Clinton County, New York

Local Solid Waste Management Plan

January 2019

Barton & Loguidice

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Executive Summary

The purpose of the Clinton County Solid Waste Management Plan is to identify the path to be pursued for managing solid waste generated in Clinton County during a ten-year planning period in an economical 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 (DEC), which is expected to be 2018. The ten-year planning period will be 2018-2028.

The residents, businesses, industries, and institutions in Clinton County currently produce hundreds of tons of solid waste every day. The question about how to increase recovery, to decrease disposal or incineration, 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.

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

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 (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 Clinton 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 6.0.

Implementation Task #1 – Evaluation Waste Reduction at County Facilities
Goal: Increase waste reduction and evaluate if current practices within County are feasible.

Implementation Task #2 – Latex Paint Exchange Program
Goal: Increase latex paint diversion from the waste stream and promote its reuse.

Implementation Task #3 – Expansion of Accepted Materials at Recycling Center (E-Waste)
Goal: Increase the types of materials accepted at the County's MRF and educate residents of proper E-waste recycling programs.

Implementation Task #4 – Expand Agricultural Plastics Recycling Program
Goal: Support the current and potential expansion of the agricultural plastics recycling program through the Clinton County Cornell Cooperative Extension or Soil and Water Conservation District.

Implementation Task #5 – Increase Recycling at County Facilities & Events
Goal: Increase recyclables recovery at County owned and/or operated facilities.

Implementation Task #6 – Adopt Product Stewardship Framework
Goal: Shift government funded waste diversion to one that relies on product stewardship.

Implementation Task #7 – Promote Backyard Composting through Education and Training Programs
Goal: Encourage yard waste composting to increase diversion of yard waste from the solid waste disposal stream.

Implementation Task #8 – Support Yard Waste Composting Efforts
Goal: Encourage backyard composting to divert more food and yard waste from the solid waste disposal stream.

Implementation Task #9 – Management of Biosolids
Goal: Increase the diversion of biosolids from landfills.

Implementation Task #10 – Clinton County Solid Waste and Recycling Law Revision
Goal: To review and modify the Solid Waste and Recycling Law to better align with the LSWMP's overall goals.

Implementation Task #11 – Pay-As-You Throw Program Evaluation
Goal: Continue the PAYT program at Convenience Stations and potentially expand to curbside collection.

Implementation Task #12 – Public Outreach and Education
Goal: Educate residents to increase recycling and waste diversion and reduce improper disposal of materials.

Implementation Task #13 – Improving Solid Waste and Recycling Data Compilation
Goal: To obtain a more complete data set to assist with the implementation of the program strategies.

Implementation Task #14 – Household Hazardous Waste Collection
Goal: Increase collection rates and divert more HHW materials from disposal and wastewater facilities.

Implementation Task #15 – Pharmaceutical Education Program
Goal: Educate residents of proper pharmaceutical management to reduce the instances of improper disposal or flushing.

Implementation Task #16 – Continue Landfilling with Energy Recovery as Primary Disposal for all Non-Recyclable/Recoverable Waste
Goal: Maintain a reliable, environmentally-sound means of disposal for non-recyclable/non-recoverable waste generated within the County.

Glossary of Acronyms

C&D	Construction and Demolition
EPA	Environmental Protection Agency
HHW	Household Hazardous Waste
LSWMP	Local Solid Waste Management Plan
LCD	Land Clearing Debris
LFGTE	Landfill Gas to Energy
MRf	Materials Recovery Facility
MSW	Municipal Solid Waste
NEWSN	New England Waste Services of N.Y., Inc.
NHT	Natural Heritage Trust
NYSDEC	New York State Department of Environmental Conservation
OMLA	Operation, Management & Lease Agreement
PAYT	Pay-As-You-Throw
PET	Polyethylene Terephthalate
RCA	Recoverable Container Act
WPCP	Water Pollution Control Plant
WWTF	Waste Water Treatment Facility
WWTP	Waste Water Treatment Plant

Table 1- 1 – LSWMP Content Checklist

Table 1-1 LSWMP Content Checklist Clinton County	
***Section 366-2.1* Description of planning unit**	***Reference***
(a) Planning Unit Description	1.1.1, 1.1.2
(b) Population of the Unit Members	1.1.1, 1.1.2
(c) Neighboring Planning Units	1.2.1
(d) Planning Unit Membership and Impacts on Implementing LSWMP	1.2.2
(e) Solid Waste Management Activities Description for the Previous Ten Years	
(1) Summary of the implementation of the previous LSWMP	1.5
***Section 366-2.2* Waste generation and materials recovery data**	
(a) Solid Waste and Recyclables Quantities and Types	2.1, 2.2.2
(1) Evaluation of all MSW subdivided into individual components by type	2.2, Table 2-2, Table 2-3
(2) Construction and demolition (C&D) debris	2.2.4. Table 2-2, Table 2-4
(3) Industrial waste	2.2.5. Table 2-2
(4) Biosolids	2.2.6, Table 2-1, Table 2-5
(b) Projections of MSW generation for each year of the planning period	Appendix A
(c) Summary assessment of any data gaps and informational needs	2.2.2
Section 366-2.3 Existing Solid Waste Management System	
(a) Existing Facilities Description and Identifications	3.1
(1) Identification of the type and amount of waste received from outside the planning unit and the planning units from which originated	3.2.3, Table 3-4
(2) Identification of the ownership type for each facility	3.2, Table 3-3
(b) Identification and description of all known agricultural operations managing any organic components of municipal solid waste	3.3.11
(c) Description and summary of the following:	
(1) Waste reduction, reuse and recycling programs conducted by the planning unit	3.3
(2) Efforts to enforce local disposal and recycling laws	3.6, 5.6
(3) Volume-based pricing incentives or other financial incentives used	3.7, 5.7
(4) Recycling market agreements	3.8
(5) Local hauler licensing	3.9, 5.10
(6) Recycling data collection efforts	3.10, 5.9
(d) Summary of any Data Gaps and Information Needs	2.2
(e) Neighboring Planning Units	1.2.1

Table 1-1 LSWMP Content Checklist Clinton County	
Section 366-2.4 Existing Administrative and Financial Structure	***Reference***
(a) Staff responsible for implementing each element of the SWMS	4.1
(b) Financial structure and costs	4.2
(1) Costs, including capital investments, insurance, operation, maintenance, closure and post-closure costs (if applicable), administration, and financing	4.2
(2) Revenues, including fees, fines, and recyclables or recovered energy revenues, general fund contributions, special district charges	4.2
(3) Funding mechanisms that are used to finance any facility operations, maintenance, and programs and events administered by the planning unit or its members	4.2
(c) Identifications of all laws, regulations or ordinances related to SWM within planning unit	4.3
(1) Effect when a draft LSWMP is submitted for department approval including but not limited to:	4.3.1
(I) Source separation laws adopted pursuant to section 120-aa of the General Municipal Law (GML);	4.3.1
(II) Waste importation and/or disposal prohibitions, flow control or local hauler licensing laws	4.3.2
(III) Zoning laws	N/A
(2) Description of any new local laws	N/A
(d) Description of any Solid Waste Management Policies	4.3.1
Section 366-2.5 Alternatives Evaluation and Selection	
(a) Alternatives Assessment, Analysis, and Selection	5.0
(1) Waste reduction programs	5.1
(2) Reuse programs	5.2
(3) Recyclables recovery programs for paper, metal, glass, plastic, and textiles	5.3
(4) Organics recovery programs for food scraps yard trimmings	5.4
(5) Programs to develop or improve local and regional markets for recyclables	5.5
(6) Enforcement programs	5.6
(7) Incentive-based pricing	5.7
(8) Education and outreach	5.8
(9) Data collection and evaluation efforts	5.9
(10) Local hauler licensing programs, including an assessment of laws preventing commingling of recyclables with waste	5.10
(11) Flow control and districting potential	5.11
(12) C&D debris reduction, including deconstruction, reuse and recovery programs	5.12
(13) Private sector management and coordination opportunities	5.13
(14) Management of waste through thermal treatment technologies	5.14
(15) Waste disposal options	5.15
Section 366-2.6 Implementation Plan and Schedule	***Reference***
(a) Implementation Schedule	Section 6.0
Section 366-2.7 Waste Stream Projections	
(a) Projections for each year of the planning period	Appendix A

1.0 Planning Unit Description

1.1 Size, Location, Population

1.1.1 Physical Setting

Clinton County is the most northeastern county in New York State. As shown on Figure 1-1, Clinton County is bordered by Canada to the north; Lake Champlain to the east, and beyond that the State of Vermont; Essex County to the south; and Franklin County to the west. The County is located approximately 30 miles west of Burlington, Vermont; 40 miles south of Montreal, Quebec; and 145 miles north of Albany. Major highways serving Clinton County include Interstate Highway 87 (U.S. Rt. 9), which links Clinton County with Albany and New York City on north-south corridor, U.S. Route 11, and New York State Routes 3, 22,190, and 374, which link Clinton County with neighboring counties to the west and south.

Clinton County has a land area of 1,038 square miles with a population density of 79 people per square mile (sq mi). The County's population is approximately 76% rural, with approximately 24% characterized as suburban. The small City of Plattsburgh is the only city located within the County[1]. The remainder of the County is largely rural, consisting of farmland, forested hills, and surface water bodies, including several lakes and the Saranac River. Clinton County is currently designated as the Plattsburgh, N.Y., Micropolitan Statistical Area by the U.S. Census Bureau.

Clinton County was incorporated in 1788 and it is currently governed by ten-member legislature with day to day operations managed by a county administrator. Clinton County's political subdivisions consist of fourteen towns (Altona, Ausable, Beekmantown, Black Brook, Champlain, Chazy, Clinton, Dannemora, Ellenburg, Mooers, Peru, Plattsburgh, Saranac, and Schuyler Falls), the City of Plattsburgh, and three villages (Champlain, Dannemora, and Rouses Point). The City of Plattsburgh, incorporated in 1902, serves as the Clinton County seat. A map displaying the County's municipal jurisdictions is presented in Figure 1-1.

[1] U.S. Census, 2010.

Figure 1- 1 - Municipalities in Clinton County

1.1.2 Population and Number of Households in the Local Planning Unit[2,3]

According to the U.S. Census data for 2010, Clinton County's population is approximately 82,128, and is distributed over 1 City, 3 villages and 14 towns, with 31,582 households. Clinton County's population increased from 79,894 in 2000 to 82,128 persons in 2010, an increase of 2,234 persons. Previously, the population of Clinton County had peaked in 1994, at 86,444 persons. The closure of the Plattsburgh Air Force Base in 1995 resulted in 10,000 people stationed there to be transferred elsewhere. According to Cornell University's Program of Applied Demographics, the population of Clinton County is projected to decrease by 11,699 persons to 70,429 persons by the year 2040.

1.2 Planning Unit Members

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, with the exception of the Village of Keeseville, which has dissolved. The northern portion has been absorbed into the Town of Ausable within Clinton County and the southern portion was absorbed into Essex County. It is not anticipated that there will be any further changes of municipalities within the Planning Unit.

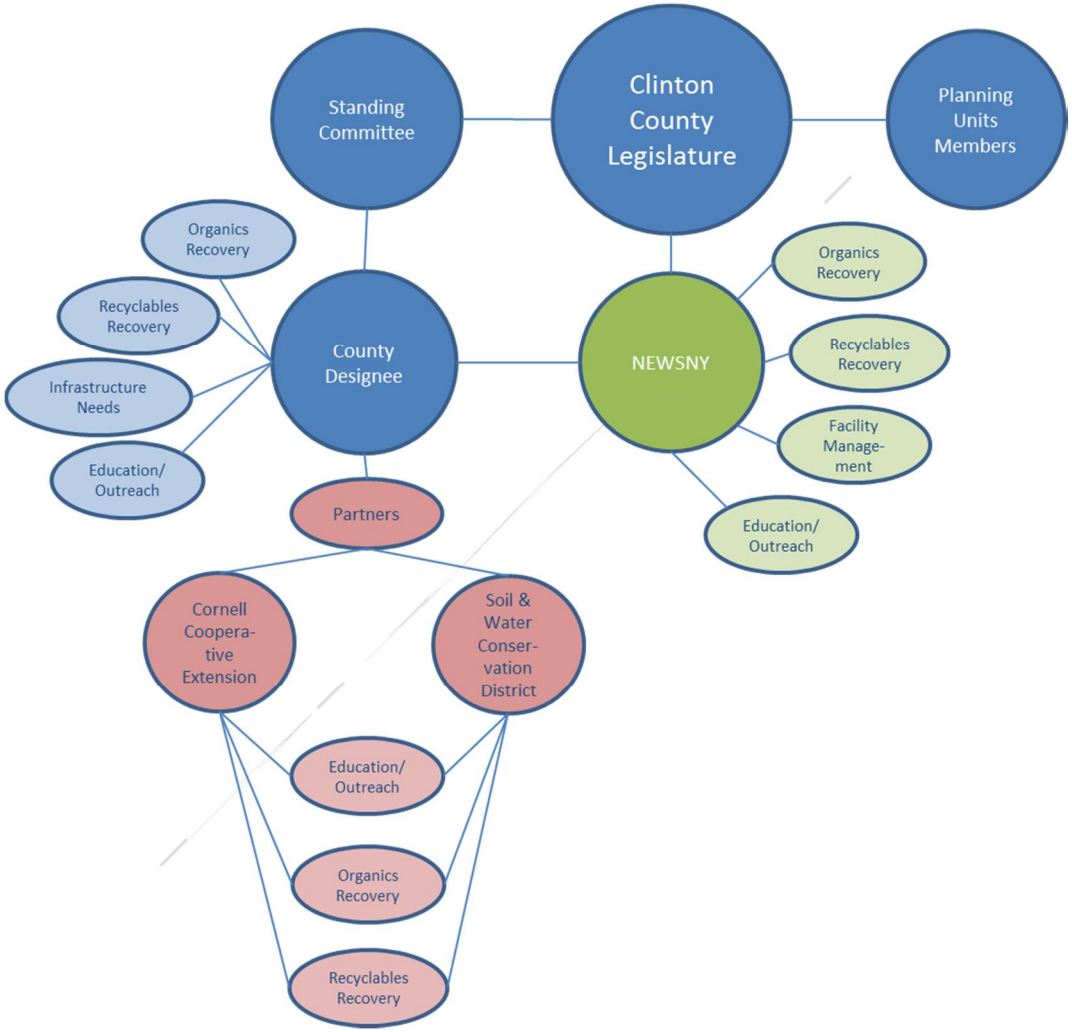
Clinton County will draw upon its existing administrative structure to implement the programs and objectives outlined within this Plan. The Clinton County Board of Legislators ("legislature") is comprised of ten elected legislators representing the ten legislative districts within the County. The legislature is the legislative, appropriating, and policy determining body of the County.

The county administrator is appointed by the legislature and is the administrative head of the County government. He also serves as the Chief Budget Officer of the County and is responsible for preparing the operating and capital budgets of the County for presentation to the legislature for approval.

Ultimately the County is responsible for implementation of this Plan. The County may delegate tasks to other partners (i.e., NEWSNY, Cornell Cooperative Extension, Soil and Water Conservation District) due to the nature of the contract, relationship or partnership. Any such delegated task may be assigned with County oversight. Figure 1-2 depicts the administrative structure to be utilized for implementing the programs and objectives outlined in this Plan.

[2] U.S. Census, 2010.
[3] Cornell University's Program of Applied Demographics, 2010.

Figure 1- 2 - LSWMP Administrative Structure



1.2.1 Neighboring Planning Units

Table 1-2 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 5, and tasks will be included in the Implementation Schedule.

Table 1- 2 - Potential Impacts or Opportunities with Neighbors That Could Affect LSWMP Implementation

Neighboring Planning Unit	Existing or Potential Inter-Jurisdiction Considerations/Impacts	Effects of Opportunities or Impacts to Implement the LSWMP
Franklin County[4]	Franklin County owns and operates three transfer stations, which are located in the villages of Tupper Lake and Malone, and in the hamlet of Lake Clear. A satellite collection site in Saint Regis Falls also operates on Saturdays. All of these locations accept both solid waste and recyclable materials from residents and haulers. The waste is then transferred to the County owned landfill in the towns of Westville and Constable. Franklin County has a flow control law in place that requires all waste generated within Franklin County to be disposed there.	Sludge disposal is prohibited at Clinton County Landfill and is currently hauled to Franklin County.
Essex County[5]	The town of North Elba operates a transfer station that accepts solid waste from residents for a charge and recyclable materials for free. Essex County does not have a landfill within its borders and exports its waste to multiple landfills including Clinton County Landfill and Franklin County Landfill.	Clinton County manages a portion of the waste generated in Essex County.
Chittenden Solid Waste District (CSWD)[6]	The Chittenden Solid Waste District does not offer hauling to its residents; instead residents can hire a private hauler to collect their waste. The City of Burlington offers recycling pickup for its residents. There are also seven county managed drop-off centers that accept recyclable materials and solid waste from residents. Additionally, CSWD owns a C&D Recycling Facility, a hazardous waste collection facility that operates year-round, a single stream recycling center, and a large	None noted.

[4] http://www.cfswma.com/
[5] http://www.northelba.org/?page=services/recycling-transfer
[6] https://cswd.net/

Neighboring Planning Unit	Existing or Potential Inter-Jurisdiction Considerations/Impacts	Effects of Opportunities or Impacts to Implement the LSWMP
	scale composting facility. There is also a privately owned transfer station, recycling center and yard waste depot. Solid waste is then transferred to a landfill in Coventry, VT.	
Northwest Vermont Solid Waste Management District (NVSWMD)[7]	NVSWMD owns and operates a recycling center, three drop-off sites for solid waste and recyclable materials, and is partnered with an organics collection site. There are also three privately owned transfer stations. Private haulers manage the collection of solid waste and recyclables. They are required to provide recycling services to all residents and businesses within the District.	None noted.
Québec, Canada	Information on how Québec handles its solid waste could not be found, but it is important to note that some of its waste is disposed of at the Clinton County landfill.	Clinton County manages a small portion of the waste generated in Québec, Canada.

1.2.2 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 quantities 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. Additionally, more details related to organic waste management are provided in Table 3-3 in Chapter 3.

[7] http://nwswd.org/

Table 1- 3 – Planning Unit Membership

Municipal Member	Population Density – Character[8]	Role in LSWMP Preparation	Role in LSWMP Implementation	Unique Conditions or Issues[9]
Towns				
Altona	28.6/sq mi rural	None	Data collection, network with schools and education outreach program	Residential drop-off facility available.
Ausable	80.4/sq mi rural	None	Same as above	Residential drop-off facility available.
Beekmantown	91.8/sq mi rural	None	Same as above	None noted.
Black Brook	11.5/sq mi rural	None	Same as above	None noted.
Champlain	112.3/sq mi rural	None	Same as above	Residential drop-off facility available.
Chazy	79.1/sq mi rural	None	Same as above	Residential drop-off facility available.
Clinton	11/sq mi rural	None	Same as above	Residential drop-off facility available.
Dannemora	82.9/sq mi rural	None	Same as above	There are two residential drop-off facilities available, one in the hamlet Lyon Mountain and the other in Dannemora.
Ellenburg	16.4/sq mi rural	None	Same as above	Residential drop-off facility available.
Mooers	18.5/sq mi rural	None	Same as above	Residential drop-off facility available.
Peru	88.7/sq mi rural	None	Same as above	Residential drop-off facility available.
Plattsburgh	258.5/sq mi rural	None	Same as above	None noted.
Saranac	34.8/sq mi rural	None	Same as above	Residential drop-off facility available.
Schuyler Falls	141.9/sq mi rural	None	Same as above	The Clinton County Landfill is located in Schuyler Falls and has a convenience station for residents to drop off their refuse and recyclables.
Villages, City				
Champlain	792.1/sq mi suburban	None	Same as above	None noted.
Dannemora	6,460/sq mi suburban	None	Same as above	None noted.

[8] Census 2000 Summary File 1 (SF 1), U.S. Census Bureau

[9] Further evaluation will be completed as discussed in Chapter 5.

Municipal Member	Population Density – Character[8]	Role in LSWMP Preparation	Role in LSWMP Implementation	Unique Conditions or Issues[9]
Rouses Point	1,255.1/sq mi suburban	None	Same as above	None Noted.
Plattsburgh – City[10]	3,981.9/sq mi suburban	None	Same as above	The City offers refuse and recycling curbside pickup for residents.

1.3 Seasonal Variations and Unique Circumstances

There are several seasonal variations which occur within Clinton 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 for both high schools and colleges, 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 is an influx of tourists during the summer, many of whom are Canadian. The number of visitors is dependent on the strength of the Canadian dollar in relation to American currency.
- There are also many large events held within the County during the year, including The Mayor's Cup Regatta and Festival and several others listed in Table 1-7. The impacts and effects of these events are discussed in Section 1.4.5.
- 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.
- 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.

[10] http://www.cityofplattsburgh-ny.gov/215/Refuse-Service

- 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 and a reduction in tourism.
- 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 5. 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.

1.4 Overview of Solid Waste Generation Sources Within Clinton County

The majority of Clinton County's industrial, commercial, retail, institutional, and governmental facilities are located within the I-87 transportation corridor. Major employment centers within the County are concentrated in the City and Town of Plattsburgh. These include many Canadian companies which have industrial locations in the County.

Clinton County's economic base is relatively diversified. The healthcare and social assistance field contributes the largest share of jobs in Clinton County followed by educational services, retail, manufacturing, accommodation and food service, and public administration. The County's largest individual employers were UVM Health Care Network - CVPH, which operates a hospital and numerous doctors' offices through the County (2,250 employees), State University of New York (SUNY) Plattsburgh (1,350 employees), Clinton Correctional Facility (1,330 employees) and the Clinton County Government (950 employees). The County's labor force totaled 35,800 in 2016. The unemployment rate peaked in January 2011 at 11.1% and has been steadily declining since 2013 to a rate of 5.5% in March of 2017. The number of private sector jobs peaked in August 2004 at 28,100. The number of private sector jobs, which has stayed relatively constant for the past five years, was 24,600 in March of 2017.

A total of 603 active farms existed in the County in 2012. These farms occupied approximately 147,229 acres of the County's total land area, and the average farm size was 244 acres. The County is experiencing a progressive displacement of agricultural land, particularly in the County's valley areas along the I-87 highway corridor, as a result of residential and commercial development.

1.4.1 Spring and Summer Residential and Agricultural Wastes

Table 1-4 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- 4 – 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.

[a]Information and data in table to be revised throughout the Planning Period as more details become available.

The possibility of recycling organics, such as by composting or anaerobic digestion, will be discussed in the Solid Waste Management Program Strategies in Chapter 5, and tasks will be included in the Implementation Schedule as appropriate.

1.4.2 Schools

Clinton County is served by a large number of private institutions and community service facilities. The County's educational system consists of public, private, and parochial school systems, including elementary, middle, and high schools and colleges. The County is also served by the Clinton-Essex-Warren-Washington Board of Cooperative Educational Services (CEWW BOCES). This region's BOCES program is run by the Champlain Valley Educational Services (CVES). SUNY Plattsburgh, a public four-year institution, is located within the City of Plattsburgh.

Table 1-5 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- 5 – Impacts of Schools Within the Planning Unit[a]

Source of Wastes	Unique Situation or Circumstances	Quantity/Quality Impacts	Impacts On LSWMP
SUNY Plattsburgh	Summer cleanout/ construction. Seasonal food wastes from cafeterias. Wastes from events held at the schools. Private hauling of school wastes and recyclables.	Dorm content, equipment left behind, C&D debris, need recycling plan implemented. Influx of food wastes. Paper, books and electronics recycling.	Organics composting programs underway. Lack of data available. Further evaluation needed.
Clinton Community College	Same as above	Same as above	Lack of data available. Further evaluation needed.
CVES	Summer cleanout/ construction. Seasonal food wastes from cafeterias. Private hauling of school wastes and recyclables.	Locker content left behind, C&D debris, need recycling plan implemented. Influx of food wastes. Paper, books and electronics recycling.	Lack of data available. Further evaluation needed.
Ausable Valley School District	Same as above	Same as above	Same as above
Beekmantown School District	Same as above	Same as above	Same as above
Chazy School District	Same as above	Same as above	Same as above
Northeastern Clinton School District	Same as above	Same as above	Same as above
Peru School District	Same as above	Same as above	Same as above
Plattsburgh City School District	Summer cleanout/ construction. Seasonal food wastes from cafeterias. Private hauling of school wastes and recyclables. There is a Recycling Club for 5th grade students.	Locker content left behind, C&D debris, need recycling plan implemented. Influx of food wastes. Paper, books and electronics recycling.	Lack of data available. Further evaluation needed.
Saranac School District	Summer cleanout/ construction. Seasonal food wastes from cafeterias. Private hauling of school wastes and recyclables.	Locker content left behind, C&D debris, need recycling plan implemented. Influx of food wastes. Paper, books and electronics recycling.	Lack of data available. Further evaluation needed.
Assumption of Mary School	Same as above	Same as above	Same as above

Source of Wastes	Unique Situation or Circumstances	Quantity/Quality Impacts	Impacts On LSWMP
Lakeshore Christian School	Same as above	Same as above	Same as above
New Life Christian Academy	Same as above	Same as above	Same as above
Seton Academy	Same as above	Same as above	Same as above
Seton Catholic Central	Same as above	Same as above	Same as above

[a]Information and data in table to be revised throughout the Planning Period as more details become available.

All of 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 5. Tasks will be included in the Implementation Schedule to evaluate and implement new or improved recycling programs, including organics recovery, and to collect data.

1.4.3 Libraries

Table 1-6 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- 6 – Impacts of Libraries Within the Planning Unit[a]

Source of Wastes	Unique Situation or Circumstances	Quantity/Quality Impacts	Impacts on LSWMP
Plattsburgh Public Library	Periodic cleanouts. Private hauling of all library wastes.	Large amounts of books and magazines. Data unavailable.	Opportunity for libraries to coordinate a recycling management program among libraries. Further evaluation needed.
Champlain Memorial Library	Same as above.	Same as above.	Same as above.
Chazy Public Library	Same as above.	Same as above.	Same as above.
Dannemora Free Library	Same as above.	Same as above.	Same as above.
Dodge Library	Same as above.	Same as above.	Same as above.
Ellenburg Sarah A. Munsil Free Library	Same as above.	Same as above.	Same as above.
Mooers Free Library	Same as above.	Same as above.	Same as above.
Peru Free Library	Same as above.	Same as above.	Same as above.
Altona Reading Center	Same as above.	Same as above.	Same as above.
Ellenburg Center Reading Center	Same as above.	Same as above.	Same as above.

[a]Information 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 5. This could include recycling programs for cardboard, outdated 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.

1.4.4 Jails, Institutions, Nursing Homes

The UVM Health Care Network - CVPH, which is located in Plattsburgh, serves the residents of Clinton County and surrounding counties. Table 1-7 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- 7 – 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
Clinton Correctional Facility	Needs further evaluation.	Needs further evaluation.	Needs further evaluation related to existing disposal and recycling activities. Possible compost of food wastes.
Altona Correctional Facility	Same as above.	Same as above.	Same as above.
Clinton County Jail	Same as above.	Same as above.	Same as above.
UVM Health Care Network - CVPH	Medical facility	Unknown regular waste. Potential for high quantity of medical waste.	Needs further evaluation related to existing disposal and recycling activities. Possible compost of food wastes.
Pine Harbour Assisted Living	Periodic cleanouts. Food wastes. Medical waste. No data available.	Unknown regular waste. Potential for high quantity of medical waste.	Needs further evaluation related to existing disposal and recycling activities. Possible compost of food wastes.
Lake Forest Senior Retirement	Same as above.	Same as above.	Same as above.
Evergreen Valley Nursing Home	Same as above.	Same as above.	Same as above.
Clinton County Nursing Home	Same as above.	Same as above.	Same as above.
Begor Home	Same as above.	Same as above.	Same as above.

Source of Wastes	Facility Type/Unique Situation or Circumstances	Quantity/Quality Impacts	Impacts On LSWMP
Meadowbrook Rehabilitation Center	Same as above.	Same as above.	Same as above.
Victoria House	Same as above.	Same as above.	Same as above.

[a]Information 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.

1.4.5 Special Events within the Planning Unit

Table 1-8 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- 8 – Impacts of Special Events Within the Planning Unit[a]

Sources of Wastes	Unique Situation or Circumstances	Quantity/Quality Impacts	Impacts On LSWMP
Clinton County Fair	Many vendors with packaging/food waste and recycling of drink bottles. Attendees that may or may not care about recycling or waste diversion.	Unknown what is done with the wastes generated at these events 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. Opportunity for education outreach to the community related to recycling and waste diversion.
Clinton County Fairgrounds events	On an annual basis, the fairgrounds are host to numerous animal shows, concerts, festivals, circuses, exhibits, and farmer's co-	Same as above.	Same as above.

Sources of Wastes	Unique Situation or Circumstances	Quantity/Quality Impacts	Impacts On LSWMP
	op[11]. No consistent diversion programs are in place.		
Plattsburgh Bluegrass Festival	Vendors with packaging/food waste and recycling of drink bottles. Attendees that may or may not care about recycling or waste diversion.	Same as above.	Same as above.
Mayor's Cup Regatta and Festival	Same as above.	Same as above.	Same as above.
Fourth of July Community Celebration	Same as above.	Same as above.	Same as above.
Battle of Plattsburgh Commemoration	Same as above.	Same as above.	Same as above.
Downtown Plattsburgh Holiday Parade and Tree Lighting	Same as above.	Same as above.	Same as above.
Discover Earth Day & Service Festival	Same as above.	Same as above.	Same as above.
SUNY Plattsburgh Choral Fest	Same as above.	Same as above.	Same as above.
SUNY Plattsburgh Gospel Fest	Same as above.	Same as above.	Same as above.
SUNY Plattsburgh Jazz Festival	Same as above.	Same as above.	Same as above.
Bassmaster Elite Series	Same as above.	Same as above.	Same as above.
Plattsburgh Brewfest	Same as above.	Same as above.	Same as above.
Plattsburgh Comic Con	Same as above.	Same as above.	Same as above.
Rouses Point Farmer's Market	Same as above.	Same as above.	Same as above.
Rouses Point Fourth of July Celebration	Same as above.	Same as above.	Same as above.
Rouses Point Summer Concert Series	Same as above.	Same as above.	Same as above.

Sources of Wastes	Unique Situation or Circumstances	Quantity/Quality Impacts	Impacts On LSWMP
Household Hazardous Waste Day	Event held to collect HHW annually.	3,370 Pounds of HHW (solids) annually[b] 1,142 Gallons of HHW (liquid) annually[b]	Other recycling events could be co-located during these events. Opportunity for education outreach to the community related to recycling and waste diversion.

[a]Information and data in table to be revised throughout the Planning Period as more details become available.
[b]Based on 2016 numbers

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.

1.5 Summary of Implementation of Previous LSWMP

In 1991, Clinton County submitted its initial SWMP to the New York State Department of Environmental Conservation (NYSDEC). The SWMP set forth the details of the Solid Waste Management Program for the County including the specific plans and approach for receiving the solid waste generated, the operation of the mandatory recycling program, and providing solid waste disposal in compliance with local, State and Federal laws, rules and regulations.

Since 1991, the SWMP has served as the foundation for decision-making by the County, for its growing solid waste management and recycling efforts. Clinton County has submitted SWMP Compliance Reports biennially from 1991 to the present, documenting the progress made on achieving the goals and objectives of the 1991 SWMP. Throughout the planning period, several modifications have been made in response to planning and development at the Clinton County Landfill Facility. In May 2001, a modification was made to the SWMP to identify the Phase III Overlay Lined Landfill Cell as part of the County's long-term SWMP. The SWMP also went through a major modification in October

2001, as part of the Draft Environmental Impact Statement (DEIS) long-term development process for the Clinton County Landfill. In February 2003 and February 2005 modifications were made to the SWMP to identify commencement of construction activity for the Phase III Overlay Lined Landfill Cell, the purchase of the New York State Electric & Gas (NYSEG) parcel for the western expansion, and the revisions to the Closure Bond Act approved by the NYSDEC Landfill. In June 2007, modifications were made to the SWMP to address the permitting of the next phase of landfill development (Phase V).

The original LSWMP called for an assessment of existing and future solid waste management needs and recommended an integrated solid waste management system that included a centrally located County landfill as the most appropriate long-term option. The solid waste management system also involved the closing of the County's unlined landfills, the implementation of a County-wide mandatory recycling program, the construction of a materials recovery facility (MRF) and the establishment of convenience stations throughout the County. This system was established for the purpose of managing the solid waste generated within Clinton County in an environmentally and economically sound manner. The County recognized that there would be a benefit in privatizing their resource management infrastructure. In September 1996, Clinton County entered into an Operation, Management & Lease Agreement with Casella Waste Systems, Inc. through the year 2021. Through this agreement, New England Waste Services of N.Y., Inc. (NEWSNY), a subsidiary of Casella Waste Systems, Inc. became responsible for the operations and management of the Clinton County Landfill. Operation of the convenience stations and the MRF are also performed by NEWSNY pursuant to the agreement. The agreement was extended in 2016 for 25 years, and shall be referred to throughout as the "OMLA". The extension of the OMLA provided some changes to the existing arrangement between the parties, including items such as: a tonnage increase to 250,000 tons per year upon approval by NYSDEC, a geographical extension for waste acceptance to the southern border of Westchester County for NYS waste, an option payment to the County, and a change to truck traffic routes for additional waste being brought to the Clinton County Landfill. Other changes are highlighted throughout.

All benchmarks of the original 1991 SWMP have been achieved and implemented into the planning unit. These include Household Hazardous Waste Collection Events (these events have been held annually since 2001), a mandatory county wide recycling law issued as

part of the County Solid Waste and Recycling Laws, and a Materials Recovery Facility constructed to recycle corrugated cardboard, newspaper, HDPE, glass, tin and aluminum cans. Gas collection for the unlined Schuyler Falls Landfill and Phases I, II and III of the Clinton County Lined Landfill was completed in 2008. A Final Environmental Impact Statement (FEIS) for an expansion of the Clinton County Landfill was completed and accepted by the County in 2002. A permit allowing for the future development of the Phase V Landfill was received in 2008, with completion of the first cell of Phase V in fall 2010. Currently, Cells 1A, 1B, 1C, 1D, and 2A of Phase V have been constructed and are being filled to permitted waste grades. Cell 2B is under construction and slated for completion in Summer/Fall 2018.

1.6 Summary of Changes to the Planning Unit

There have been a few changes in schools, and colleges being introduced to the planning unit. 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 Clinton 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 1.9.

Table 1-9 summarizes the changes to the planning unit since the last LSWMP and the impacts to be considered for this plan.

Table 1- 9 – Impacts of Planning Unit Changes on LSWMP

Planning Unit Changes	Quantitative and Qualitative Impacts	Impacts on LSWMP
Large Retail businesses	More packaging materials	More recycling data needs to be collected
Changes in Manufacturing Businesses	Different wastes from manufacturing	Different waste generated, different materials available for recycling

There have been quite a few changes in industry in the Planning Unit since the original Plan. Several businesses have left the area, and some have started up or expanded. The loss of the Plattsburgh Airforce Base in 1995 resulted in a population drop in the County and was expected to cripple the area's economy. However, the Airforce Base site has been redeveloped by the Plattsburgh Airbase Redevelopment Corporation (PARC) and now is the home to the Plattsburgh International Airport, as well as biotechnology, industrial and recreational tenants. PARC is a multi-modal industrial park designed to meet the needs of both domestic and international companies. Tenants at PARC include businesses like Bombardier Aerospace, Nova Bus Company, Schluter-Systems, Norsk Titanium and Swarovski Lighting. Additionally, the former Clinton County Airport, located on the western end of the Route 3 corridor in Plattsburgh, has seen increased growth recently, including, expansion of the industrial park, and additional hotels and retail. The new businesses in the area are very diverse and little is known about their waste management practices. 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.

2.0 Solid Waste and Recyclables Quantities and Types

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

2.1 Waste Types

Clinton 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 LSWMP, 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 offices, and manufacturing facilities.

As a regulatory requirement, each solid waste management facility is required to submit annual reports to the NYSDEC. 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 NYSDEC annual reports is readily available and generally reliable. It can also be assumed that the materials collected and processed at the Clinton 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 NYSDEC, this data is also relatively easy to gather. Yard waste is a component of the 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.

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, drill cuttings and dust. According to annual reports submitted to NYSDEC, 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.

Construction and demolition (C&D) debris 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. For this specific analysis, asbestos debris and petroleum contaminated soil that is not considered alternative daily cover are also included in the C&D debris category. Many of the upstate New York landfills report C&D debris as a separate disposal stream, and therefore, the quantity disposed of from Clinton 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 C&D debris generation and recovery, considering these circumstances is further discussed in Chapter 6.

As defined in the Part 360 regulations, biosolids are the accumulated semisolids or solids resulting from treatment of wastewaters from publicly or privately owned or operated sewage treatment plants. Biosolids does not include grit or screenings, or ash generated from the incineration of biosolids. Municipal treatment plants generate sludge/biosolids that require special handling and management. A majority of this material is landfilled and the data is readily available from the annual reports to NYSDEC. No sludge/biosolids materials are landfilled in Clinton County.

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 scrap metals generation in the County and recovery, considering these circumstances is further discussed in Chapter 6.

2.2 Availability of Generation and Recovery Estimates

2.2.1 Data Sources and Methodology

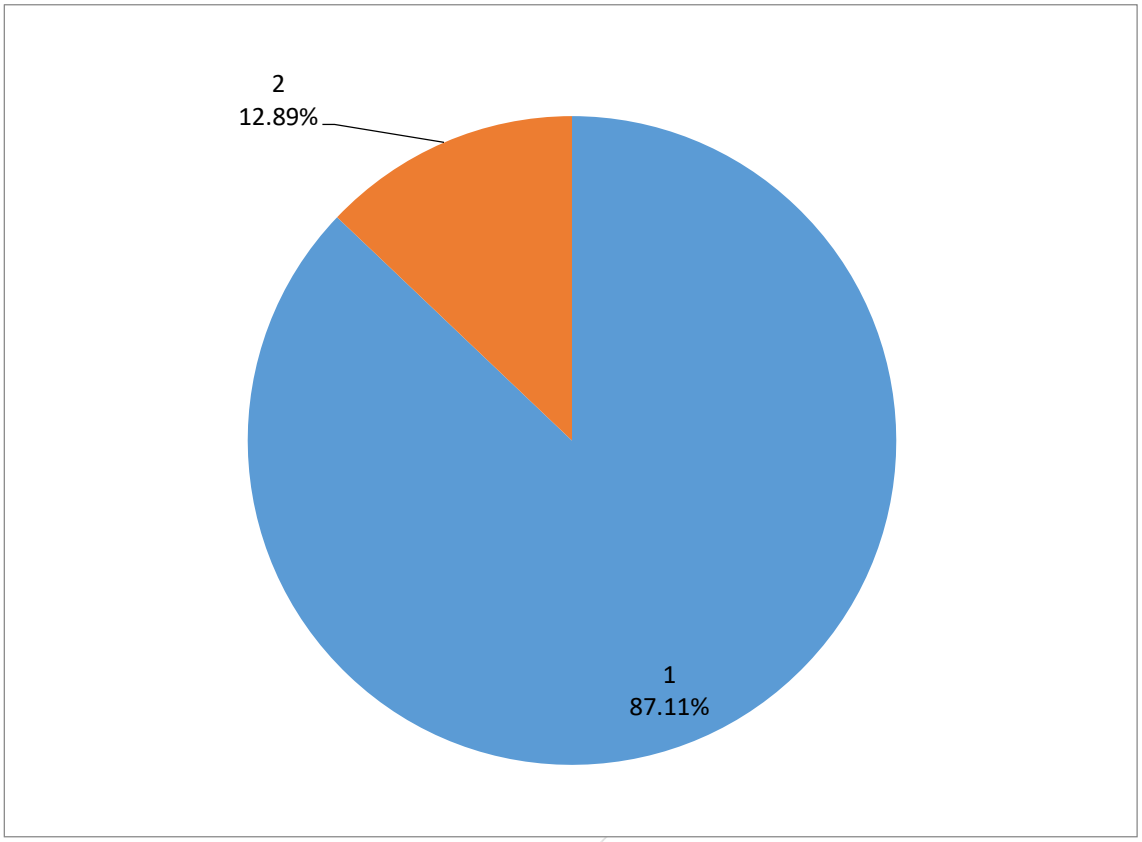
As discussed above, much of the following waste generation estimates were derived from available reports provided to the NYSDEC by permitted landfills, sewage treatment plants, and recycling centers. Limitations associated with the data are as follows and will be considered when evaluating and implementing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

- **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. With the County's proximity to Canada and Vermont, any data for waste exported there is not available.

2.2.2 Estimation of Total Waste Generation in Clinton County

Based on annual reports submitted to the NYSDEC for 2010, Clinton County residents and businesses generated approximately 114,804 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 Clinton County. Based on the information available to interpret, the majority of the waste is landfilled (100,000 tons or 87.11 percent) while the remainder is recycled (14,804 tons or 12.89 percent).

Figure 2- 1 - Estimated Waste Management Methods in Clinton County in 2016



Source: NYSDEC, Facility Annual Reports, 2016; and NYSDEC, Biosolids Management in New York State, 2011 and Self Reporting

Clinton County has ten wastewater treatment facilities (WWTFs). 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	Tons/Year	Use/Disposal Method	Location
Town of Plattsburgh (Cadyville) WWTP	Aerobic Digestion	Drying Beds	Not Reported	Landfill	Franklin County Landfill
Village of Champlain WWTF	Aerobic Digestion	Belt Filter Press	116.5	Landfill	Franklin County Landfill
Town of Chazy WWTF	Reed Beds	Drying Beds	2.4	Reed Beds	On-Site
Village of Dannemora WWTP	Septic Tank	None	Not Reported	Lagoon	On-Site
Town of Ausable WWTP	Aerobic Digestion	Belt Press/Dry Bed	85.8	Land Application	Casella
Town of Peru WPCP	Aerobic Digestion	Plate and Frame Press	70.5	Compost	Grasslands Agricultural Products
City of Plattsburgh WPCP	None	Belt Filter Press	4,570	Landfill	Franklin County Landfill/ Grasslands Agricultural Products
Village of Rouses Point WWTP	None	Belt Filter Press	19.85	Landfill	Franklin County Landfill
Total			4,865		
Total Sewage Sludge Used/Disposed On-site			**2.4**	*Source: NYSDEC, Biosolids Management in New York State, 2018*	
Total Sewage Sludge Landfilled			**4,706.35**		
Total Municipal Sewage Sludge Generated			**4,865**		

The data in Table 2-1 above was generated from data compiled for the most recent NYSDEC, Biosolids Management in New York State 2018, which utilized 2015 disposal data. While detailed data for generation from individual facilities was not available for 2016 (the year for which the overall waste generation and diversion for the County was calculated), annual reporting data for the disposal/diversion facilities was utilized, The discrepancies between Table 2-1 and 2-2 regarding biosolids quantities is due to this fact.

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 Clinton 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 2016 Waste Tonnage by Management Method

	Amount (Tons)	Percentage	% of Total Generation
Landfilled [1]			
MSW	50,121	50.1	43.7
Construction and Demolition Debris	15,045	15.0	13.1
Sewage Sludge	4,508	4.5	3.9
Industrial	1,185	1.2	1.0
Alternative Daily Cover/Beneficial Use Determination Material	29,140	29.1	25.4
Total	**100,000**	**100.0**	**87.1**
Diverted			
Composted Sewage Sludge[2]	0	0.0	0.0
Land Applied Sewage Sludge[4]	2,293.18	13.4	2.0
Composted Yard Waste[3]	0	0.0	0.0
Recovered/Composted Food Scraps[5]	0	0.0	0.0
Recycled[5]	3,593	21.0	3.1
Processed Construction & Demolition Material	1,025	6.0	0.9
Vehicle Scrap Metal	10,186	59.6	8.7
Total	**17,088**	**100.0**	**14.6**
Total Waste Generation	**117,088**		

1. The NYSDEC 2016 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 managing biosolids on-site. No more recent data available.
3. The NYSDEC 2013 Recyclables Handling and Recovery Facility Reports provided the tonnages recycled at the various recovery facilities. The following recovery facilities received materials from Clinton County: Clinton County MRF and Casella Recycling.
4 The land applied sewage sludge data was obtained from the Grasslands Agricultural Facility data 2016.
5. Shaded categories are considered to be part of the MSW category, and will be utilized in the MSW composition analysis.

2.2.3 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 NYSDEC's waste composition and recovery projection tool, the following section provides Clinton 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 NYSDEC's assistance, Table 2-3 below provides some assumptions as to the quantity of containers recovered as part of RCA in 2010.[12]

Table 2-3 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.

[12] According to 2010 RCA data from the NYSDEC, 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 Clinton County[13]

Material	Estimated MSW Tons Generated (2016)	Estimated % of Total Tons Generated (2016)	Estimate of Actual MSW Tons Diverted (2016)	% of Each Material Diverted (2016)
Newspaper	2,158	3.8%	638	29.6%
Corrugated Cardboard	5,591	9.8%	1,000	17.9%
Other Recyclable Paper (Total)	6,239	10.9%	828	13.3%
Other Compostable Paper	3,804	6.6%	0	0.00%
Total Paper	17,792	31.1%	2,467	13.9%
Ferrous/Aluminum Containers (Total)	1,037	1.8%	67	6.5%
Other Ferrous Metals	3,000	5.2%	25	0.8%
Other Non-Ferrous Metals (Total)	708	1.2%	2	0.3%
Total Metals	4,745	8.3%	94	2.0%
PET Containers	534	0.9%	179	33.5%
HDPE Containers	491	0.9%	173	35.2%
Other Plastic (3-7) Containers	101	0.2%	31	30.6%
Film Plastic	3,280	5.7%	0	0.00%
Other Plastic (Total)	3,490	6.1%	0	0.00%
Total Plastics	7,897	13.7%	383	4.9%
Glass Containers	2,252	3.9%	618	27.4%
Other Glass	235	0.4%	0	0.00%
Total Glass	2,487	4.3%	618	24.8%
Food Scraps	7,867	13.7%	0	0.00%
Yard Trimmings	3,169	5.5%	0	0.00%
Total Organics	11,036	19.3%	0	0.00%
Clothing Footwear, Towels, Sheets	2,233	3.90%	0	0.00%
Carpet	826	1.4%	0	0.00%
Total Textiles	3,058	5.34%	0	0.00%
Total Wood	2,815	4.9%	0	0.00%

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

Material	Estimated MSW Tons Generated (2016)	Estimated % of Total Tons Generated (2016)	Estimate of Actual MSW Tons Diverted (2016)	% of Each Material Diverted (2016)
C&D Materials	3,254	5.9%	0	0.00%
Other Durables	978	1.7%	0	0.00%
Diapers	932	1.6%	0	0.00%
Electronics	838	1.5%	0	0.00%
Tires	944	1.6%	22	2.30%
HHW	194	0.3%	7	3.60%
Fines	227	0.40%	0	0.00%
Total Miscellaneous	7,466	13.0%	29	0.4%
Total	57,296	100.00%	3,591	6.3%

Source: NYSDEC MSW Combined Composition Analysis and Projections; 2010 NYSDEC Facility Annual Reports.

Based on the quantities of potential divertible materials that were reported to the NYSDEC or estimated, Clinton County diverted approximately 3,591 tons of material (6.3 percent) from the MSW disposal stream in 2016. Table 2-3 indicates that 57,296[14] tons of MSW materials are generated and available for diversion from residential, commercial and institutional generators. Not all the categories are populated for the 2016 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 Clinton County; however, there are no mechanisms for gathering data for the individual materials at this time. Therefore, a program strategy has been added to evaluate and implement data collection efforts. Chapters 3 and 5 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.

2.2.4 Estimation of Potential C&D Waste Recovery

C&D debris can be assessed separately from MSW or industrial wastes. By utilizing the NYSDEC's C&D debris composition and recovery projection tool, the following section provides Clinton County with an estimated C&D debris composition for future planning purposes. The complete tables are included in Appendix A. According to NYSDEC, their

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

analysis and the waste composition and recovery projection tool considers the variations in the C&D debris 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 NYSDEC annual reports, Table 2-4, below, 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.

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

Material	Estimated Components of C&D Debris Tons Generated in 2016 per NYSDEC Model	% of Total C&D Debris Generated (2016)	Tons of C&D Debris Diverted per 2016 Data Obtained	
			Tons Diverted	% Diverted
Concrete/Asphalt/Rock/Brick	5,165	35.39%	87	1.68%
Wood	2,226	14.80%	103	4.64%
Roofing	707	4.93%	0	0.00%
Drywall	364	2.54%	0	0.00%
Soil/Gravel	3,905	27.22%	0	0.00%
Metal	1,683	5.91%	835	49.61%
Plastic	57	0.40%	0	0.00%
Corrugated/Paper	287	2.00%	0	0.00%
Other	979	6.82%	0	0.00%
Total	**15,374**	**100.00%**	**1,025**	**6.67%**

Source: 2016 NYSDEC Facility Annual Reports.

Based on the quantities of potential divertible materials that were reported to the NYSDEC or estimated, Clinton County diverted approximately 1,025 tons of material (6.67 percent) from the C&D disposal stream in 2016. Table 2-4, above, indicates that 15,374 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.

2.2.5 Estimation of Potential Industrial Waste Recovery

According to the 2016 NYSDEC Facilities Annual Report, Clinton County disposed of 1,735 tons of Industrial Waste in 2016. An exact number of the amount of waste disposed in the county is uncertain because the diversion of waste is so significant because many industries recycle outside of the traditional recycling process.

2.2.6 Estimation of Potential Biosolids Recovery

Table 2- 5 - Estimated Biosolids Recoverable in Clinton County

Material	Estimated Components of Biosolids Tons Generated in 2016	Tons of Biosolids Diverted per 2016 Data Obtained	
		Tons Diverted	% Diverted
Biosolids	4,508[1]	2,293	50.87%

Source: 2016 NYSDEC Facility Annual Reports.

1. Doesn't include minor amounts treated on site

Based on the quantities of potential biosolids divertible materials that were reported to the NYSDEC or estimated, Clinton County diverted approximately 2,293 tons of material (50.87 percent) from the Biosolids disposal stream in 2016. This diverted material was land applied through Grasslands Agricultural Products. Table 2-5, above, indicates that 2,215 tons of Biosolid materials could potentially be available for diversion. A task has been added to the Implementation Schedule to evaluate and implement data collection efforts.

3.0 Existing Program Description

The County owns one central landfill comprised of an operational MSW and Land Clearing Debris (LCD) landfill in the Town of Schuyler Falls as well as a MRF at the same site. NEWSNY operates the landfill and the MRF is run by NEWSNY. Additionally, NEWSNY operates 12 residential waste and recyclables drop-off stations in the Towns Altona, Ausable, Champlain, Chazy, Clinton, Dannemora, Ellenburg, Mooers, Peru, Saranac and Schuyler Falls. These facilities deliver their collected waste and recyclables to the County MRF or the Clinton County Landfill. Generators and haulers are not required to deliver waste or recyclables to the County facilities and businesses may self-market their recyclables. The majority of solid waste and recyclables are processed within the County. It is currently estimated that 98 percent of the MSW and 75 percent of the C&D debris is managed within the County.

Given the rural nature of Clinton 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 stations or private contracts. Most entities transport their waste and recyclables directly to the landfill or MRF for proper management by the County's private contractor. Clinton 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. The City of Plattsburgh is the only municipality within Clinton County that offers municipally run collection of garbage and recycling. All residential properties located within the City of Plattsburgh may elect to receive garbage collection. Households pay a monthly fee per unit, which is billed and collected along with water, sewer, and electric utility bill. Households can dispose of unlimited household refuse and recyclables. Commercial properties may also elect to enroll in the program. Commercial properties' pickup is limited to six, 30-gallon bags weekly. All participants may opt-out of the program at any time. A summary of waste disposal activities by waste type follows.

3.1 Solid Waste Management Facilities

3.1.1 Landfill Facilities

Clinton County currently owns one solid waste landfill and one Land Clearing Debris (LCD) landfill, both co-located on the same property within the County's borders. The active MSW landfill began accepting waste in 1997 and the active LCD landfill began accepting waste in 2010. The County-owned landfill property is located on Sand Road in the Town of Schuyler Falls. The existing annual permit limit for the active MSW landfill is 175,000 tons per year, and the remaining constructed capacity reported

in the 2016 annual report was 401,914 cubic yards, with an anticipated site life of approximately 1.67 years depending on actual waste receipts. The ultimate disposal capacity of the site is 5,421,601 cubic yards which has an approximate site life of 22.41 years at the 175,000 tons per year acceptance limit. The current OMLA allows for an increase in annual tonnage limit up to 250,000 tons per year, however, this is not allowed under the current Part 360 landfill permit. A modification to the permit to allow for this tonnage increase is currently being pursued. The active LCD landfill received 1,939 tons of LCD in 2016. All waste operations undertaken at the Clinton County Landfill are done in accordance with NYSDEC Part 360 regulations and any special conditions set forth in the Operating Permit issued by the NYSDEC. MSW, C&D debris, and non-hazardous commercial/industrial waste are accepted at the site. There are no other active landfills within Clinton County. Four landfills within the County were closed in the 1990s, including the Schuyler Falls Landfill, Mooers Landfill, Ausable Landfill, and Champlain Landfill.

There is a landfill gas to energy (LFGTE) facility on-site as well. It began operation in 2008 and generates approximately 4 MW of electricity per day using landfill gas collection from the various sections of the Clinton County Landfill. This is considered a “green” energy, as it replaces the consumption of power generated by fossil fuels. NEWSNY continues to look for financially viable opportunities to partner with solar companies to install additional “green” energy solutions on closed portions of the Clinton County Landfill.

Most residents and commercial/industrial entities that are either not served by or elect not to contract with a private hauler, deliver their waste to a Convenience Station owned by Clinton County and operated by NEWSNY. However, the following municipalities in Clinton County do not have their own Convenience Station and must transport their waste to a Convenience Station in a neighboring town.

- Town of Beekmantown
- Town of Black Brook
- Town of Plattsburgh

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

Table 3- 1 – Out-of-County Solid Waste Landfills Servicing Clinton County Waste

Solid Waste Facility	Facility Address	Permitted Capacity (cubic yards)	Expected Site Life (years)	Operating Status
Franklin County Landfill	828 County Route 20 Constable, New York	2,186,063	27.8	Municipally owned and operated
Albany Landfill	525 Rapp Road Albany, New York	1,030,620	3.1	Municipally owned and operated
Colonie Landfill	1319 London Road Cohoes, New York	411,957	1	Municipally owned; Operated by Capital Region Landfills; Expansion Permit application under review by NYSDEC.

Each of these out-of-county landfills accepted waste that was generated in Clinton County in 2016. 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 Clinton County.

3.1.2 Transfer Stations or Drop Off Stations

As previously mentioned, 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 Transfer Station or Convenience Stations owned by Clinton County and operated by NEWSNY.

The Clinton County Solid Waste Management Facility, owned by Clinton County and operated by NEWSNY, is located on Sand Road in the Town of Schuyler Falls. Currently the facility operation allows for a multitude of resource management activities. MSW and recyclables are deposited in their respective areas. MSW and C&D debris are placed on the active face of the Clinton County Landfill which is on site. Recyclables are processed at the MRF on-site and sold to market. Various electronics, scrap metal, appliances and tires may be accepted for a nominal fee and are segregated so that they may be transported for disposal or recycling at an appropriately permitted facility. Recyclable materials accepted through the MRF currently includes; glass bottles and jars, tin and aluminum containers, plastics #1 and 2, mixed paper, office paper, magazines,

newspaper and cardboard. The MRF has no annual tonnage limit for acceptance of materials, but has a design capacity of 55 tons of recyclables per day.

The Schuyler Falls Convenience Station is also located on the grounds. Residents may bring their waste and recyclables to the Drop Off Station for disposal and recovery respectively. The County provides a pay-as-you-throw (PAYT) program whereby residents pay for disposal of their solid waste at a designated sticker price, while recyclables are received at no charge. For residential safety, the activities associated with the Drop Off Station are segregated from the larger landfill/MRF operations.

In addition to Schuyler Falls Convenience Station, several other Drop Offs are located around the County for residential use. These stations are located in the Towns of Altona, Ausable, Champlain, Chazy, Clinton, Dannemora, Ellenburg, Mooers, Peru, and Saranac. The County provides a PAYT program whereby residents pay for disposal of their solid waste at a per bag rate, while recyclables are received at no charge. A listing of the transfer station facilities in Clinton County is presented in the following Table 3-2.

Table 3-2 Convenience Station Sticker Prices (one sticker is $3.00)

Size of Trash Bag (gallons)	Number of Stickers
1-16	1
17-33	2
34-50	3
51-80	4
>80	Not Accepted

Table 3- 3 - Active Transfer Stations in Clinton County (*Source: NYSDEC Annual Facility Reports (2016)*

Transfer Station Name	Owner/Operator	Facility Address	Disposal Destination	Age/ Expected Life	Infrastructure Components
Altona Convenience Station	Clinton County/ NEWSNY	259 Devils Den Road Altona, NY 12910	Clinton County LF or MRF	Unknown	Accepts MSW and recyclables.
Ausable Convenience Station	Clinton County/ NEWSNY	242 Dry Bridge Road Ausable Forks, NY 12912	Clinton County LF or MRF	Unknown	Accepts MSW and recyclables
Champlain Convenience Station	Clinton County/ NEWSNY	144 Castine Road Champlain, NY 12919	Clinton County LF or MRF	Unknown	Accepts MSW and recyclables.
Chazy Convenience Station	Clinton County/ NEWSNY	49 Esker Road West Chazy, NY 12992	Clinton County LF or MRF	Unknown	Accepts MSW and recyclables.
Churubusco Convenience Station	Clinton County/ NEWSNY	Clinton Mills Road Churubusco, NY 12935	Clinton County LF or MRF	Unknown	Accepts MSW and recyclables.
Dannemora Convenience Station	Clinton County/ NEWSNY	958 General Leroy Manor Road Cadyville, NY 12918	Clinton County LF or MRF	Unknown	Accepts MSW and recyclables.
Ellenburg Convenience Station	Clinton County/ NEWSNY	6576 Military Turnpike Ellenburg, NY 12934	Clinton County LF or MRF	Unknown	Accepts MSW and recyclables.
Lyon Mountain Convenience Station	Clinton County/ NEWSNY	4353 Route 374 Lyon Mountain, NY 12955	Clinton County LF or MRF	Unknown	Accepts MSW and recyclables.
Mooers Transfer Station	Clinton County/ NEWSNY	1590 North Star Road Mooers Forks, NY 12959	Clinton County LF or MRF	Unknown	Accepts MSW and recyclables.
Peru Convenience Station	Clinton County/ NEWSNY	526 Barney Downs Road Peru, NY 12972	Clinton County LF or MRF	Unknown	Accepts MSW and recyclables.
Saranac Convenience Station	Clinton County/ NEWSNY	802 Ore Bed Road Schuyler Falls, NY 12985	Clinton County LF or MRF	Unknown	Accepts MSW and recyclables.
Schuyler Falls Convenience Station	Clinton County/ NEWSNY	Sand Road Morrisonville, NY 12962	Clinton County LF or MRF	Unknown	Accepts MSW and recyclables.

3.2 Out-of-County Waste

The Clinton County Landfill is the only facility from which adequate data is available to determine what quantities of out-of-County waste are handled within Clinton County. The following is a summary of the types and quantities of waste that are handled from each outside entity.

Table 3- 4 – Out-of-County Waste

Solid Waste Type	County/State/ Province	Amount Per Year (tons)
Mixed Municipal Solid Waste	Essex, NY	5,824.41
Mixed Municipal Solid Waste	Franklin, NY	5.60
Mixed Municipal Solid Waste	St. Lawrence, NY	60.39
Mixed Municipal Solid Waste	Saratoga, NY	16,502.46
Mixed Municipal Solid Waste	Vermont	7.06
Mixed Municipal Solid Waste	Massachusetts	22.07
Mixed Municipal Solid Waste	Quebec, CA	22,928.75
TOTAL		**45,353.74**
C&D Debris	Essex, NY	1,548.37
C&D Debris	Saratoga, NY	151.27
C&D Debris	St. Lawrence, NY	7.30
C&D Debris	Vermont	29.27
C&D Debris	Quebec, CA	14,891.06
TOTAL		**16,627.27**
Industrial Waste & MRF Residue	Essex, NY	1,300.51
Industrial Waste & MRF Residue	St. Lawrence, NY	4,084.18
Industrial Waste & MRF Residue	Saratoga, NY	3.18
Industrial Waste & MRF Residue	Vermont	349.63
Industrial Waste & MRF Residue	Quebec, CA	379.27
TOTAL		**6,116.71**
GRAND TOTAL		***68,097.72***

3.3 Reduction, Reuse Recycle Programs

3.3.1 Residential Sector Recycling Facilities and Efforts

Table 3-4, above, provides a summary of the transfer stations that accept recyclables. As mentioned above, Clinton County contracts with a private operator (NEWSNY) to operate a MRF on Sand Road in Schuyler Falls, NY. Materials accepted at this location are sorted and then shipped to their respective markets across the Eastern United States and Canada. Other known recycling facilities located within Clinton County include Tomra New York Recycling and Plattsburgh Hauling (formerly Northern Sanitation). Little information on services was available at the time this Plan was prepared.

Two basic systems currently exist in Clinton County for the collection of recyclables: curbside collection and residential drop off sites (i.e., convenience stations). Residents who elect not to hire a private hauler typically drop-off recyclables at Convenience Stations across the County operated by NEWSNY. The Convenience Stations do not charge for the acceptance of recyclables. 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 Clinton County. The evaluations are to assess the effectiveness and/or needs of these facilities and programs and Clinton 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.

3.3.2 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 stations or transfer stations.

Since there is no reporting requirement for these commercial entities, quantities and types of waste/recyclable materials disposed or recovered in Clinton County have not been made readily available to the County. Chapter 5 is intended to address the issue of the lack of data being reported by the various commercial entities. Additionally, 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 Clinton 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.

3.3.3 Agricultural Sector Recycling Efforts

Although in its infancy, the County has participated in a pilot agricultural plastics recycling program that allows a small number of farmers to bale their agricultural plastics in lieu of other disposal options. Materials accepted in the program have included agricultural film, greenhouse poly, irrigation and sap collection tubing, and black plastic greenhouse pots and flats. This program is currently constrained by the availability of markets interested in the baled commodity. In 2016, approximately 45,000 pounds of agricultural plastics were sent out for recycling. The Soil & Water Conservation District will continue to work on establishing markets and looking for partnership opportunities with other planning units, so that the program may provide a regional benefit and commodity quantities that are desirable to the recycling markets.

In addition, the CleanSweepNY program, an Environmental Benefit Project administered by the Natural Heritage Trust (NHT), has provided several pesticide collection and disposal programs within Clinton County over the past several years, with the most recent occurring in spring 2016. These services are provided to farmers and owners of former farms, all

categories of NYS certified pesticide applicators, cemeteries, golf courses, marinas, and other entities possessing unwanted or unusable pesticides and other waste chemicals.

3.3.4 C&D Debris 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.

3.3.5 Institutional Recycling Efforts

Large educational institutions, such as local school districts, SUNY Plattsburgh, prisons, nursing homes, hospitals, and senior living complexes, tend to produce large quantities of paper wastes and food wastes. Section 1.4 in Chapter 1 provided an overview of several of these institutions. These institutions manage their own waste and recyclables. Clinton 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 Clinton County has not been made available to the County. Section 5.9 is intended to address the issue of the lack of data being reported by these various entities. Additionally, 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 Clinton 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.

3.3.6 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, as discussed further in Section 5.1 below, the County does not have a formal County-wide waste reduction and recycling policy. All recycling programs are left to the municipalities and private entities.

Clinton County implements waste diversion efforts through their reuse of road millings during road resurfacing projects. Pavement that is removed during resurfacing projects is reused and not landfilled.

3.3.7 Industrial Facility Recycling Efforts

There are a number of industries located within Clinton County, such as Mold-Rite Plastics, Georgia-Pacific, and Bombardier. Information related to industrial recycling efforts was unavailable at the time this Plan was completed.

3.3.8 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 1-8.

3.3.9 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 yield[15]:

- 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

NEWSNY monitors scrap metal that is processed at the County-owned and NEWSNY operated convenience stations and landfill. Additionally, NEWSNY monitors scrap metal that is collected by their hauling division. Any scrap metal generated that is not collected or processed by a NEWSNY division is not monitored.

3.3.10 Public Education Efforts to Promote Recycling

Clinton County recognizes the importance of educating the community on waste reduction, recycling and material recovery opportunities. To effectively manage these evolving programs, the County has a public-private partnership with NEWSNY. NEWSNY interacts with children through schools, environmental field days, and youth related

[15] http://www.norstar.com.au/Recycling/Processing/Benefits.aspx

events and contests. In order to help educate Clinton County residents in the design, construction and operations of the resource management facilities that exist within the County, NEWSNY gives landfill, MRF, and LFGTE facility tours to local organizations and schools.

The County's other public education efforts are primarily on the Clinton County website.

3.3.11 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. According to the Cornell Waste Management Institute Compost Facilities Map, there are currently four organics compositing facilities located within Clinton County – two farm based facilities, likely composting animal manure and farm generated green waste, one food waste composting facility located at the Altona Correctional Facility, and one yard waste composting facility located at the Clinton County Landfill.

It should be noted, that the diversion of organic wastes, including yard waste and food waste (addressed below) would result in the removal of these wastes from the Clinton County Landfill Facility. The organic component of waste is responsible for the landfill gas generation. As described in Section 3.2.1, above, this landfill gas is currently collected and beneficially used for green energy production.

3.3.12 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.

Currently yard waste is accepted at the Clinton County Landfill for a nominal fee. Christmas trees are accepted free of charge at the Clinton County Landfill composting area every January. Information regarding municipalities' yard waste programs is lacking.

3.3.13 Food Scraps/Food Processing Waste/Food Banks

There are no known food waste collection programs or food processing facilities within Clinton County.

3.4 Biosolids/Sewage Sludge Handling

According to NYSDEC records, biosolids/sewage sludge generated in Clinton County were managed as identified in Table 3-5, below. Additional details related to these facilities are provided in Table 2-1 in Chapter 2.

Table 3- 5 - Municipal Sewage Sludge Disposal Summary

Facility Name	Disposal Destination
Cadyville WWTP	Undisclosed Landfill
Village of Champlain WWTF	Franklin County Landfill
Town of Chazy WWTF	Treated On-Site
Village of Dannemora WWTP	Treated On-Site
Town of Ausable WPCP	Franklin County Landfill
Lyon Mountain SD WWTP	Treated On-Site
Town of Peru WPCP	Franklin County Landfill/Grasslands Agricultural Products
City of Plattsburgh WPCP	Franklin County Landfill/Waste USA Landfill/Grasslands Agricultural Products
Village of Rouses Point WWTP	Franklin County Landfill
Valcour SD WWTF	Treated On-Site

3.5 Management of Household Hazardous Waste

Many common household products contain hazardous substances. These products become HHW once the consumer no longer has any use for them. Many communities have established programs to manage HHW. The impetus for starting a HHW program can come from the grassroots level, from local or state government agencies, from community groups, or from industry. The number of HHW collections in the United States has grown dramatically over the last decade. Since 1980, when the first HHW collection was held, more than 3,000 collection programs have been documented in all 50 states.

Although programs vary across the country, most include both educational and collection components. Communities usually begin a HHW program by holding a single-day drop-off HHW collection. Organizing a collection event is an important first step in reducing and managing risks associated with HHW.

Some communities hold annual or semiannual collections, while others have established permanent HHW collection programs with a dedicated facility (open at least once each month) to provide households with year-round access to information and repositories for HHW. In addition, communities have initiated pilot programs for curbside pick-up by appointment, neighborhood curbside collection programs, and drop-off programs for specific types of HHW.

The efforts of communities across the country provide a wealth of experience for other communities beginning HHW management programs. As the number of these programs continues to grow, public awareness about HHW will also grow, and the environmental problems associated with improper storage and disposal of HHW are likely to decrease.

Clinton County has voluntarily offered a public HHW collection event for County residents since 1996. Currently, NEWSNY manages an annual event that is paid for by the County, up to a set dollar amount, per the OMLA between the parties. In recent years this event has been very successful. Table 1-8 summarizes the quantities of HHW that was collected in June 2017 during the Household Hazardous Waste Collection Day.

3.6 Efforts to Enforce Local Disposal and Recycling Laws

The Clinton County Sheriff's Department employs a sheriff with certain duties as a Solid Waste Enforcement Officer who is responsible for enforcing the County's recycling laws as well as ensuring that trucks transporting waste to the landfill are tarped/covered and responding to complaints of trash being burned on residential sites.

In 2009, Clinton County outlawed the disposal of electronic waste, including televisions, computers, and computer components from landfills. The majority of e-waste is accepted free of charge to County residents at the Mooers Transfer Station on North Star Road in the Town of Mooers and at the Clinton County Landfill on Sand Road in the Town of Schuyler Falls. There is currently a handling fee for disposing of CRT televisions and monitors. On May 28, 2010, the New York State Electronic Equipment Recycling and Reuse Act was signed into law. The law 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 Clinton 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. Available e-waste collection sites, other than the Mooers Transfer Station and Clinton County Landfill, include:

- Best Buy – 60 Smithfield Boulevard, Plattsburgh
- Big Apple Audio & Customizing – 10 South Peru Street, Plattsburgh
- Northern Sanitation – 67 Carbide Road, Plattsburgh
- East Side Computer – 855 Route 11, Champlain
- Staples – 77 Consumer Square, Plattsburgh
- Total Computer Supplies – 7164 Route 9, Plattsburgh
- Verizon Wireless Retail Store – 130 Consumer Square, Plattsburgh

As the technology in consumer electronics evolves, the quantity of electronic waste, or E-waste, entering the waste stream will likely continue to grow.

3.7 Volume-based Pricing Incentives

The residential convenience stations located throughout the County use a volume based pricing mechanism for disposal of household MSW. The stations use a sticker system, where residents are charged a flat fee per sticker, but must place a varying number of stickers on each bag prior to disposal. This ranges from one sticker for a 1-16 gallon trash bag, to four stickers for a 51-80 gallon trash bag, while most recyclables are accepted at the facility free of charge. Unlike an annual fee sticker allowing unlimited disposal that is used at many similar facilities, this incentivizes residents to reduce the size and number of bags they dispose.

3.8 Recycling Market Agreements

The County contract with NEWSNY allows full operational control of the County MRF as well as responsibility for marketing and sale of the materials. NEWSNY has 30 years of experience in the recycling industry which allows them to provide expertise in marketing of recycling materials.

Due to the competitive nature of recycling markets, specific outlets are not listed in this Plan because NEWSNY considers these markets proprietary and confidential business information. NEWSNY's parent company operates several MRFs located throughout the State and New England which means that they have more associated tonnage to leverage. This increased volume gives them an expanded ability to market these materials.

NEWSNY actively evaluates the demand for markets and aggressively pursues opportunities. Currently NEWSNY is working to expand the markets for recycling 4-7 plastic container mix, aseptic packaging (broths, soy milk, soups)

and bulky rigid plastics (toys, five gallon pales, laundry baskets). If these market opportunities become available, acceptance of these materials will be incorporated into the existing recycling program.

Although the County relies on the expertise of a contractor to operate the County owned facilities, it also supports both municipal and private industry development for collection, processing and market opportunities of all recoverable materials and monitors the general markets for recyclables.

3.9 Local Hauler Licensing

Currently, Clinton County requires all haulers, businesses, landlords, and property management companies to obtain a hauler's permit in order to use the Clinton County Landfill and/or the Materials Recovery Facility. This program gives the County a mechanism for tracking waste and recyclables brought to County owned facilities, impose penalties on haulers who do not follow facility guidelines, and track payments. This program does not, however, apply to haulers who operate in Clinton County and haul waste to locations outside of the County.

3.10 Recycling Data Collection Efforts

As demonstrated in the previous sections of this plan, Clinton 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 NYSDEC 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 NYSDEC). 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 Section 2, based on 117,088 tons of waste (including recyclable materials) generated within Clinton County in 2016, 100,000 tons were disposed in landfills and 17,088 tons of materials were diverted either by composting or recycling. Consequently, Clinton County's current overall waste diversion rate is estimated at 14.6%. When examining just the MSW component of the overall waste stream, the County's MSW diversion rate is estimated at 6.7% -- 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 Clinton County has not been made readily available to the County.

4.0 Existing Administrative and Financial Structure

4.1 Staff in Charge of Implementing New System

Following the decision to contract out operations and management of the landfill, MRF, transfer station and convenience stations through a lease agreement, Clinton County took the position of relying on the private sector to manage the County's solid waste and recyclables. The County continues to be removed from the primary role as a solid waste manager. However, the County Executive and the Standing Committee of the Clinton County Legislature will be responsible for the implementation of the program strategies described in Chapter 6. Although they may not have direct financial or administrative responsibility for each item, they will bear the responsibility of working with municipalities, institutions, and private sector waste managers to address the implementation of the program strategies.

4.2 Financial Structure

Clinton County bore the primary financial responsibility for the initial development of the existing County-owned solid waste management facilities located within the County, which are responsible for the management of much of the waste generated within the County. Under the OMLA agreement, NEWSNY is responsible for a majority of the costs associated with the operation of these facilities, as well as capital investments such as landfill expansion and facility improvements.

The OMLA agreement provides the following financial benefits to Clinton County and its residents yearly:

- Host Fee of $2.50-$3.50/ton disposed
- Recycling Payment of $200,000/year
- Deputy Sheriff salary, benefits, expenses and new vehicle every five (5) years
- Four percent (4%) of the value of Renewable Energy Credits for production of electricity from Landfill Gas
- LFGTE Payments of greater of $52,000 or $0.30/ton
- Free disposal of up to 10,000 tons of Acceptable Waste over the term of the OMLA

The revenue received by Clinton County pursuant to this OMLA has helped the County implement programs that they would otherwise not have been able to provide. It is expected that these financial benefits will continue to assist the County in implementing the program strategies that promote waste diversion and recovery as described in Chapter 6.

NEWSNY pays the following per ton fee to the County for each ton of Acceptable Waste disposed of at the Lined Landfill on an annual basis, excluding material with a "beneficial use determination", for each increment described below:

Table 4-1 – Financial Benefits Summary

Tonnage	Price
0-125,000	2.50
125,000-175,000	3.50
175,000-200,000	3.50
200,000-250.000	3.50

4.3 Laws, Regulations or Ordinances

4.3.1 Local Law

In 1992 Clinton County passed Local Law #3 (Adopting Clinton County Recycling Law) which required the segregation of recyclables (for which economic markets exist) from the waste stream. The law was amended in 1994, 1996 and again in 2005 with further clarification of definitions and more stringent penalties. In 2009, the County enacted Local Law #1(attached in Appendix B), which established a new Clinton County Solid Waste and Recycling Law and repealed these prior laws. Generally, this local law:

- establishes the management structure for the solid waste management system within the county;
- prohibits the mixing of recyclables with solid waste;
- establishes a waste hauler permit system;
- sets disposal fees/limits at the convenience stations;
- establishes the list of recyclable materials within the County;
- details prohibited disposal activities; and,
- sets enforcement policies and penalties.

The Clinton County Sheriff's Department employs a sheriff with certain duties as a Solid Waste Enforcement Officer who is responsible for enforcing the County's recycling laws as well as ensuring that trucks transporting waste to the landfill are tarped/covered and responding to complaints of trash being burned on residential sites.

4.3.2 Waste Importation and Flow Control

Clinton County does not currently have any laws relating to the import or export of waste to or from Clinton County. The OMLA with Casella does stipulate the geographical area from which waste may be imported to the Clinton County Landfill, which is the southern boundary of Westchester County.

4.4 Solid Waste Management Policies

Clinton County does not currently have formal solid waste management policies across County facilities. Although many departments within the County may employ waste management reduction practices on an office by office basis, such as double sided printing, air hand dryers, and recycling programs, these are not currently consistent across all County government.

5.0 Alternative Technology Evaluation

The County evaluated various technologies that could possibly enhance existing solid waste management program elements or add new program elements to the planning unit as alternative programs. While expansions of the existing technology may be necessary to provide ongoing capacity, no significant technology changes from existing approaches are anticipated during the planning period. The County anticipates continuing the current integrated, multi-disciplinary approach to solid waste services. The alternatives listed within this section were subject to a public comment period in which they receive no public comments.

5.1 Waste Reduction Programs

Under the State Solid Waste Management Policy established in New York State's Environmental Conservation Law, Waste Reduction Programs is first in the hierarchy of waste management. Waste Reduction focuses on the prevention of solid waste generation through modifications in behavior and changes in products, packaging and purchasing. For individuals, waste reduction is a change to consciously thinking about not creating waste or minimizing their waste. For product manufacturers, it is the design, manufacture, purchase or use of materials to reduce the volume or toxicity before products are produced and eventually enter the waste stream.

Programs to incite waste reduction at the County level are difficult, as they primarily rely on changes to human behavior or manufacturing; two things that the County has very little control over. However, two possible mechanisms that the County could employ to achieve waste reduction are the implementation of waste reduction practices within County facilities and public education, to encourage changes in purchasing and consumption habits of County residents.

A low-cost method to encourage waste reduction within the County and to set an example for County residents would be the adoption of a County-wide waste reduction policy. This policy could include:

- An electronic documents policy to allow for the use of electronic documents where paper copies are currently required.
- A double-sided printing policy to save paper where paper copies are required.
- Standard document formatting policies that reduce margin width and unused space.
- The use of high efficiency hand dryers in all bathrooms at County facilities to eliminate paper towel waste.

- Changes in purchasing policy to eliminate the County purchase/use of disposable tableware.

Administrative/Technical Impacts

Quantitative/Qualitative - The Waste Reduction Program is expected to reduce select MSW waste volumes by less than 5%.

Sizing of Facilities or Programs Needed - This program wouldn't effect sizing of current facilities, and there would be no infrastructure required by the County. Waste reduction allows the facilities within the planning unit to stay the same size and additional space for waste processing won't be necessary.

Cost and Life Cycle - Waste reduction efforts are expected to have no measurable cost to the County or the residential waste generator.

Impacts on Natural Resource Conservation, Energy Production and Employment - MSW waste reduction is expected to provide natural resource conservation. Energy production and job creation is not anticipated.

Jurisdictional Impacts on Neighboring Planning Units

Assessment of Participation Interest Potential by Neighboring Planning Units - Franklin and Essex Counties could potentially participate with Clinton County in the Waste Reduction Program. A consistent method between planning units could be useful in education efforts in communities near the county borders.

Assessment of Alternatives That Might be Available if any Planning Units Participated - Activities associated with this program are not dependent on the participation of neighboring planning units.

Comments Received by Neighboring Planning Units or Neighboring Jurisdictions- No comments were received.

Assessment of Environmental Justice within Clinton County - According to the NYSDEC Environmental Justice Area Mapper, there are three potential environmental justice areas located within Clinton County, within the Town of Dannemora, Town of Beekmantown and City and Town of Plattsburgh. There is no known or expected environmental justice impact within Clinton County associated with waste reduction.

Alternative Selection Status

Program Strategy No. 1 - During the planning period, the County will evaluate the current waste reduction practices within County facilities and determine where changes are feasible.

Expected Quantitative and Qualitative Impacts

Waste Reduction - Waste Reduction Program is expected to reduce MSW select waste volumes by less than 5%.

Reuse- actions expected to enhance reuse <5%

Materials Recovery - Expected to improve materials recovery of select waste materials by 3%-5%

Participation in Recovery Opportunities- actions expected to enhance participation <5%

Product Stewardship - no Measurable impact on product stewardship

Economic, administrative or partnership benefits- actions expected to reduce expenses <5%

Identification of Administrative, Contractual, and Financial Requirements for Implementation - The existing administrative, contractual and financial structure is sufficient to support ongoing and proposed waste reduction activities.

Identification of New or Modification to Local Laws, Ordinances or Regulations- No new local laws, ordinances, or regulations identified as necessary at this time.

Implementation of public education is discussed in Section 5.8.

5.2 Reuse Programs

Reuse Programs focus on everyday materials that have the potential to be reused for their original purpose or for a new purpose. Reuse programs allow products to be used to their full potential and also keeps these materials out of the landfill. Additionally, reusing products conserves natural resources and saves valuable landfill space.

Prior to 1992, latex paint contained mercury and was classified as a hazardous waste. The Environmental Protection Agency (EPA) banned the use of mercury in latex paint in 1992, which reclassified it as non-hazardous. Currently, the proper disposal method for latex paint is with the MSW waste stream after the paint has been dried. It's estimated that 10% of paint bought becomes leftover and that in Clinton County approximately 17,500 gallons of

paint are leftover every year.[16] Disposing of the leftover paint, which does not expire quickly, is a waste.

The County will evaluate the feasibility of establishing a latex paint exchange program for its residents. The program will allow for residents to drop off unwanted paint and allow for other County residents to pick up paint there free of charge. This program would need to be organized by an administrator and at least one employee would be needed to make this program successful. To make this program successful there would have to be a community drop off and pick up location. Cost of this program includes employees to oversee the program and building pickup and drop off. Currently, various other details on the program are unknown and will need to be developed.

Administrative/Technical Impacts

Quantitative/Qualitative - The Reuse Program is expected to reduce latex paint disposal by 20%.

Sizing of Facilities or Programs Needed - This program would need a designated facility to be the drop off and pickup location. Sizing of the facility would need to be determined during program feasibility review.

Cost and Life Cycle - To make this program successful there would have to be a community drop off and pick up location. Cost of this program includes at least one employee to oversee the program and a building for pickup and drop off.

Impacts on Natural Resource Conservation, Energy Production and Employment - Reuse Program is expected to provide natural resource conservation. It is anticipated the additional employees would come from shifts in job duties of current personnel. Energy production is not anticipated.

Jurisdictional Impacts on Neighboring Planning Units

Assessment of Participation Interest Potential by Neighboring Planning Units - Franklin and Essex Counties could potentially participate with Clinton County in the Reuse Reduction Program, although time of travel to the facility would factor in.

Assessment of Alternatives That Might be Available if any Planning Units Participated - Activities associated with this program are not dependent on the participation of neighboring planning units.

[16] http://c.ymcdn.com/sites/www.productstewardship.us/resource/resmgr/Paint/2nd_Paint_MOU--FINAL_10-24-0.pdf

Comments Received by Neighboring Planning Units or Neighboring Jurisdictions - No comments were received.

Assessment of Environmental Justice within Clinton County - There is no known or expected environmental justice impact within Clinton County associated with the latex paint exchange program.

Alternative Selection Status

Program Strategy No. 2 - Latex Paint Exchange Program

Expected Quantitative and Qualitative Impacts

Waste Reduction - Reuse Program is expected to reduce Latex Paint waste disposal volumes by 20%.

Reuse - actions expected to enhance reuse 10%

Materials Recovery - Expected to improve materials recovery of select waste materials by 20%

Participation in Recovery Opportunities- actions expected to enhance participation 20%

Product Stewardship - no Measurable impact on product stewardship

Economic, administrative or partnership benefits- actions expected to increase expenses 5-10%

Identification of Administrative, Contractual, and Financial Requirements for Implementation - Administrative and financial structure of the County would have to be changed to implement the added expenses of a new employee for the program. The existing contractual structure is sufficient to support the proposed reuse program.

Identification of New or Modification to Local Laws, Ordinances or Regulations- No new local laws, ordinances, or regulations identified as necessary at this time.

5.3 Recyclables Recovery Program

The main objective of a Recyclables and Recovery Program is finding solutions for beneficial reuse or recycling waste into new raw materials protects and preserves our environment by limiting our dependence on landfills, conserving natural resources and decreasing our community's environmental footprint. The average person generates over 4 pounds of trash every day and

about 1.5 tons of trash annually. Of that 1.5 tons over 75% of waste is recyclable, but only 30% of it is recycled.

5.3.1 Single Stream Recycling

Single-stream recycling is a system that collects all paper fibers and commingled containers together in one collection truck. In a single-stream recycling system, the materials are commingled and no longer separated by the residents at the curb and hauled to the recycling facility in separate compartments in the collection vehicle. In single-stream, both the collection and the processing systems must be designed to handle this fully commingled mixture of recyclables.

The single-stream philosophy of recycling has firmly taken hold in many areas of the country where weather conditions and port access eased operational concerns. Hundreds of North American and European cities annually shift to single stream recycling. A 2005 R.W. Beck survey stated that 11 percent of the U.S. population with curbside recycling service was single-stream. By 2007, that number had increased to 50 percent according to the American Forest and Paper Association.

The advantages of a single-stream system are associated with slightly higher recycling rates and reduced collection costs. The disadvantages of the system are associated with initial capital costs for upgrading of the materials recovery facilities, higher sorting and processing costs, higher residual rates (i.e., non-processable material sent to the landfill), and higher contamination of recyclable paper, making the recovered material less marketable.

Currently single stream recycling is offered by a number of the independent local hauling companies operating in Clinton County for its residents who subscribe to the service.

5.3.2 Expansion of Accepted Materials

In many communities, mandatory recyclables lists are outdated and do not align with the current recycling markets. It is important to ensure that local laws and requirements are consistent with market conditions and technological advances. In recent years communities are reviewing these lists.

NEWSNY currently contract-operates the Clinton County MRF. It is the County's public responsibility, and NEWSNY's contractual charge, to continually examine the waste stream for opportunities to sustainably divert material from entering landfills. Sustainable diversion includes locating markets that, at the minimum, are long-term, consistent, safe (to human health and the environment) and profitable. The County has always aggressively expanded its recycling/recovery program as emerging markets allow for sustainable diversion (i.e., aerosol cans, aseptic containers, gable-top containers and all clean paper).

The County and its MRF contract operator will continue to examine the County's waste stream to determine new items eligible for sustainable diversion through the County's Convenience Station program. Examples include E-wastes such as cell phones and digital cameras.

Administrative/Technical Impacts

Quantitative/Qualitative - Expansion of accepted materials at the Recycling Center is expected to increase the quantity of materials diverted due to increased availability of local outlets for material. In addition, the increased diversion of some wastes would result in the removal of toxic and/or hazardous components from the waste stream such as heavy metals contained in some electronics.

Sizing of Facilities or Programs Needed - Additional facility space is the only sizing criteria associated with this program. Educational programs could potentially be implemented as an effort to educate the public in the importance of Recycling.

Cost and Life Cycle - Anticipated costs associated with this program would potentially be additional facility space.

Impacts on Natural Resource Conservation, Energy Production and Employment- Increase of materials accepted at the Recycling Facility is expected to provide for natural resource conservation. Energy production and Job creation aren't anticipated be effected by this proposed program.

Jurisdictional Impacts on Neighboring Planning Units

Assessment of Participation Interest Potential by Neighboring Planning Units- Franklin and Essex Counties could potentially participate with Clinton County in the proposed program.

Assessment of Alternatives That Might be Available if any Planning Units Participated - Activities associated with this program are not dependent on the participation of neighboring planning units.

Comments Received by Neighboring Planning Units or Neighboring Jurisdictions - No comments were received.

Assessment of Environmental Justice within Clinton County - According to the NYSDEC Environmental Justice Area Mapper, there are three potential environmental justice areas located within Clinton County, within the Town of Dannemora, town of Beekmantown and City and Town of Plattsburgh. There is no known or expected environmental justice impact within Clinton County associated with the proposed expansion of accepted materials at the recycling center (E-Waste) program.

Alternative Selection Status

Program Strategy No. 3 – Expansion of Accepted Materials at Recycling Center (E-Waste)

Expected Quantitative and Qualitative Impacts

Waste Reduction - The proposed program is expected to increase recycling volumes by <5%.

Reuse- actions expected to enhance reuse <5%

Materials Recovery - Expected to improve materials recovery of select waste materials by <5%

Participation in Recovery Opportunities- actions expected to enhance participation <5%

Product Stewardship - no measurable impact on product stewardship

Economic, administrative or partnership benefits - actions aren't believed to provide economic, administrative or partnership benefits associated with the proposed program.

Identification of Administrative, Contractual, and Financial Requirements for Implementation - Existing administrative, financial and contractual structure is sufficient to support the proposed program.

Identification of New or Modification to Local Laws, Ordinances or Regulations - No new local laws, ordinances, or regulations identified as necessary at this time.

5.3.3 Agricultural Plastics Recycling

About 22% of the total land area in Clinton County is active farmland. Land in farms has stayed relatively constant over the last twenty years[17]. 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 Clinton County. As such, many of these materials end up in the County landfill or buried at their point of origin. One challenge to recycling these products is that many of them are bulky and difficult to transport, as well as the concern that many of them may be contaminated with pesticides, mold, and soil. Recently a handful of agricultural plastics recyclers have begun to emerge across the country, along with new concepts in the handling of these materials to enhance the ability to recycle them.

As detailed in Section 3.4, the County has worked with Cornell Cooperative Extension in the past to implement a pilot scale agricultural waste recycling program. The County Division of Soil & Water will continue to look into expanding the agricultural plastics recycling program. The feasibility of larger scale use will be investigated and outside Planning Unit partners will be sought out to participate. Chapter 6 – Implementation Schedule provides the milestones through the planning period that are anticipated to be completed to expand this program throughout the County.

Administrative/Technical Impacts

Quantitative/Qualitative - Expansion of agricultural plastics program is expected to increase recycling efforts by <5%. In addition, this would reduce the instances of these materials being buried at the site of generation.

Sizing of Facilities or Programs Needed - Additional facility space is the only anticipated sizing criteria associated with this program. Educational programs could potentially be implemented as an effort to educate the public on recycling agricultural plastics.

Cost and Life Cycle - Anticipated costs associated with this program is additional facility space and program expansion efforts.

Impacts on Natural Resource Conservation, Energy Production and Employment - Expansion of agricultural plastics is expected to provide for natural resource

[17] https://agcensus.usda.gov/Publications/

conservation and provide new job creation. Energy production isn't anticipated be effected by this proposed program.

Jurisdictional Impacts on Neighboring Planning Units

Assessment of Participation Interest Potential by Neighboring Planning Units - Franklin and Essex Counties could potentially participate with Clinton County in the proposed program.

Assessment of Alternatives That Might be Available if any Planning Units Participated - Activities associated with this program are not dependent on the participation of neighboring planning units.

Comments Received by Neighboring Planning Units or Neighboring Jurisdictions - No comments were received.

Assessment of Environmental Justice within Clinton County - There is no known or expected environmental justice impact within Clinton County associated with the proposed expansion of agricultural plastics program.

Alternative Selection Status

Program Strategy No. 4 – Expand Agricultural Plastics Recycling Program

Expected Quantitative and Qualitative Impacts

Waste Reduction - The proposed program is expected to increase recycling volumes by <5%.

Reuse - actions expected to enhance reuse <5%

Materials Recovery - Expected to improve materials recovery of select waste materials by <5%

Participation in Recovery Opportunities - actions expected to enhance participation <5%

Product Stewardship - no measurable impact on product stewardship

Economic, administrative or partnership benefits - Administrative and Partnership benefits are likely for this proposed program. Partnership benefits with neighboring planning units and with Cornell Cooperative Extension would benefit the development of this program. There are not any economic benefits associated with the proposed program.

Identification of Administrative, Contractual, and Financial Requirements for Implementation - Existing administrative, financial and contractual structure is sufficient to support the proposed program.

Identification of New or Modification to Local Laws, Ordinances or Regulations - No new local laws, ordinances, or regulations identified as necessary at this time.

5.3.4 Recycling at County Facilities and Events

Clinton County is interested in taking the initiative to promote recycling at county owned facilities. Clinton County will act as a model to other municipalities within Clinton County to increase recycling by their staff. Clinton 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 subcommittee, Clinton County staff will prepare a plan to increase recycling at county owned and/or operated facilities. Later in the planning period the subcommittee will review how to expand this goal to public events, schools, institutions, etc. given the lack of participation and information specified previously in Section 3. The implementation schedule in Section 6 provides an outline of the resources and subtasks necessary to increase recycling at county owned facilities.

Administrative/Technical Impacts

Quantitative/Qualitative - Increased recycling at County facilities and events program is expected to increase recycling efforts by 5-10% over the 10 year planning period. In addition, the program could have ancillary benefits by providing education to the public in the form of setting an example for proper waste reduction and diversion.

Sizing of Facilities or Programs Needed - There are no foreseen additional infrastructure needed to support this program.

Cost and Life Cycle - Increased recycling at County facilities and events is expected to have no measureable cost to the County. Operation and maintenance costs for the County are expected to rise modestly in line with inflation.

Impacts on Natural Resource Conservation, Energy Production and Employment - The proposed program is expected to provide for natural resource conservation. Energy production and job creation isn’t anticipated to be affected by this proposed program.

Jurisdictional Impacts on Neighboring Planning Units

Assessment of Participation Interest Potential by Neighboring Planning Units - No participation by neighboring planning units is anticipated.

Assessment of Alternatives That Might be Available if any Planning Units Participated - Activities associated with this program are not dependent on the participation of neighboring planning units.

Comments Received by Neighboring Planning Units or Neighboring Jurisdictions - No comments were received.

There is no known or expected environmental justice impact within Clinton County associated with the proposed program.

Alternative Selection Status

Program Strategy No. 5 – Increase Recycling at County Facilities & Events

Expected Quantitative and Qualitative Impacts

Waste Reduction - The proposed program is expected to increase recycling volumes by 5-10%.

Reuse - actions expected to enhance reuse <5%

Materials Recovery - Expected to improve materials recovery of select waste materials by 5%-10%

Participation in Recovery Opportunities - actions expected to enhance participation <5%

Product Stewardship - no measurable impact on product stewardship

Economic, administrative or partnership benefits - actions are expected to reduce direct expenses by >1%

Identification of Administrative, Contractual, and Financial Requirements for Implementation - Existing administrative, financial and contractual structure is sufficient to support the proposed program.

Identification of New or Modification to Local Laws, Ordinances or Regulations - No new local laws, ordinances, or regulations identified as necessary at this time.

5.3.5 Product Stewardship

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. Clinton County intends to work together with the New York Product Stewardship Council to coordinate and participate in product stewardship initiatives locally. It is the intent of Clinton County to adopt these product stewardship framework principles through a resolution.

Administrative/Technical Impacts

Quantitative/Qualitative - Adoption of the product stewardship framework displays support for the implementation of State-wide product stewardship initiatives.

Sizing of Facilities or Programs Needed - There are no foreseen additional infrastructure needed to support this program.

Cost and Life Cycle - Product stewardship has the potential to decrease the costs of waste management and diversion efforts in the County by making producers responsible for disposal and/or diversion costs.

Impacts on Natural Resource Conservation, Energy Production and Employment - Natural resource conservation, energy production and job creation aren't anticipated be effected by this proposed program.

Jurisdictional Impacts on Neighboring Planning Units

Assessment of Participation Interest Potential by Neighboring Planning Units - Participation by neighboring planning units is not anticipated.

Assessment of Alternatives That Might be Available if any Planning Units Participated - Activities associated with this program are not dependent on the participation of neighboring planning units.

Comments Received by Neighboring Planning Units or Neighboring Jurisdictions - No comments were received.

Assessment of Environmental Justice within Clinton County - There is no known or expected environmental justice impact within Clinton County associated with the proposed program.

Alternative Selection Status

Program Strategy No. 6 – Adopt Product Stewardship Framework

Expected Quantitative and Qualitative Impacts

Waste Reduction - None anticipated.

Reuse - None anticipated.

Materials Recovery - No direct impacts to materials recovery is anticipated, however, the end goal of supporting product stewardship measures could potentially have signification impacts to material recovery.

Participation in Recovery Opportunities - None anticipated.

Product Stewardship - An increase in product stewardship is anticipated.

Economic, administrative or partnership benefits - As municipalities throughout the State adopt product stewardship framework, it is anticipated that this show of support could lead to legislative action at the State level.

Identification of Administrative, Contractual, and Financial Requirements for Implementation - Existing administrative, financial and contractual structure is sufficient to support the proposed program.

Identification of New or Modification to Local Laws, Ordinances or Regulations - No new local laws, ordinances, or regulations identified as necessary at this time.

5.4 Organic Recovery Program

Each American disposes of about 1,200 pounds of organic waste annually; 100% of that waste can be composted. Composting of organic materials from the solid waste stream not only provides a valuable benefit to nutrient deficient soils, but also reduces the amount of waste that ends up in landfills or incinerators. Other benefits of composting organic matter include the increase in beneficial soil organisms such as worms and centipedes, suppression of certain plant diseases, the reduced need for fertilizers and pesticides, prevention of soil erosion and nutrient run-off, and assistance in land reclamation projects.

In New York State, thousands of tons of organic waste materials are composted each year. These include treated sewage sludge, otherwise known as biosolids/sewage sludge from waste water treatment plants (WWTPs); food waste residuals from industrial food processing facilities; food waste from recovery programs at hospitals, colleges, office buildings, and prisons; paper sludge; yard waste and other organic waste materials.

Currently, there are 78 facilities permitted for composting in New York State. Of these, 13 compost biosolids/sewage sludge, 51 compost yard wastes, and 14 compost food and other mixed wastes.

Material resulting from the composting of biosolids/sewage sludge and yard waste is used primarily as an organic soil conditioner and partial fertilizer. It is applied to agricultural lands, recreational areas such as parks and golf courses, mined lands, highway medians, cemeteries, home lawns and gardens.

It should be noted, that the diversion of organic wastes, including yard waste and food waste (addressed below) would result in the removal of these wastes from the Clinton County Landfill Facility. The organic component of waste is responsible for the landfill gas generation. As described in Section 3.2.1, above, this landfill gas is currently collected and beneficially used for green energy production.

5.4.1 Food Waste Management

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.

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 6 provides an outline of this implementation task.

Administrative/Technical Impacts

Quantitative/Qualitative - Promote Backyard Composting through Education and Training Programs could increase organics diversion from the landfill by several thousand tons per year.

Sizing of Facilities or Programs Needed - There are no foreseen additional infrastructure needed to support this program. Educational programs will be implemented to teach the public how to properly backyard compost and the benefits of this program.

Cost and Life Cycle - Costs associated with the program include public educational and training programs

Impacts on Natural Resource Conservation, Energy Production and Employment - The proposed program is expected to provide for natural resource conservation. Energy production and job creation isn't anticipated to be effected by this proposed program.

Jurisdictional Impacts on Neighboring Planning Units

Assessment of Participation Interest Potential by Neighboring Planning Units - Franklin and Essex Counties could potentially participate with Clinton County in the proposed program by sharing educational materials and/or bulk purchase of backyard composting bins for sale.

Assessment of Alternatives That Might be Available if any Planning Units Participated - Activities associated with this program are not dependent on the participation of neighboring planning units.

Comments Received by Neighboring Planning Units or Neighboring Jurisdictions - No comments were received.

Assessment of Environmental Justice within Clinton County - There is no known or expected environmental justice impact within Clinton County associated with the proposed program.

Alternative Selection Status

Program Strategy No. 7 – Promote Backyard Composting through Education and Training Programs

Expected Quantitative and Qualitative Impacts

Waste Reduction - The proposed program is expected to reduce waste volumes by <5%.

Reuse- actions expected to enhance reuse <5%

Materials Recovery - Expected to improve materials recovery of select waste materials by <5%.

Participation in Recovery Opportunities - actions expected to enhance participation <15%

Product Stewardship - no measurable impact on product stewardship

Economic, administrative or partnership benefits - actions are not expected to result in economic or administrative benefits. Partnership with neighboring counties could potentially reduce program costs.

Identification of Administrative, Contractual, and Financial Requirements for Implementation - Existing administrative and contractual structure is sufficient to support the proposed program. Minor financial requirements are needed to support education and training programs.

Identification of New or Modification to Local Laws, Ordinances or Regulations - No new local laws, ordinances, or regulations identified as necessary at this time.

5.4.2 Yard Waste Management

Little is known regarding yard waste composting programs across the County. Therefore, the County will undertake an effort to collect data on programs offered by the different municipalities within the County. The County will monitor these programs and will support their success, as well as the addition of any programs that are needed.

The Planning Unit's service area is both suburban and rural. 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 #9. Clinton County encourages through educational outreach, 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 management.

Clinton 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 6 provides a year by year breakdown of the different steps necessary to undertake this task.

Administrative/Technical Impacts

Quantitative/Qualitative - Supporting yard waste composting efforts could reduce diversion from the landfill by several thousand tons per year.

Sizing of Facilities or Programs Needed - There is no foreseen additional infrastructure needed to support this program. Educational programs will need to be implemented to teach the public how to properly backyard compost and the benefits of this program.

Cost and Life Cycle - Costs associated with the program include public educational and training programs

Impacts on Natural Resource Conservation, Energy Production and Employment - The proposed program is expected to provide for natural resource conservation. Energy production and job creation isn't anticipated be affected by this proposed program.

Jurisdictional Impacts on Neighboring Planning Units

Assessment of Participation Interest Potential by Neighboring Planning Units - No participation by neighboring planning units is anticipated.

Assessment of Alternatives That Might be Available if any Planning Units Participated - Activities associated with this program are not dependent on the participation of neighboring planning units.

Comments Received by Neighboring Planning Units or Neighboring Jurisdictions - No comments were received.

Assessment of Environmental Justice within Clinton County - There is no known or expected environmental justice impact within Clinton County associated with the proposed program.

Alternative Selection Status

Program Strategy No. 8 – Support Yard Waste Composting Efforts

Expected Quantitative and Qualitative Impacts

Waste Reduction - The proposed program is expected to reduce waste volumes by <5%.

Reuse - actions expected to enhance reuse <5%

Materials Recovery - Expected to improve materials recovery of select waste materials by 5%.

Participation in Recovery Opportunities - actions expected to enhance participation <15%

Product Stewardship - no measurable impact on product stewardship

Economic, administrative or partnership benefits - actions are not expected to reduce expenses.

Identification of Administrative, Contractual, and Financial Requirements for Implementation - Existing administrative and contractual structure is sufficient to support the proposed program. Minor financial requirements are needed to support educational partners Soil and Water Conservation and Cornell Cooperative Extension.

Identification of New or Modification to Local Laws, Ordinances or Regulations - No new local laws, ordinances, or regulations identified as necessary at this time.

5.4.3 Biosolids Management

As previously indicated in Table 2-1, municipal sewage sludge is generated at ten wastewater treatment plants in Clinton County. The management of these materials has been primarily handled at each facility with ultimate disposal at the Franklin County Landfill, since disposal of biosolids is prohibited at the Clinton County Landfill. A small percentage of sludge is treated on-site at a few of the smaller WWTFs using reed beds and lagoon technologies. In addition, the Grasslands Agricultural Products facility in Franklin County has been accepting biosolids for processing and eventual land application from the City of Plattsburgh and Town of Peru facilities.

According to the NYSDEC Biosolids Management in NYS Report from June 2011, in 2009, beneficial use was the most popular biosolids management method used across New York State, on a dry weight basis.

Beneficial use is considered direct land application, composting, chemical stabilization or heat drying. During the last 15 years, beneficial use had been consistently the most popular method with over 48 percent of biosolids generated being beneficially used. However, in 2010 there was a big change in the amount of beneficial use when several major beneficial use facilities switched to landfilling, due to costs and other issues. This change caused a significant drop in the quantity of biosolids being beneficially used and makes landfilling the most popular method in the State since July 1, 2010. Many municipalities that recently switched to landfilling are still considering beneficial use options as they evaluate their long-term management practices. For the near future, however, it is not certain that the beneficial use option will regain the popularity it has enjoyed for the past 15 years.

Although this change has occurred throughout New York State and the majority of facilities in Clinton County are currently landfilling their biosolids/ sewage sludge, Clinton County will continue to maintain communication with the wastewater treatment plants and evaluate if other management methods could be utilized in the future. Multiple facilities in the adjacent planning unit, Essex County, are beneficially using their sludge through land application. Clinton County will encourage their wastewater treatment plant operators to inquire about the practices at these facilities and determine if a beneficial use management method would benefit additional Clinton County wastewater treatment facilities. Chapter 6 – Implementation Schedule provides a timeline on when this evaluation would begin.

Administrative/Technical Impacts

Quantitative/Qualitative - Landfilling of biosolids is prohibited at the Clinton County Landfill. As such, the support of alternative biosolids management methods would decrease the dependency on facilities outside of the County for disposal.

Sizing of Facilities or Programs Needed - There are no foreseen additional infrastructure needed to support this program.

Cost and Life Cycle - No cost associated with this program.

Impacts on Natural Resource Conservation, Energy Production and Employment - Natural resource conservation, energy production and job creation isn't anticipated be effected by this proposed program.

Jurisdictional Impacts on Neighboring Planning Units

Assessment of Participation Interest Potential by Neighboring Planning Units - Because Clinton County-located wastewater treatment facilities rely on disposal/land application in the neighboring counties for management of biosolids, potential interest from neighboring planning units is high.

Assessment of Alternatives That Might be Available if any Planning Units Participated - Communication with neighboring counties will be imperative to providing disposal/management options as well as insight into land application methods and permitting.

Comments Received by Neighboring Planning Units or Neighboring Jurisdictions - No comments were received.

Assessment of Environmental Justice within Clinton County - There is no known or expected environmental justice impact within Clinton County associated with the proposed program.

Alternative Selection Status

Program Strategy No. 9 – Management of Biosolids

Expected Quantitative and Qualitative Impacts

Waste Reduction - May result in the decrease of biosolids being disposed of at landfill facilities.

Reuse- None

Materials Recovery - May result in the recovery of nutrients contained in biosolids through land application.

Participation in Recovery Opportunities - None

Product Stewardship- no measurable impact on product stewardship

Economic, administrative or partnership benefits - None

Identification of Administrative, Contractual, and Financial Requirements for Implementation - Existing administrative, financial and contractual structure is sufficient to support the proposed program.

Identification of New or Modification to Local Laws, Ordinances or Regulations - No new local laws, ordinances, or regulations identified as necessary at this time.

5.5 Develop or Improve Local and Regional Markets for Recyclables Program

As described in Section 3.8, The County contract with NEWSNY allows full operational control of the County MRF as well as responsibility for marketing and sale of the materials.

Due to the high capital investment needed to build a state-of-the-art single stream processing facility, Clinton County and NEWSNY have chosen to utilize the existing MRF to consolidate recyclable materials collected within the County.

Currently, material processed at the MRF is sold primarily to domestic markets with a lesser volume sold internationally. NEWSNY audits outlets for legitimate business practice and end uses.

NEWSNY actively evaluates the demand for markets and aggressively pursues opportunities. Currently NEWSNY is working to expand the markets for recycling 4-7 plastic container mix, aseptic packaging (broths, soy milk, soups) and bulky rigid plastics (toys, five gallon pales, laundry baskets). If these market opportunities become available, acceptance of these materials will be incorporated into the recycling program.

Administrative/Technical Impacts

Quantitative/Qualitative - An improvement in local recycling markets would improve the viability of waste diversion efforts.

Sizing of Facilities or Programs Needed - No program currently exists. County does not currently have the staff required to undertake this effort.

Cost and Life Cycle - Costs associated with the program include cost of staff to research and actively improve recycling markets.

Impacts on Natural Resource Conservation, Energy Production and Employment - No impacts are anticipated.

Jurisdictional Impacts on Neighboring Planning Units

Assessment of Participation Interest Potential by Neighboring Planning Units - No interest from neighboring planning units is anticipated.

Assessment of Alternatives That Might be Available if any Planning Units Participated - Activities associated with this program would depend on assistance from neighboring planning units, which is not anticipated.

Comments Received by Neighboring Planning Units or Neighboring Jurisdictions - No comments were received.

Assessment of Environmental Justice within Clinton County - There is no known or expected environmental justice impact within Clinton County associated with the proposed program.

Alternative Selection Status

The County has limited influence on the development of local and regional recycling markets, as they do not control the marketing of the County-generated recyclables. The County will continue to rely on NEWSNY's expertise and regional market presence for selection of recyclables outlets. However, it should be noted that NEWSNY has typically worked with and encouraged local and regional outlets for these materials as they have significant need for outlets in the region and transportation costs favor the use of local markets where available.

5.6 Enforcement Programs

The County has identified areas in which its existing Solid Waste and Recycling Law can be strengthened in order to more adequately ensure that waste is disposed of or recycled according to plan. During the planning period, the County will conduct an internal review of its law, as well as consult with outside sources, in order to ensure its Solid Waste and Recycling Law is up-to-date. Specific items that the County intends to address include, but are not limited to:

- Update list of mandatory recyclables
- Recycling at multiple-resident dwellings
- Recycling at hotels and motels
- Commercial recycling
- Review and revise definitions
- Revise recordkeeping and reporting requirements for haulers and/or generators
- Review enforcement options

These items, among others, will be considered during the law review process and implemented as the County deems prudent. The County would spend time and potentially money researching and discussing these laws to determine if modifications are required. Depending on which laws may be

modified the County would likely consult with neighboring planning units to determine if they are also supportive of the laws or any changes to the laws that may affect the movement of wastes and recyclables between counties.

Administrative/Technical Impacts

Quantitative/Qualitative - Clinton County Solid Waste and the Revision of Recycling Law could potentially increase diversion rates of waste from the landfill.

Sizing of Facilities or Programs Needed - Depending on the changes to the law that are considered, the County may need additional infrastructure to accept increases and/or changes to the recycling stream or for enforcement purposes.

Cost and Life Cycle - Costs associated with the program may include consulting costs for review of the existing local law as well as the time required by lawmakers to review, discuss, and implement any changes.

Impacts on Natural Resource Conservation, Energy Production and Employment - There is potential for job opportunities to help implement any revision to the recycling law. The proposed program is expected to provide for natural resource conservation. Energy production isn't anticipated be effected by this proposed program.

Jurisdictional Impacts on Neighboring Planning Units

Assessment of Participation Interest Potential by Neighboring Planning Units - No participation by neighboring planning units is anticipated.

Assessment of Alternatives That Might be Available if any Planning Units Participated - Activities associated with this program are not dependent on the participation of neighboring planning units.

Comments Received by Neighboring Planning Units or Neighboring Jurisdictions - No comments were received.

Assessment of Environmental Justice within Clinton County - There is no known or expected environmental justice impact within Clinton County associated with the proposed program.

Alternative Selection Status

Program Strategy No. 10 – Clinton County Solid Waste and Recycling Law Revision

Expected Quantitative and Qualitative Impacts

Waste Reduction - The proposed program is expected to reduce waste volumes by <5%.

Reuse - actions expected to enhance reuse <5%

Materials Recovery - Expected to improve materials recovery of select waste materials by 5%.

Participation in Recovery Opportunities- actions expected to enhance participation <5%

Product Stewardship - no measurable impact on product stewardship

Economic, administrative or partnership benefits - The potential benefits are related to providing more explicit language and definitions, resulting in more uniform implementation and enforcement of the local law.

Identification of Administrative, Contractual, and Financial Requirements for Implementation - Existing administrative and contractual structure is sufficient to support the proposed program. Depending on what changes are considered, financial commitments may be required for handling of additional materials and/or enforcement.

Identification of New or Modification to Local Laws, Ordinances or Regulations - The County will review the local Solid Waste and Recycling Law as part of this Program Strategy implementation.

The County currently implements a fairly robust enforcement program through the use of the Local Law and the enforcement officer discussed in Section 4.3.1. No further enforcement programs are anticipated at this time.

5.7 Incentive Programs

Incentive programs within a solid waste management system are programs used to promote or encourage specific actions by the community to increase the success of programs the landfill is trying to integrate.

In areas where Pay-As-You-Throw (PAYT) is an option for waste collection, residents are charged a fee for municipal solid waste collection based on the amount of waste they dispose of. According to the Environmental Protection Agency (EPA), this concept creates a direct economic incentive to recycle more and to generate less waste. PAYT programs allow residents to treat waste collection as a utility and pay only for the service they actually use. Most communities that use a PAYT program operate municipal hauling and charge

their residents a fee per bag or per can of waste. In a small number of communities, residents are billed based on the weight of their trash. All of these variations on the PAYT programs allow residents to pay less for waste disposal if they recycle more and throw away less waste.

Another type of PAYT program allows customers to select the appropriate number or size of containers for their standard weekly disposal amount. The bag program allows customers to purchase bags, often printed with special logos for different haulers, and dispose of waste in these specially marked bags. The price of each bag incorporates the cost of collection, transportation and disposal of the waste. The more bags customers use the more they are paying for waste collection and vice versa. The tag and sticker program allows customers to purchase tags or stickers, which are often specially marked for different haulers, and place these tags or stickers on their garbage bags. This program is similar to the bag program, only using tags and stickers instead of specialty bags.

Hybrid PAYT programs vary greatly from community to community. An example of a hybrid program would be offering residents a limited collection (e.g., a limit of five bags per week) with any additional bags being bought at a per bag fee from the municipality, hauler, etc. In this type of program, the initial cost of service is often billed to the residents in the form of taxes or quarterly bills through the municipality or hauler. Weight based programs use a modified scale located on the waste collection trucks and charge customers based on the actual pounds of garbage set out for disposal. On board computers record weights by household and customers are billed on this basis.

As with any program, there are advantages and disadvantages. Some of the advantages and disadvantages of the PAYT programs are listed below:

Advantages:

- PAYT programs are a fair way to charge customers. Customers who dispose of more waste pay a higher cost than those who recycle more and dispose of less waste.
- PAYT programs do not place restrictions on customer choices. Customers are not prohibited from putting out additional garbage, but those who want to dispose of more garbage will pay a higher fee.
- PAYT programs are generally inexpensive to implement. They may also help prevent overuse of solid waste services.
- PAYT programs encourage waste reduction in the form of recycling, composting, and source reduction.
- PAYT programs can be implemented in a variety of sizes and types of communities, with a broad range of collection methods.

- PAYT programs offer environmental benefits by reducing the amount of waste sent to a landfill and recycling more of the products used by residents.

Disadvantages:

- PAYT programs may raise concerns regarding illegal dumping.
- PAYT programs can be a concern for large poor families who cannot afford to pay for the amount of waste they dispose.
- PAYT programs can be hard to implement at first if communities are unwilling to embrace the change that the program requires.
- Implementing PAYT programs (e.g., purchasing of stickers, cans, bags, etc., retrofitting waste trucks, employee reassignment, etc.) can prove challenging.

As discussed in Section 3.3.1, Clinton County has seen success with PAYT type programs at the convenience stations and will continue implementing them. Clinton County will monitor the availability and public need for the expansion of the program to curbside collection programs. Since Clinton County is not responsible for curbside collection of residential waste, the PAYT program would need to be implemented through the local haulers. Should the public demand become greater than the private sector can manage, Clinton County will work with the haulers to determine if incentivized waste reduction programs can be made available to residents. Chapter 6 – Implementation Schedule provides the milestones through the planning period that are anticipated to evaluate this task.

Administrative/Technical Impacts

Quantitative/Qualitative - Possible negative impacts in the form of increased waste littering is anticipated with a PAYT program. Potential positive impact due to financial incentive for waste reduction efforts.

Sizing of Facilities or Programs Needed - Additional programming would potentially be required in order to implement a PAYT payment and measuring system at the various County located disposal facilities.

Cost and Life Cycle - Some additional costs may be associated with the implementation of PAYT programs for billing and program management.

Impacts on Natural Resource Conservation, Energy Production and Employment - Program has the potential to conserve disposal capacity due to incentivized increased diversion.

Jurisdictional Impacts on Neighboring Planning Units

Assessment of Participation Interest Potential by Neighboring Planning Units - No participation by neighboring planning units is anticipated.

Assessment of Alternatives That Might be Available if any Planning Units Participated - Activities associated with this program are not dependent on the participation of neighboring planning units.
Comments Received by Neighboring Planning Units or Neighboring Jurisdictions - No comments were received.

Assessment of Environmental Justice within Clinton County - There is no known or expected environmental justice impact within Clinton County associated with the proposed program.

Alternative Selection Status

Program Strategy No. 11 – Pay-As-You Throw Program Evaluation

Expected Quantitative and Qualitative Impacts

Waste Reduction - >1% waste reduction anticipated if program is implemented.

Reuse- >1% increase in product reuse is anticipated if program is implemented.

Materials Recovery - 5% increase in material recovery is anticipated if program is implemented.

Participation in Recovery Opportunities - None measurable.

Product Stewardship - no measurable impact on product stewardship

Economic, administrative or partnership benefits - None measurable.

Identification of Administrative, Contractual, and Financial Requirements for Implementation - Additional administrative and contractual structure may be required to support the proposed program.

Identification of New or Modification to Local Laws, Ordinances or Regulations - No new local laws, ordinances, or regulations identified as necessary at this time.

5.8 Education and Outreach

Public outreach and education regarding waste diversion programs and responsible disposal of special wastes has been identified as a key component of solid waste management programs in New York State. Raising the awareness of

reduce, reuse and recycle has been a goal of the NYSDEC since the first Earth Day in 1970. To reach audiences, numerous programs and events have been organized. The NYSDEC's Recycling Outreach and Education program is available to other communities to help them spread the word. Without education none of the recovery programs or technologies will be successful.

Clinton 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
- Food Scrap Composting at Institutions and/or Large Commercial Generators
- HHW Collection Events
- C&D Debris Diversion Opportunities
- Mercury Containing Materials Disposal Options
- E-waste Management Options
- Pharmaceuticals Management

Currently the County has a partnership with the Soil & Water Conservation for providing education at special events and schools related to waste reduction, reuse and recycling. The County will endeavor to implement a recycling education program for second grade students in the elementary schools throughout Clinton County within two years of commencement of the new ten-year planning period.

NEWSNY continues to establish and implement a recycling educational outreach program. The program is aimed at educating residents and commercials haulers regarding what commodities can be recycled through the County facilities and the process by which these materials see new life.

During this planning period, the County will evaluate its current and potential education methods for promoting the Clinton County Solid Waste and Recycling Law (especially if the law is revised). 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. 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 1-5 and 1-8. 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 1-6) and jails, institutions, nursing homes (Table 1-7) 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. The Implementation Schedule in Section 6.0 provides the milestones through the planning period that are anticipated to evaluate this task.

Administrative/Technical Impacts

Quantitative/Qualitative - Continuation and improvement of current education and outreach efforts are anticipated to help in maintaining and enhancing waste diversion efforts.

Sizing of Facilities or Programs Needed - There are no foreseen additional infrastructure needed to support this program. Some additional program support may be required for increased education efforts.

Cost and Life Cycle - No cost impacts.

Impacts on Natural Resource Conservation, Energy Production and Employment - No impacts.

Jurisdictional Impacts on Neighboring Planning Units

Assessment of Participation Interest Potential by Neighboring Planning Units - Franklin and Essex Counties could potentially participate with Clinton County in the proposed program.

Assessment of Alternatives That Might be Available if any Planning Units Participated - Activities associated with this program are not dependent on the participation of neighboring planning units.

Comments Received by Neighboring Planning Units or Neighboring Jurisdictions - No comments were received.

Assessment of Environmental Justice within Clinton County - According to the NYSDEC Environmental Justice Area Mapper, there are three potential environmental justice areas located within Clinton County, within the Town of Dannemora, town of Beekmantown and City and Town of Plattsburgh. There is no known or expected environmental justice impact within Clinton County associated with the proposed program.

Alternative Selection Status

Program Strategy No. 12 – Public Outreach and Education

Expected Quantitative and Qualitative Impacts

Waste Reduction - The proposed program is expected to reduce waste volumes by <5%.

Reuse - actions expected to enhance reuse <5%

Materials Recovery - Expected to improve materials recovery of select waste materials by 5%.

Participation in Recovery Opportunities - actions expected to enhance participation <5%

Product Stewardship - no measurable impact on product stewardship

Economic, administrative or partnership benefits - actions are expected to increase expenses related to education efforts.

Identification of Administrative, Contractual, and Financial Requirements for Implementation - Additional administrative and financial resources may be required to support the proposed program.

Identification of New or Modification to Local Laws, Ordinances or Regulations - No new local laws, ordinances, or regulations identified as necessary at this time.

5.9 Data Collection and Evaluation Efforts

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. 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, in partnership with their solid waste management partner, NEWSNY, will undertake several recycling data surveys over the course of the planning period, which will 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 C&D material recycling. The survey will 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 Clinton County. This information will 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. If response rates are low, the County will consider enforcement of the hauler licensing and reporting component of the law to obtain better data.

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

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

For Planning Unit owned facilities/programs information would include:

- infrastructure/components,
- age,
- operating dates,

- size,
- regulatory status,
- partnerships/ opportunities,
- contracts,
- improvements or changes, and
- resources/needs/ costs.

Administrative/Technical Impacts

Quantitative/Qualitative - Ultimately this program will give the county the information required to determine where to enhance recycling or diversion efforts. In addition, it will help the County achieve diversion goals by providing accurate information on current diversion efforts.

Sizing of Facilities or Programs Needed - Management of additional data that will be generated will create additional work load on administrative staff.

Cost and Life Cycle - Costs associated with the program include administrative labor for database systems.

Impacts on Natural Resource Conservation, Energy Production and Employment - No impacts are anticipated.

Jurisdictional Impacts on Neighboring Planning Units

Assessment of Participation Interest Potential by Neighboring Planning Units- Data sharing with neighboring counties will ensure an understanding of the current management of solid waste in the region and potentially be useful for program development within neighboring counties.

Assessment of Alternatives That Might be Available if any Planning Units Participated - Activities associated with this program are not dependent on the participation of neighboring planning units.

Comments Received by Neighboring Planning Units or Neighboring Jurisdictions - No comments were received.

Assessment of Environmental Justice within Clinton County - There is no known or expected environmental justice impact within Clinton County associated with the proposed program.

Alternative Selection Status

Program Strategy No. 13 - Improving Solid Waste and Recycling Data Compilation

Expected Quantitative and Qualitative Impacts

Waste Reduction - The proposed program is not expected to reduce waste volumes.

Reuse - No impact.

Materials Recovery - No impact.

Participation in Recovery Opportunities - The program is expected to increase the County's knowledge of current participation in recovery options provided within the County.

Product Stewardship - no measurable impact on product stewardship

Economic, administrative or partnership benefits - actions are expected to reduce direct expenses by >5%

Identification of Administrative, Contractual, and Financial Requirements for Implementation - Some additional administrative resources will be required to implement the program.

Identification of New or Modification to Local Laws, Ordinances or Regulations - No new local laws, ordinances, or regulations identified as necessary at this time.

5.10 Local Hauler Licensing Program

To provide stricter oversight of the haulers responsible for collection of solid waste and recyclables, some communities opt to require hauling companies that collect, transport or dispose of discarded materials (garbage, recyclables or compostables) to be licensed by the municipality in which they are performing these services. Hauler licensing allows municipalities to gain access to data on amounts of material collected and managed.

Although Clinton County currently requires haulers bringing waste to the County-owned facilities to obtain a permit from the County, there is not a reporting component associated with this permitting process.

The possibility of enacting local hauler licensing is discussed in Section 5.9, above.

5.11 Flow Control and Districting Potential

Flow control legislation allows local governments to direct solid waste

and/or recyclables to designated facilities to ensure a continuous source of revenue and eliminates the possibility that any portion of the municipality's waste stream could be diverted.

Thirty-five states (including New York) as well as the District of Columbia and the Virgin Islands directly authorize flow control, while four additional states authorize flow control indirectly through mechanisms such as local solid waste management plans or home rule authority. In New York, a municipality is usually specifically authorized by the State Legislature to adopt flow-control legislation. Unlike other states, New York explicitly states that flow control may cover source-separated recyclable materials. Currently, there are 37 municipalities in New York State (i.e., districts, towns, counties, authorities) authorized by the State Legislature to enact flow control legislation covering approximately 80 percent of the state's population. Although flow control is authorized, many municipalities or Planning Units do not enforce it.

The County would have to employ an additional enforcement officer to make this program successful, which isn't economically feasible for the County at this time. This program would not affect neighboring planning units. Flow control would guarantee that all the waste generated in the County would go to the County landfill. Currently, Clinton County does not anticipate that flow control would be an effective strategy for solid waste management within the County.

Administrative/Technical Impacts

Quantitative/Qualitative - Program would not likely result in increases in diversion.

Sizing of Facilities or Programs Needed - Enforcement program required

Cost and Life Cycle - Costs associated with the program include cost of additional enforcement resources

Impacts on Natural Resource Conservation, Energy Production and Employment - No impacts are anticipated.

Jurisdictional Impacts on Neighboring Planning Units

Assessment of Participation Interest Potential by Neighboring Planning Units - Would result in decrease in waste sent to neighboring planning units, having potential financial impacts on existing systems.

Assessment of Alternatives That Might be Available if any Planning Units Participated - Activities associated with this program are not dependent on the participation of neighboring planning units.

Comments Received by Neighboring Planning Units or Neighboring Jurisdictions - No comments were received.

Assessment of Environmental Justice within Clinton County - There is no known or expected environmental justice impact within Clinton County associated with the proposed program.

5.12 C&D Debris Reduction

There are currently no upstream or downstream separation requirements/ regulations for C&D waste in Clinton County. While there are many materials in the C&D waste stream that have potential reuse/recycling options, low tipping fees at area landfills can make the division of these materials into desirable components cost-prohibitive. Reducing and recycling C&D materials conserves landfill space, reduces the environmental impact of producing new materials, creates jobs, and can reduce overall building project expenses through avoided purchase/disposal costs. Options for C&D debris diversion from traditional disposal consist of upstream and downstream diversion.

Diverting C&D debris from the waste stream either as upstream or downstream diversion has benefits as well as drawbacks. Some benefits are:

- Potential revenue to developers and contractors from the sale of recoverable and recyclables
- Potential revenue to processors from the sale of processed C&D
- Decrease in hydrogen sulfide gas generated at the Landfill from decaying gypsum board
- Decrease in the amount of waste disposed at the landfill

Upstream diversion of C&D is the act of separating recoverable materials for recycling or reuse at a construction, demolition or remodeling job site. These materials are then processed and transported to an end market which keeps them from being disposed of in landfills. Separating C&D provides an opportunity for the contractor to save money on disposal costs and sometimes the materials can be reused by the contractor on future or current projects. Some of the common materials that are recycled or reused from new construction projects are wood, metal, drywall and cardboard. Contractors are faced with decisions when

determining if it is economically efficient to recycle C&D debris. Separating the debris will require additional staging areas for separate containers and additional labor, increasing costs, and in turn extending the duration of construction. Lastly, the contractor's ultimate decision is to decide if the material has any economic value. Some cities and counties have passed ordinances mandating source separation of recoverable C&D materials at the job site to insure that there is a decrease in the amount going to the landfill. The County could potentially enact such an ordinance or law.

Some potential drawbacks to the enactment of such an ordinance, were the County to entertain this action, are an increase in the County staff time and costs to develop diversion program and to monitor and enforce C&D debris separation. It is estimated that, due to the financial benefits of diverting materials where recycling outlets and project constraints allow, a majority of contractors are already implementing this practice and the County simply does not have the data for reporting. Enforcement by the County would only result in forcing contractors to divert more cost intensive materials for which local recycling outlets likely do not exist, increasing construction costs and/or making it impossible for contractors to comply. For this reason, this does not represent a feasible use of County resources.

Downstream diversion of C&D is the act of separating materials at a central collection point, such as a landfill, transfer station, or processing facility and identifying the recoverable materials. In order to determine the feasibility of implementing downstream diversion, one must initially determine what comprises the largest portion of the C&D waste brought to the landfill, then determine if there are available markets in the region for recycling or reuse of the material.

According to the NYSDEC's database of active registered or permitted facilities, there are no permitted and five registered C&D processing facilities located in Clinton County:

1. **Carter's Trucking Wood Processing Facility -** Asphalt, Wood, Wood (Unadulterated Pallets), Metals (Ferrous), Metals (Non-Ferrous), Commingled Recyclables, Metals (Structural)
2. **Casella Waste Management dba Plattsburgh Hauling (formerly Northern Sanitation) -** (Wood (Unadulterated), Metals (Structural)
3. **Graymont-Plattsburgh Quarry**
4. **Graymont Materials (now Upstone Materials) -** Concrete, Asphalt, Brick, Clean Soil
5. **Murphy's Wood Processing Facility** - Wood (Unadulterated Pallets), Wood (Unadulterated)

According to the DEC's "Construction and Demolition Debris Combined Composition Analysis and Projections" found in Appendix A, the top four components of the C&D waste stream are determined to be concrete/ asphalt/rock/brick, soil/gravel, wood and metal. Listed above are facilities that these materials are likely already diverted to due to the relatively high density and quantities of these materials generated during construction and the associated high tipping fees if they were to be disposed of at a landfill or transfer station. The remainder of the materials listed in Appendix A are very minor percentages and are likely not economically feasible to separate into their multiple recyclable components.

When considering the downstream diversion program, the County must evaluate the overall economic impact of implementing this program into their facility. There would be capital and operational expenses associated with the development of such a facility. In addition, viable recycling outlets for the minor components of the C&D waste stream may not be available, therefor making the implementation of this program not practical.

Administrative/Technical Impacts

Quantitative/Qualitative - Program would result in diversion of C&D debris from landfill facilities.

Sizing of Facilities or Programs Needed - The size of facility required is unknown as current diversion data is not available.

Cost and Life Cycle - The cost to implement a C&D recycling facility would be upwards of $1 million. Operational costs have the potential to be very high due to the need for manual labor. Markets for materials are not known.

Impacts on Natural Resource Conservation, Energy Production and Employment - Conversion of natural resources would be realized through reuse of natural materials.

Jurisdictional Impacts on Neighboring Planning Units

Assessment of Participation Interest Potential by Neighboring Planning Units- Participation by neighboring planning units would likely be required to make such a facility economically feasible; however, no interest is likely due to the large geographical size of the counties, making a central facility infeasible.

Assessment of Alternatives That Might be Available if any Planning Units Participated - Activities associated with this program are not dependent on the participation of neighboring planning units.

Comments Received by Neighboring Planning Units or Neighboring Jurisdictions - No comments were received.

Assessment of Environmental Justice within Clinton County - There is no known or expected environmental justice impact within Clinton County associated with the proposed program.

5.13 Waste Toxicity Reduction

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 waste stream.

Since 1996, Clinton County has voluntarily sponsored a minimum of one Household Hazardous Waste event each year. The HHW event is typically held in June each year, and is funded by Clinton County to encourage the responsible disposal of various household materials. Clinton County residents may dispose of any HHW there without incurring any charges for disposal. Materials accepted at these events include, but are not limited to; oil-based paints, thinners, pesticides, herbicides, varnish, etc. These events will continue to occur throughout the planning period.

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 heath care facilities, pharmaceutical manufacturing facilities and farms can also find their way into the water.

The Clinton County Sheriff's Office participates in the Drug Enforcement Administration's nationwide Prescription Drug "Take Back" Initiative on an annual basis. Multiple events are scheduled each year at different locations including the City of Plattsburgh, the Clinton County Sherriff's Office, and the Rouses Point Fire Department. The County will post information on its website to ensure proper promotion of these events.

The City of Plattsburgh Police Department also offers a “Safe Scripts” program which allows citizens to drop off unwanted prescription medication at the Police Department seven days a week, 24 hours a day.

Clinton County will continue these programs and will increase its efforts to educate the public on them. Furthermore, the feasibility of including pharmaceutical waste collection at the annual HHW collection event will be evaluated. Section 6 will detail the implementation tasks necessary for these goals.

Administrative/Technical Impacts

Quantitative/Qualitative - The ongoing effort of the management and collection of HHW and Pharmaceuticals will potentially reduce landfilling by a minor amount and reduce the toxicity of the waste stream within the landfill.

Sizing of Facilities or Programs Needed - There are no foreseen additional infrastructure or software needed to support the existing program. Additional collection types or frequency would require increased capacity and staffing.

Cost and Life Cycle - Costs associated with the program include the continued costs associated with this program. Additional collection types or frequency would require increased funding for facilities, disposal, and/or staffing.

Impacts on Natural Resource Conservation, Energy Production and Employment - Natural resource conservation will be impacted positively due to the fact that the public will not be flushing or dumping HHW and Pharmaceuticals into the environment. Energy production and employment opportunities are not anticipated to be effected by this program.

Jurisdictional Impacts on Neighboring Planning Units

Assessment of Participation Interest Potential by Neighboring Planning Units - None anticipated.

Assessment of Alternatives That Might be Available if any Planning Units Participated - Activities associated with this program are not dependent on the participation of neighboring planning units.

Comments Received by Neighboring Planning Units or Neighboring Jurisdictions - No comments were received.

Assessment of Environmental Justice within Clinton County - There is no known or expected environmental justice impact within Clinton County associated with the proposed program.

Alternative Selection Status

Program Strategy No. 14 – Household Hazardous Waste Collection

Program Strategy No. 15 – Pharmaceutical Education Program

Expected Quantitative and Qualitative Impacts

Waste Reduction- The proposed program has the potential to reduce HHW and pharmaceuticals in the waste stream by 75% over the 10 year planning period.

Reuse - No impact anticipated.

Materials Recovery - No impact anticipated.

Participation in Recovery Opportunities - actions expected to enhance participation by 75%

Product Stewardship - no measurable impact on product stewardship

Economic, administrative or partnership benefits - None expected.

Identification of Administrative, Contractual, and Financial Requirements for Implementation - Existing administrative and contractual structure is sufficient to support the proposed program.

Identification of New or Modification to Local Laws, Ordinances or Regulations - No new local laws, ordinances, or regulations identified as necessary at this time.

5.14 Management of Waste through Thermal Treatment Technologies

Thermal Treatment Technologies involve high temperatures in the processing of the waste feedstock. Frequently, this involves the combustion of waste materials

5.14.1 Waste-to-Energy (Combustion/Incineration)

A waste-to-energy (WTE) facility is a solid waste management facility that combusts wastes to generate steam or electricity and reduce the volume of MSW requiring disposal by 80-90 percent. These facilities are sometimes referred to as resource recovery facilities or Municipal Waste Combustors (MWC). Newer technology allows higher efficiency

heat recovery from the combustors, increasing energy production potential.

Although the total volume of MSW requiring disposal is reduced, a secondary disposal method such as landfilling would be required for the ash. If Clinton County initiated the permitting, construction and operation of their own WTE facility within the County, high construction and operations and maintenance costs as well as uncertainty in energy sales revenues, would result in higher disposal costs per ton than landfilling in Clinton County. For example, a 600 ton per day WTE facility capital cost could be in the range of $160 million with an average per ton cost of $92/ton. This would not be economically feasible for the County. In addition, Clinton County maintains a landfill that has been permitted by the NYSDEC.

There are currently ten active WTE facilities in the State; however, none have been permitted or constructed in the State in the past 20 years.

5.14.2 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 (H_2), carbon monoxide (CO), carbon dioxide (CO_2), and methane (CH_4). 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 complete 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 Clinton County is 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 and the greater complexity of the technology. According to a recent EPA study[18] 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, which has since closed, was previously located in Niagara Falls, NY and one gasification plant has been commissioned in Montgomery, NY using only portions of the MSW waste stream.

5.14.3 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.

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

The technologies outlined above do not present economically feasible options for Clinton County at this time. They have not yet been proven for mixed MSW waste streams on a commercial scale within New York State.

Administrative/Technical Impacts

Quantitative/Qualitative - While thermal treatment technologies for waste management have the potential to decrease the quantity of material landfilled, they do not inherently impact diversion, reduction, or reuse within the County.

Sizing of Facilities or Programs Needed - It is anticipated that a thermal treatment facility would need to be sized to handle all waste from within the County, as well as from neighboring planning units in order to approach financial viability.

Cost and Life Cycle - It is anticipated that a thermal treatment technology would cost upwards of $10 million, regardless of the technology chosen, for the size described above.

Impacts on Natural Resource Conservation, Energy Production and Employment - A thermal treatment facility has the potential to result in energy production, however, it would likely replace the current energy production efforts at the Clinton County Landfill, making the additional energy production over current efforts very minor. Thermal technologies have the potential to conserve natural resources by reducing required landfill capacity; however, such facilities do require the use of land for construction footprint and have the potential to impact air and water resources, which must be further investigated.

Jurisdictional Impacts on Neighboring Planning Units

Assessment of Participation Interest Potential by Neighboring Planning Units - Franklin County currently has their own long term disposal facility and is not likely to be interested in thermal treatment technologies due to the large financial investment already made in their current infrastructure.

Assessment of Alternatives That Might be Available if any Planning Units Participated - Activities associated with this program are dependent on the participation of neighboring planning units.

Comments Received by Neighboring Planning Units or Neighboring Jurisdictions - No comments were received.

Assessment of Environmental Justice within Clinton County - According to the NYSDEC Environmental Justice Area Mapper, there are three potential environmental justice area located within Clinton County, within the Town of Dannemora, town of Beekmantown and City and Town of Plattsburgh. If a thermal treatment facility were proposed within the vicinity of these areas, the potential for environmental justice impacts is high.

5.15 Waste Disposal Options

5.15.1 Landfilling

Clinton County has used landfilling as its method of solid waste disposal since at least 1973. The active landfill site, the Clinton County Landfill, is located at 286 Sand Road in the Town of Schuyler Falls, approximately 6 miles west of the City of Plattsburgh, New York. The landfill is part of a 431-acre parcel of land currently owned by Clinton County which encompasses the active Clinton County landfill, the closed unlined Clinton County MSW landfill, the active LCD landfill, the active MRF, the public convenience center and the LFGTE facility. The Clinton County Landfill is approximately 55 acres in size and is located on the central portion of the landfill site.

The landfill accepts waste for disposal from Clinton County, as well as from surrounding counties in New York and from Canada. The landfill is permitted to accept 175,000 tons of MSW per year. At this tonnage, it is projected that the site has approximately 24 years of capacity remaining as of January 1, 2016. The current OMLA allows for an increase in annual tonnage limit up to 250,000 tons per year; however, this is not allowed under the current Part 360 landfill permit. A modification to the permit to allow for this tonnage increase will be pursued in the near future. This LSWMP is intended to establish the framework and programs that will be implemented over the next ten years and providing available options to the County for solid waste management. Several of these options are briefly summarized below. Continuing the use of the current landfill will provide a long-term source of revenue to the local economy and protect against the unreliability of transporting waste to other locations if the landfill were to close. There are few landfills located in the surrounding counties. The Clinton County Landfill services the majority of Clinton County and surrounding areas. Closing the landfill could subject residents throughout the region to increased waste disposal prices from associated transportation costs and the liability of transporting solid wastes to another landfill.

While the prominent foci of this Plan is overall waste reduction and local recycling/reuse and composting programs, the region will still require a local, dependable facility for the disposal of all non-recyclable and non-hazardous waste. A permit modification is currently being pursued to increase the annual tonnage accepted at the landfill. This will provide additional revenue to the County and the Town of Schuyler Falls to

provide further tax relief to the residents as well as help to fund the implementation of the Plan. The County will continue to study and assess improvements to existing disposal methods and new disposal methods through emerging technologies over the course of the planning period.

5.15.2 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/sewage sludge. 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, 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.

5.15.3 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.

5.15.4 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 CO_2. 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 (H^2) and CO_2. A third group of bacteria, the methane producers or methanogens, produce a medium-Btu biogas consisting of 50-70% methane, as well as CO_2. 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 study[19] 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) 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. 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.

5.15.5 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,

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

because obtaining the homogeneous input stream from mixed MSW has proven difficult.

5.15.6 Alternative Chosen

Based on the technologies discussed above, the continued use of the Clinton County Landfill appears to be viable; however, a separate environmental review process would be required to examine the environmental benefits and impacts associated with the expansion of the facility should it be continued to be used along with ongoing energy recovery efforts. Should any of the other technologies discussed above be pursued in the future, further analysis and a separate environmental review process would be required to analyze the benefits and impacts of these technologies. In addition, should any of the other technologies discussed above be implemented, it is imperative that long term waste commitments be in place to undertake a full scale program within Clinton County. Clinton County does not propose further evaluating the feasibility of these other alternative waste disposal options during the 10 year planning period; however, Clinton County does acknowledge that they are available and will keep abreast of their further development. Should advances in the above technologies occur, the County will reassess these opportunities during the next planning period.

Administrative/Technical Impacts

Quantitative/Qualitative – According to the MSW Composition and Diversion spreadsheets included in Appendix A, Clinton County's solid waste program MSW generation in 2017 was 53,705 tons, which, using a population of 83,296, equates to 3.51 lbs/capita/day, well above the State's "Beyond Waste" target of 2.6 lbs/capita/day for 2017. Focusing on educating the public about waste reduction is a crucial part of reducing the amount of waste landfilled.

Sizing of Facilities or Programs Needed - Expansion of landfill capacity within the existing property boundaries of the current Clinton County Landfill is essential to retaining long term system reliability and resiliency for the entirety of the integrated solid waste services provided by the County's solid waste program.

Cost and Life Cycle - According to the 2017 annual report the projected life of capacity of the landfill is 24 years and 10 months. The County's share of landfill tipping fees provide the main source of funding for the County's other solid waste management programs. Currently, the private operator of the landfill facility is responsible for operational and construction costs at the facility.

Impacts on Natural Resource Conservation, Energy Production and Employment - Continued MSW and recycling efforts are expected to provide for natural resource conservation. Energy production is anticipated to increase over the 10-year planning period due to the methane generation at the landfill increasing. Jobs that currently exist in the operation of the Clinton County Landfill are expected to remain constant during the 10-year planning period.

Jurisdictional Impacts on Neighboring Planning Units

Assessment of Participation Interest Potential by Neighboring Planning Units - While Franklin County currently has their own disposal facility, Essex County currently utilizes the Clinton County Landfill for waste disposal. Although this is not the only outlet for Essex County's waste, continued availability of a local disposal facility is important for regional cost stability.

Assessment of Alternatives That Might be Available if any Planning Units Participated - Activities associated with this program are not dependent on the participation of neighboring planning units.

Comments Received by Neighboring Planning Units or Neighboring Jurisdictions - No comments were received.

Assessment of Environmental Justice within Clinton County - According to the NYSDEC Environmental Justice Area Mapper, there are three potential environmental justice areas located within Clinton County, within the Town of Dannemora, Town of Beekmantown and City and Town of Plattsburgh. As the landfill is not located within these areas, there is no known or expected environmental justice impact within Clinton County associated with continuation of landfilling for un-diverted waste.

Alternative Selection Status

Program Strategy No. 16 – Continue Landfilling as Primary Disposal for all Non-Recyclable/Recoverable Waste

Expected Quantitative and Qualitative Impacts

Waste Reduction - No impacts anticipated.

Reuse - No impacts anticipated.

Materials Recovery - No impacts anticipated.

Participation in Recovery Opportunities - No impacts anticipated.

Product Stewardship - No measurable impact on product stewardship

Economic, administrative or partnership benefits - actions are believed to provide economic benefits associated with cost control for long term reliable Solid Waste disposal within Clinton County.

Identification of Administrative, Contractual, and Financial Requirements for Implementation - Existing administrative, financial and contractual structure is sufficient to support the proposed program.

Identification of New or Modification to Local Laws, Ordinances or Regulations - No new local laws, ordinances, or regulations identified as necessary at this time.

6.0 Implementation Schedule

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 plan is outlined in Table 6-1 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 NYSDEC requirements.

7.0 Waste Stream Projections

Previous sections of this Plan discussed the quantities of waste generated, disposed and diverted from the waste stream. This section will present the projected MSW diversion rates as well as the projected 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.

7.1 Anticipated Changes to the Local Planning Unit

Clinton County has experienced a relatively constant population over the past four decades. U.S. Census data reveals that Clinton County's population steadily increased from 73,656 in 1970 to 86,444 in 1994. The closing of the Plattsburgh Air Force Base caused those stationed there to be transferred elsewhere and the population decreased to 79,875 in 1999. Since then it has slowly increased to 82,128 in 2010. In 2016, the population was predicted to be 81,073 persons. The largest estimated municipal population change between 2000 and 2010 occurred in the Town of Black Brook, which experienced an estimated population loss of 9.8% during that period. The town of Altona also experienced a large population loss at an estimated 8.6% loss. By contrast, the Town of Peru and the City of Plattsburgh experienced estimated population gains of 9.9% and 6.2%, respectively, between 2000 and 2010.

Baseline population projections reflecting these historical trends have been developed by the New York State Information System (NYsis) and analyzed by Cornell University's Program of Applied Demographics, an affiliate of the U.S. Census Research Data Center network. Clinton County's population projections indicate a decrease in the County's total population from its present level to 81,073 in 2016, 79,809 in 2020, 75,929 in 2030, and 70,429 in 2040. The baseline population projections noted are not forecasts of future population size; they simply project population levels that would be expected if current life expectancy, birth, and net migration rates continue unchanged in future years.

7.2 Anticipated Changes to the Waste Stream

Over the course of the previous planning period, changes to the waste stream have occurred nationally, which includes local trends in Clinton County as well. Consumers have moved towards a throw-away society where one-time use products are preferred for convenience sake as opposed to environmental concerns. In addition, products are nearly obsolete before they even hit the shelves. Household items, such as thermostats, electronics, batteries, contain harmful chemicals such as mercury, Freon, and heavy metals. Both proper disposal and diversion are keys aspects of solid waste management today. Education is an integral component to changing the solid waste management practices nationally, as well as locally.

Based on the declining population trends referenced above, it is the opinion of the County that the amount of waste produced within its borders will parallel the population's downward trend.

It is anticipated that with the implementation of this Plan, more opportunities for waste diversion will be made to residents, which should in turn increase the County's waste diversion percentage. Chapter 5 describes the various programs that will be made available to County residents and how these tasks and goals will be implemented.

Appendix A

Detailed Waste Composition Spreadsheets

A1 – MSW Composition and Diversion Tables
A2 – C&D Waste Composition and Diversion Tables

A1 MSW Composition and Diversion Tables

Step 1. Planning Unit and Plan Period Selection

Please, select from the drop-down list the name of your **planning unit** and the **planning period** of your **LSWMP**. Be aware that a LSWMP must be developed for a **10-year period**, and that your selection will be replicated on each one of the following tabs.

Planning Unit	Clinton County
Planning Period	2018-2028

Step 2. Waste Generation Rate

In order to project how the amount of waste generated in the planning unit will change over time, data regarding the current amount of waste generated by the planning unit is needed. This can be the total tons of waste generated by the planning unit in the current year **(Tons/yr)**, or this can be the estimated daily quantity of waste generated per person in the planning unit **(lb/person/day).** If both the total annual generation and the estimated generation rate per person are unknown, the state average for MSW generation rate can be used along with the planning unit's population to estimate the total amount of waste generated in the planning unit.

For this step, select **one** of the options that describes the known information about the planning unit. Enter the waste generated in Tons (MSW disposed & Recycled Materials) or the waste generation rate in lb/person/day) in the purple cell. If no data on the waste generated in the planning unit is available, choose the corresponding option from the list. The calculator will estimate the total amount of waste generated based on the state's average generation rate and the planning unit's population.

Clinton County

The amount of waste generated (by all residents, institutions, etc.) in the planning unit will be based on what is known. If the MSW generation amount and the generation rate are unknown, the state average for MSW generation rate will be used.

- (●) I know the amount of MSW generated (Tons/year):
- ( ) The planning unit Average MSW Generation Rate (lb/person/day) is:
- ( ) The amount of MSW Generated and the planning unit Average MSW Generation Rate are unknown.

Enter tons disposed here: 53,705.00

Enter tons diverted here: 3,591.00

Step 3. Planning Unit Population - Projections & Municipal Solid Waste (MSW) - Projections

This tab will provide you with population projections and MSW generation projections for the planning period you had previously selected. It is recognized that Municipal Solid Waste (MSW) generation is reliant on population changes, hence, it is necessary to project both and identify their correlation.

purple cell enter the total tons of MSW that was disposed in the year immediately before your plan period starts. For example: If the plan period is 2016-2026, the MSW disposed data should be from 2015.

Population Projection:

Calculations are determined by a linear regression based on the latest **census population data** and an **annual growth rate percentage** specific to the planning unit. If it is anticipated that the population is going to decrease overtime, the minus sign (-) will be used.

MSW Generation Projection:

The MSW generation rate (Lb/person/day) calculated on the previous tab from the **Waste Generation Rate** will serve as a start point for the planning period. On the calculator, three options are considered to anticipate the MSW generation over time, and one must be selected according to the goals of the planning unit:

First Option:

MSW generation **rate** does not change. Consequently, MSW generation fluctuates with the population of the planning unit. If the population increases, waste generation will rise as well, and vice versa. By selecting this option, the planning unit is in **"status quo"**, meaning that is not making any improvements, and consequently is getting far from reaching the State's goal by 2030.

Second Option:

MSW generation **amount** remains the same, regardless of whether or not the planning unit's population changes.

Third Option:

As a result of successfully implementing the Local Solid Waste Management Plan, MSW generation will be reduced by an annual factor of …

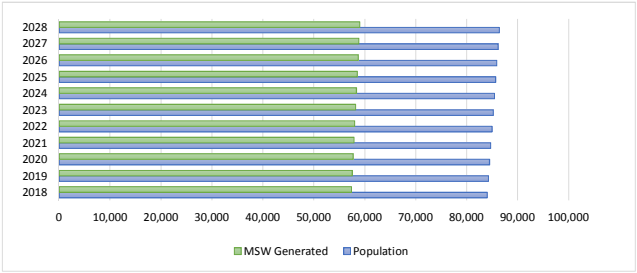
An **Annual Factor of Reduction (%)** should be calculated, defined, and selected by the planning unit. This factor will be the numerical representation of one of the planning unit's **goals** for the planning period. Once calculated, the Annual Factor of Reduction can be chosen from the drop down list provided.

Note:

• The graphic will display the Population and MSW Generation projections over the selected planning period. It has been designed to visualize the contrast of the final outcomes, based on the selections of each planning unit

Clinton County 2018-2028

Current Data	
2010 Population Census	82,128
2017 Population	83,751
2017 MSW Generated (Tons/yr)	57,296
2017 MSW generation rate (Lb/person/day)	3.51
2017 MSW Disposed (Tons/yr)	53,705
2017 MSW Diverted (Tons/yr)	3,591



Population Projection										
2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028
83,986	84,221	84,457	84,693	84,930	85,168	85,407	85,646	85,886	86,126	86,367

Annual rate of population growth (%)	0.28%

Forecasting future conditions... What do you expect to happen to the MSW generation rate over the next 10 year period plan?

- (●) MSW generation rate does not change. Consequently, MSW generation fluctuates with the population of the planning unit, if the population increases, waste generation will rise as well, and vice versa.
- ( ) MSW generation amount remains the same, regardless of whether or not the planning unit's population fluctuates.
- ( ) As a result of successfully implementing the Local Solid Waste Management Plan, MSW generation will be reduced by an annual factor of ...

Reduction Factor (per year) 1.0%

MSW Generation Projection											
2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	
3.74	3.74	3.74	3.74	3.74	3.74	3.74	3.74	3.74	3.74	3.74	(Lb/person/day)
57,357	57,518	57,679	57,840	58,002	58,165	58,328	58,491	58,655	58,819	58,984	Tons/yr

MSW generation rate (Lb/person/day)	3.74

Step 4. Municipal Solid Waste (MSW) Detailed Composition Analysis

The next step is to *Identify the Materials Composition of the Waste Stream* based on population density, and demographic characteristics of the Planning Unit.
This tab will provide the PU with a more detailed estimate of the materials present in the waste stream, which could be crucial when prioritizing the initiatives and programs of the LSWMP.

The population density distribution has been calculated based on the 2010 Census data and will be auto populated when a planning unit is selected. The following parameters were used:

- Rural: <325 persons/mi^2
- Suburban: >325 and <5,000 persons/mi^2
- Urban: >5,000 persons/mi^2

Under **Density Population Distribution**, the user has the option to modify the percentage values for the **Sector** *(Residential and Commercial/Institutional)* based on land use and specific characteristics of each planning unit. For example: A rural population in Westchester County could be 64% Residential and 36% Commercial / Institutional, while in Wyoming County might be 50% Residential and 50% Commercial / Institutional.

The results are presented on the last right column under **MSW Materials Composition.** Be aware of color changes on the cells, whenever a category represents over 15% of the total waste generation, the cell will turn red to easily identify key categories of the waste stream. It will also facilitate the selection of initiatives, programs, and infrastructure for the solid waste management system.

Note: If no data exists, use the pre-populated information in the worksheet.

Clinton County 2018-2028

Material			Rural			Suburban			Urban			MSW Materials Composition (%)
	Density Population Distribution		55.48%			40.19%			4.33%			
			Residential	Comm/Inst.	Combined	Residential	Comm/Inst.	Combined	Residential	Comm/Inst.	Combined	
			58.00%	42.00%	100.00%	55.00%	45.00%	100.00%	58.00%	42.00%	100.00%	100.00%
	Newspaper		5.20%	1.90%	3.81%	5.00%	1.90%	3.61%	6.60%	2.00%	4.67%	3.77%
	Corrugated Cardboard		6.60%	13.90%	9.67%	6.60%	13.90%	9.89%	6.90%	13.70%	9.76%	9.76%
	Other Recyclable Paper	Paperboard	3.20%	1.10%	2.32%	3.30%	1.00%	2.27%	3.60%	0.90%	2.47%	2.30%
		Office Paper	0.80%	3.80%	2.06%	0.90%	4.20%	2.39%	1.10%	5.80%	3.07%	2.23%
		Junk Mail	3.00%	0.70%	2.03%	3.20%	0.70%	2.08%	3.50%	0.70%	2.32%	2.06%
		Other Commercial Printing	1.70%	2.30%	1.95%	1.70%	2.40%	2.02%	2.30%	2.60%	2.43%	2.00%
		Magazines	1.10%	0.90%	1.02%	1.00%	0.80%	0.91%	1.10%	1.00%	1.06%	0.98%
		Books	0.50%	0.30%	0.42%	0.50%	0.30%	0.41%	0.60%	0.40%	0.52%	0.42%
		Paper Bags	0.50%	0.20%	0.37%	0.50%	0.20%	0.37%	0.60%	0.20%	0.43%	0.37%
		Phone Books	0.30%	0.30%	0.30%	0.30%	0.30%	0.30%	0.30%	0.20%	0.26%	0.30%
		Poly-Coated	0.20%	0.30%	0.24%	0.20%	0.20%	0.20%	0.30%	0.20%	0.26%	0.23%
	Other Recyclable Paper (Total)		11.30%	9.90%	10.71%	11.60%	10.10%	10.93%	13.40%	12.00%	12.81%	10.89%
	Other Compostable Paper		6.80%	6.80%	6.80%	6.40%	6.40%	6.40%	6.80%	6.80%	6.80%	6.64%
	Total Paper		***29.90%***	***32.50%***	***30.99%***	***29.60%***	***32.30%***	***30.82%***	***33.70%***	***34.50%***	***34.04%***	***31.05%***
	Ferrous/Aluminum Containers	Ferrous Containers	1.90%	1.00%	1.52%	1.20%	0.70%	0.98%	1.40%	0.70%	1.11%	1.28%
		Aluminum Containers	0.70%	0.40%	0.57%	0.60%	0.30%	0.47%	0.50%	0.40%	0.46%	0.53%
	Ferrous/Aluminum Containers (Total)		2.60%	1.40%	2.10%	1.80%	1.00%	1.44%	1.90%	1.10%	1.56%	1.81%
	Other Ferrous Metals		5.20%	5.40%	5.28%	5.00%	5.80%	5.36%	3.30%	3.70%	3.47%	5.24%
	Other Non-Ferrous Metals	Other aluminum	0.20%	0.30%	0.24%	0.20%	0.30%	0.25%	0.20%	0.30%	0.24%	0.24%
		Automotive batteries	0.80%	0.50%	0.67%	0.70%	0.40%	0.57%	0.20%	0.20%	0.20%	0.61%
		Other non-aluminum	0.50%	0.30%	0.42%	0.30%	0.40%	0.35%	0.40%	0.20%	0.32%	0.38%
	Other Non-Ferrous Metals (Total)		1.50%	1.10%	1.33%	1.20%	1.10%	1.16%	0.80%	0.70%	0.76%	1.24%
	Total Metals		***9.30%***	***7.90%***	***8.71%***	***8.00%***	***7.90%***	***7.96%***	***6.00%***	***5.50%***	***5.79%***	***8.28%***
	PET Containers		1.10%	0.80%	0.97%	0.90%	0.80%	0.86%	1.20%	1.00%	1.12%	0.93%
	HDPE Containers		1.10%	0.60%	0.89%	0.90%	0.70%	0.81%	1.00%	0.70%	0.87%	0.86%
	Other Plastic (3-7) Containers		0.20%	0.10%	0.16%	0.20%	0.20%	0.20%	0.20%	0.20%	0.20%	0.18%
	Film Plastic		5.70%	5.90%	5.78%	5.50%	5.80%	5.64%	5.80%	5.80%	5.80%	5.72%
	Other Plastic	Durables	3.10%	3.20%	3.14%	3.00%	3.20%	3.09%	3.20%	3.30%	3.24%	3.13%
		Non-Durables	1.60%	1.80%	1.68%	1.60%	1.80%	1.69%	1.80%	1.90%	1.84%	1.69%
		Packaging	1.40%	1.10%	1.27%	1.40%	1.10%	1.27%	1.50%	1.10%	1.33%	1.27%
	Other Plastic (Total)		6.10%	6.10%	6.10%	6.00%	6.10%	6.05%	6.50%	6.30%	6.42%	6.09%
	Total Plastics		***14.20%***	***13.50%***	***13.91%***	***13.50%***	***13.60%***	***13.55%***	***14.70%***	***14.00%***	***14.41%***	***13.78%***
	Glass Bottles, Jars and Containers		4.10%	3.80%	3.97%	3.90%	3.80%	3.86%	4.30%	3.80%	4.09%	3.93%
	Other Glass (Flat glass, dishware, light bulbs, etc.)		0.50%	0.40%	0.46%	0.30%	0.40%	0.35%	0.40%	0.40%	0.40%	0.41%
	Total Glass		***4.60%***	***4.20%***	***4.43%***	***4.20%***	***4.20%***	***4.20%***	***4.70%***	***4.20%***	***4.49%***	***4.34%***
	Food Scraps		12.70%	13.30%	12.95%	12.90%	15.50%	14.07%	17.20%	25.20%	20.56%	13.73%
	Leaves and Grass / Pruning and Trimmings		3.10%	1.10%	2.26%	11.30%	9.10%	10.31%	4.20%	1.50%	3.07%	5.53%
	Total Organics		***15.80%***	***14.40%***	***15.21%***	***24.20%***	***24.60%***	***24.38%***	***21.40%***	***26.70%***	***23.63%***	***19.26%***
	Clothing Footwear, Towels, Sheets		4.60%	3.00%	3.93%	4.40%	3.20%	3.86%	4.80%	2.50%	3.83%	3.90%
	Carpet		1.40%	1.30%	1.36%	1.70%	1.40%	1.57%	1.70%	0.90%	1.36%	1.44%
	Total Textiles		***6.00%***	***4.30%***	***5.29%***	***6.10%***	***4.60%***	***5.43%***	***6.50%***	***3.40%***	***5.20%***	***5.34%***
	Total Wood (Pallets, crates, adulterated and non-adulterated wood)		***4.10%***	***9.00%***	***6.16%***	***2.90%***	***4.10%***	***3.44%***	***2.00%***	***3.50%***	***2.63%***	***4.91%***
	DIY - Construction & Renovation Materials		8.00%	7.60%	7.83%	3.80%	2.70%	3.31%	4.40%	3.80%	4.15%	5.85%
	Diapers		1.90%	1.10%	1.56%	2.10%	1.20%	1.70%	2.30%	1.10%	1.80%	1.63%
	Electronics		1.30%	1.40%	1.34%	1.60%	1.70%	1.65%	1.30%	1.30%	1.30%	1.46%
	Tires		1.80%	1.80%	1.80%	1.70%	1.40%	1.57%	0.50%	0.40%	0.46%	1.65%
	HHW		0.60%	0.00%	0.35%	0.60%	0.00%	0.33%	0.50%	0.00%	0.29%	0.34%
	Soils and Fines		0.60%	0.60%	0.60%	0.10%	0.20%	0.15%	0.10%	0.10%	0.10%	0.40%
	Other Composite Materials - Durable and/or Inert		1.90%	1.70%	1.82%	1.60%	1.50%	1.56%	1.90%	1.50%	1.73%	1.71%
	Total Miscellaneous		***16.10%***	***14.20%***	***15.30%***	***11.50%***	***8.70%***	***10.24%***	***11.00%***	***8.20%***	***9.82%***	***13.03%***
	Total		***100.00%***	***100.00%***	***100.00%***	***100.00%***	***100.00%***	***100.00%***	***100.00%***	***100.00%***	***100.00%***	***100.00%***

Step 5. Municipal Solid Waste (MSW) Detailed Composition Analysis

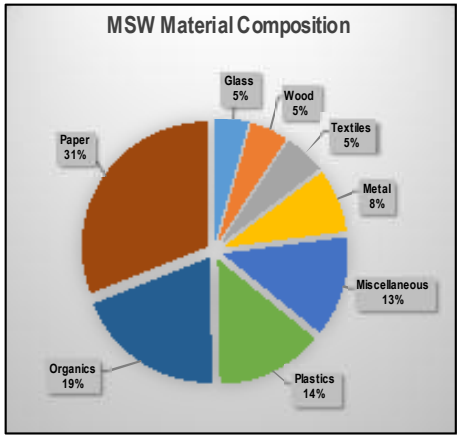
On this tab, the composition of the municipal waste stream will be estimated based on the amount of material generated in the planning unit and the state average of the different waste materials. A pie chart will be generated to clearly show the composition of the waste stream and to identify key categories of the waste stream for the planning unit.

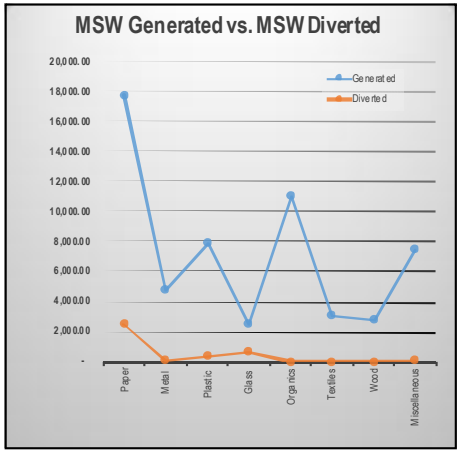
The total tons of MSW diverted per year will be auto populated based on previous data inputs, while the amount tons diverted for each material by category should be populated by the Purple cells should be used for amounts of diverted waste by type of material, and a totaled number by category (e.g. paper, metal) should be put in the green cells. After inputting the data, a graphic will be generated to show the MSW generation and diversion streams in Tons.

Make sure that the total amounts at the bottom of the page are consistent with the data you already put into the calculator. If the cell is highlighted in red, you should revise the amounts of diverted waste by category.

Clinton County 2018-2028

		2016		
		MSW Materials Composition	MSW Generated	MSW Diverted (Tons)
	Material	**100.0%**	**57,296**	**3,591**
Paper	Newspaper	3.8%	2,158	638
	Corrugated Cardboard	9.8%	5,591	1,000
	Other Recyclable Paper (Total)	10.9%	6,239	829
	Other Compostable Paper	6.6%	3,804	0
	Total Paper	31.1%	17,792	2,467
Metal	Ferrous/Aluminum Containers (Total)	1.8%	1,037	67
	Other Ferrous Metals	5.2%	3,000	25
	Other Non-Ferrous Metals (Total)	1.2%	708	2
	Total Metals	8.3%	4,745	94
Plastic	PET Containers	0.9%	534	179
	HDPE Containers	0.9%	491	173
	Other Plastic (3-7) Containers	0.2%	101	31
	Film Plastic	5.7%	3,280	0
	Other Plastic (Total)	6.1%	3,490	0
	Total Plastics	13.8%	7,897	383
Glass	Glass Bottles, Jars and Containers	3.9%	2,252	618
	Other Glass (Flat glass, dishware, light bulbs, etc.)	0.4%	235	0
	Total Glass	4.3%	2,487	618
Organics	Food Scraps	13.7%	7,867	0
	Leaves and Grass / Pruning and Trimmings	5.5%	3,169	0
	Total Organics	19.3%	11,036	0
Textiles	Clothing Footwear, Towels, Sheets	3.9%	2,233	0
	Carpet	1.4%	826	0
	Total Textiles	5.3%	3,058	0
Wood	*Total Wood* (Pallets, crates, adulterated and non-adulterated w	4.9%	2,815	0
Miscellaneous	DIY Construction & Renovation Materials	5.9%	3,354	0
	Diapers	1.6%	932	0
	Electronics	1.5%	838	0
	Tires	1.6%	944	22
	HHW	0.3%	194	7
	Soils and Fines	0.4%	227	0
	Other Composite Materials - Durable and/or inert	1.7%	978	0
	Total Miscellaneous	13.0%	7,466	29
	Total	**100.0%**	**57,296**	**3,591**





Step 6. Municipal Solid Waste (MSW) Diversion Projections

This tab will be used to create goals for the amount of material the planning unit will divert for each year of the planning period. These goals will be entered as percentages, based on how much of the material generated will be diverted for recycling or beneficial use.

The diversion goal percentages will be entered in the purple cells for each material and each year of the planning period.

Clinton County 2018-2028

Year	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028
Projected MSW Generation (Tons/yr)	57,357	57,518	57,679	57,840	58,002	58,165	58,328	58,491	58,655	58,819	58,984
MSW Diverted (Tons/yr)	4,044	6,273	8,718	11,178	13,600	16,142	18,645	21,162	23,693	25,084	28,808

			2017			2018	2019	2020	2021	2022	2,023	2024	2025	2026	2027	2028
	Material	MSW Materials Composition (%)	MSW Generated (Tons)	MSW Diverted (Tons)	% MSW Diverted	% MSW Diverted	% MSW Diverted	% MSW Diverted	% MSW Diverted	% MSW Diverted	% MSW Diverted	% MSW Diverted	% MSW Diverted	% MSW Diverted	% MSW Diverted	% MSW Diverted
		100.0%	57,296	3,591	6.3%	7.1%	10.9%	15.1%	19.3%	23.4%	27.8%	32.0%	36.2%	40.4%	42.6%	48.8%
Paper	Newspaper	3.8%	2,158	638	29.6%	31.5%	35.9%	40.2%	44.6%	48.9%	53.3%	57.6%	62.0%	66.3%	70.7%	75.0%
Paper	Corrugated Cardboard	9.8%	5,591	1,000	17.9%	19.1%	24.7%	30.3%	35.9%	41.5%	47.0%	52.6%	58.2%	63.8%	69.4%	75.0%
Paper	Other Recyclable Paper (Total)	10.9%	6,239	829	13.3%	14.2%	19.4%	24.6%	29.8%	35.0%	40.2%	45.3%	50.5%	55.7%	60.9%	66.1%
Paper	Other Compostable Paper	6.6%	3,804	0	0.0%	0.0%	2.5%	5.0%	7.5%	10.0%	12.5%	15.0%	17.5%	20.0%	22.5%	25.0%
Paper	*Total Paper*	31.1%	17,792	2,467	13.9%	14.8%	19.4%	24.1%	28.7%	33.4%	38.0%	42.6%	47.3%	51.9%	56.6%	61.2%
Metal	Ferrous/Aluminum Containers (Total)	1.8%	1,037	67	6.5%	9.7%	12.9%	18.8%	24.7%	30.7%	36.7%	42.6%	48.6%	54.5%	60.5%	66.5%
Metal	Other Ferrous Metals	5.2%	3,000	25	0.8%	4.0%	7.3%	13.7%	20.1%	26.5%	32.9%	39.4%	45.8%	52.2%	55.3%	65.0%
Metal	Other Non-Ferrous Metals (Total)	1.2%	708	2	0.3%	3.6%	7.3%	14.2%	21.2%	28.1%	35.0%	42.0%	48.9%	55.8%	57.4%	69.7%
Metal	*Total Metals*	8.3%	4,745	94	2.0%	5.2%	8.5%	14.9%	21.3%	27.7%	34.1%	40.5%	46.8%	53.2%	56.7%	66.0%
Plastic	PET Containers	0.9%	534	179	33.5%	35.8%	39.7%	43.6%	47.6%	41.5%	55.4%	59.3%	63.2%	67.2%	71.1%	75.0%
Plastic	HDPE Containers	0.9%	491	173	35.2%	37.6%	39.8%	42.1%	44.3%	46.6%	48.8%	51.0%	53.3%	55.5%	56.3%	60.0%
Plastic	Other Plastic (3-7) Containers	0.2%	101	31	30.6%	32.6%	35.8%	39.1%	42.3%	45.5%	48.8%	52.0%	55.3%	58.5%	59.4%	65.0%
Plastic	Film Plastic	5.7%	3,280	0	0.0%	0.0%	3.5%	7.0%	10.5%	14.0%	17.5%	21.0%	24.5%	28.0%	31.5%	35.0%
Plastic	Other Plastic (Total)	6.1%	3,490	0	0.0%	0.0%	3.4%	6.7%	10.1%	13.5%	16.9%	20.2%	23.6%	27.0%	30.3%	33.7%
Plastic	*Total Plastics*	13.8%	7,897	383	4.9%	5.2%	8.6%	11.9%	15.3%	18.1%	22.1%	25.5%	28.9%	32.3%	23.2%	39.1%
Glass	Glass Bottles, Jars and Containers	3.9%	2,252	618	27.4%	29.3%	34.3%	39.4%	44.5%	49.6%	54.6%	59.7%	64.8%	69.9%	74.9%	80.0%
Glass	Other Glass (Flat glass, dishware, light bulbs, etc.)	0.4%	235	0	0.0%	0.0%	5.5%	11.0%	16.5%	22.0%	27.5%	33.0%	38.5%	44.0%	49.5%	55.0%
Glass	*Total Glass*	4.3%	2,487	618	24.8%	26.5%	31.6%	36.7%	41.8%	47.0%	52.1%	57.2%	62.3%	67.4%	72.5%	77.6%
Organic	Food Scraps	13.7%	7,867	0	0.0%	0.0%	1.5%	3.0%	4.5%	6.0%	7.5%	9.0%	10.5%	12.0%	13.5%	15.0%
Organic	Leaves and Grass / Pruning and Trimmings	5.5%	3,169	0	0.0%	0.0%	8.5%	17.0%	25.5%	34.0%	42.5%	51.0%	59.5%	68.0%	76.5%	85.0%
Organic	*Total Organics*	19.3%	11,036	0	0.0%	0.0%	3.5%	7.0%	10.5%	14.0%	17.5%	21.1%	24.6%	28.1%	31.6%	35.1%
Textiles	Clothing Footwear, Towels, Sheets	3.9%	2,233	0	0.0%	2.0%	5.5%	11.0%	16.5%	22.0%	27.5%	33.0%	38.5%	44.0%	49.5%	55.0%
Textiles	Carpet	1.4%	826	0	0.0%	1.0%	1.5%	3.0%	4.5%	6.0%	7.5%	9.0%	10.5%	12.0%	13.5%	15.0%
Textiles	*Total Textiles*	5.3%	3,058	0	0.0%	1.7%	4.4%	8.8%	13.3%	17.7%	22.1%	26.5%	30.9%	35.4%	39.8%	44.2%
Wood	*Total Wood* (Pallets, crates, adulterated and non-adulterated wood)	4.9%	2,815	0	0.0%	0.0%	3.5%	7.0%	10.5%	14.0%	17.5%	21.0%	24.5%	28.0%	31.5%	35.0%
Miscellaneous	DIY Construction & Renovation Materials	5.9%	3,354	0	0.0%	0.0%	2.0%	4.0%	6.0%	8.0%	10.0%	12.0%	14.0%	16.0%	18.0%	20.0%
Miscellaneous	Diapers	1.6%	932	0	0.0%	0.0%	2.0%	4.0%	6.0%	8.0%	10.0%	12.0%	14.0%	16.0%	18.0%	20.0%
Miscellaneous	Electronics	1.5%	838	0	0.0%	0.0%	9.0%	18.0%	27.0%	36.0%	45.0%	54.0%	63.0%	72.0%	81.0%	90.0%
Miscellaneous	Tires	1.6%	944	22	2.3%	3.5%	12.2%	20.8%	29.5%	38.1%	46.8%	55.4%	64.1%	72.7%	81.4%	90.0%
Miscellaneous	HHW	0.3%	194	7	3.6%	5.0%	7.5%	15.0%	22.5%	30.0%	37.5%	45.0%	52.5%	60.0%	67.5%	75.0%
Miscellaneous	Soils and Fines	0.4%	227	0	0.0%	0.0%	1.5%	3.0%	4.5%	6.0%	7.5%	9.0%	10.5%	12.0%	13.5%	15.0%
Miscellaneous	Other Composite Materials - Durable and/or inert	1.7%	978	0	0.0%	0.0%	1.0%	2.0%	3.0%	4.0%	5.0%	6.0%	7.0%	8.0%	9.0%	10.0%
Miscellaneous	*Total Miscellaneous*	13.0%	7,466	29	0.4%	0.6%	4.1%	7.7%	11.3%	14.9%	18.6%	22.2%	25.8%	29.4%	33.0%	36.7%

Step 7. Municipal Solid Waste (MSW) Generation and Diversion - Detailed Projections

The final result of the Population and Municipal Composition Calculator is presented on the last tab. This tab contains data for the current year regarding waste generated and waste diverted from disposal. This tab also shows the projected waste diversion percentages, and the amount of waste in tons these percentages will divert for recycling. Total amounts of waste diverted will be calculated for each material and each year of the planning period.

Clinton County 2018-2028

	Material	MSW Materials Composition (%)	2017			2018			2019			2020			2021			2022			2023			2024			2025			2026			2027			2028		
			MSW Generated (Tons)	MSW Diverted (Tons)	% MSW Diverted	MSW generated (Tons)	MSW Diverted	% MSW Diverted	MSW generated (Tons)	MSW Diverted	% MSW Diverted	MSW generated (Tons)	MSW Diverted	% MSW Diverted	MSW generated (Tons)	MSW Diverted	% MSW Diverted	MSW generated (Tons)	MSW Diverted	% MSW Diverted	MSW generated (Tons)	MSW Diverted	% MSW Diverted	MSW generated (Tons)	MSW Diverted	% MSW Diverted	MSW generated (Tons)	MSW Diverted	% MSW Diverted	MSW generated (Tons)	MSW Diverted	% MSW Diverted	MSW generated (Tons)	MSW Diverted	% MSW Diverted	MSW generated (Tons)	MSW Diverted	% MSW Diverted
		100.00%	57,296	3,591	6.3%	57,357	4,044	7.1%	57,518	6,273	11%	57,679	8,721	15.1%	57,840	11,183	19.3%	58,002	14,336	24.7%	58,165	16,150	27.8%	58,328	18,654	32.0%	58,491	21,172	36.2%	58,655	23,806	40.6%	58,819	26,100	44.4%	58,984	28,808	48.8%
Paper	Newspaper	3.77%	2,158	638	29.6%	2,161	680	31.5%	2,167	777	36%	2,173	874	40.2%	2,179	971	44.6%	2,185	1,069	48.9%	2,191	1,167	53.3%	2,197	1,266	57.6%	2,203	1,365	62.0%	2,210	1,465	66.3%	2,216	1,565	70.7%	2,222	1,666	75.0%
	Corrugated Cardboard	9.76%	5,591	1,000	17.9%	5,597	1,068	19.1%	5,613	1,385	25%	5,628	1,704	30.3%	5,644	2,024	35.9%	5,660	2,346	41.5%	5,676	2,670	47.0%	5,692	2,995	52.6%	5,708	3,323	58.2%	5,723	3,653	63.8%	5,740	3,984	69.4%	5,756	4,317	75.0%
	Other Recyclable Paper (Total)	10.89%	6,239	829	13.3%	6,245	884	14.2%	6,263	1,212	19%	6,280	1,542	24.6%	6,298	1,874	29.8%	6,316	2,207	35.0%	6,333	2,543	40.2%	6,351	2,880	45.3%	6,369	3,219	50.5%	6,387	3,560	55.7%	6,405	3,903	60.9%	6,422	4,245	66.1%
	Other Compostable Paper	6.64%	3,804	0	0.0%	3,808	0	0.0%	3,819	95	3%	3,829	191	5.0%	3,840	288	7.5%	3,851	385	10.0%	3,862	483	12.5%	3,873	581	15.0%	3,883	680	17.5%	3,894	779	20.0%	3,905	879	22.5%	3,916	979	25.0%
	Total Paper	**31.05%**	17,792	2,467	13.9%	17,811	2,632	14.8%	17,861	3,471	19%	17,911	4,312	24.1%	17,961	5,157	28.7%	18,011	6,007	33.4%	18,062	6,863	38.0%	18,112	7,722	42.6%	18,163	8,587	47.3%	18,214	9,457	51.9%	18,265	10,331	56.6%	18,316	11,207	61.2%
Metal	Ferrous/Aluminum Containers (Total)	1.81%	1,037	67	6.5%	1,038	101	9.7%	1,041	134	13%	1,044	196	18.8%	1,047	259	24.7%	1,049	322	30.7%	1,052	386	36.7%	1,055	450	42.6%	1,058	514	48.6%	1,061	579	54.5%	1,064	643	60.5%	1,067	709	66.5%
	Other Ferrous Metals	5.34%	3,060	25	0.8%	3,063	120	4.0%	3,072	220	7%	3,080	414	13.7%	3,088	609	20.1%	3,097	806	26.5%	3,045	1,003	32.9%	3,054	1,202	39.4%	3,063	1,401	45.8%	3,071	1,603	52.2%	3,080	1,703	55.3%	3,088	2,007	65.0%
	Other Non-Ferrous Metals (Total)	1.24%	708	2	0.3%	709	26	3.6%	711	52	7%	713	101	14.2%	715	151	21.2%	717	201	28.1%	719	252	35.0%	721	302	42.0%	723	353	48.9%	725	405	55.8%	727	417	57.4%	729	508	69.7%
	Total Metals	**8.28%**	4,745	94	2.0%	4,750	246	5.2%	4,763	406	9%	4,777	711	14.9%	4,790	1,019	21.3%	4,803	1,329	27.7%	4,817	1,641	34.1%	4,830	1,954	40.5%	4,844	2,269	46.8%	4,857	2,586	53.2%	4,871	2,764	56.7%	4,885	3,224	66.0%
Plastic	PET Containers	0.93%	534	179	33.5%	535	191	35.8%	536	213	40%	538	235	43.6%	539	256	47.5%	541	277	51.4%	542	300	55.4%	544	323	59.3%	545	345	63.2%	547	367	67.2%	548	390	71.1%	550	412	75.0%
	HDPE Containers	0.88%	491	173	35.2%	492	185	37.6%	493	196	40%	494	208	42.1%	495	220	44.3%	497	44	8.9%	499	253	49.8%	500	255	51.0%	501	257	51.3%	503	279	55.5%	504	284	56.3%	506	303	60.0%
	Other Plastic (3-7) Containers	0.18%	101	31	30.6%	101	33	32.6%	102	36	36%	102	40	39.1%	102	43	42.3%	102	31	30.7%	103	50	48.8%	103	54	52.0%	103	57	55.3%	104	61	58.5%	104	62	59.4%	104	68	65.0%
	Film Plastic	5.72%	3,280	0	0.0%	3,284	0	0.0%	3,293	115	4%	3,302	231	7.0%	3,311	348	10.5%	3,321	881	26.5%	3,330	583	17.5%	3,339	701	21.0%	3,348	820	24.5%	3,358	940	28.0%	3,367	1,061	31.5%	3,377	1,182	35.0%
	Other Plastic (Total)	6.09%	3,490	0	0.0%	3,494	0	0.0%	3,504	118	3%	3,514	237	6.7%	3,523	356	10.1%	3,533	992	28.1%	3,543	597	16.9%	3,553	718	20.2%	3,563	841	23.6%	3,573	963	27.0%	3,583	1,087	30.3%	3,593	1,211	33.7%
	Total Plastics	**13.76%**	7,897	383	4.9%	7,905	409	5.2%	7,927	679	9%	7,950	950	12.0%	7,972	1,223	15.3%	7,994	2,173	27.2%	8,017	1,774	22.1%	8,039	2,051	25.5%	8,062	2,330	28.9%	8,084	2,611	32.3%	8,107	2,883	35.6%	8,129	3,176	39.1%
Glass	Glass Bottles, Jars and Containers	3.93%	2,252	618	27.4%	2,255	660	29.3%	2,261	776	34%	2,267	894	39.4%	2,274	1,012	44.5%	2,280	1,130	49.6%	2,287	1,249	54.6%	2,293	1,369	59.7%	2,299	1,490	64.8%	2,306	1,611	69.9%	2,312	1,733	74.9%	2,319	1,855	80.0%
	Other Glass (Flat glass, dishware, light bulbs, etc.)	0.41%	235	0	0.0%	235	0	0.0%	236	13	6%	237	26	11.0%	237	39	16.5%	238	52	22.0%	239	66	27.5%	239	79	33.0%	240	92	38.5%	241	106	44.0%	241	119	49.5%	242	133	55.0%
	Total Glass	**4.34%**	2,487	618	24.8%	2,490	660	26.5%	2,497	789	32%	2,504	920	36.7%	2,511	1,051	41.8%	2,518	1,182	47.0%	2,525	1,315	52.1%	2,532	1,448	57.2%	2,539	1,582	62.3%	2,546	1,716	67.4%	2,553	1,852	72.5%	2,561	1,988	77.6%
Organics	Food Scraps	13.73%	7,867	0	0.0%	7,876	0	0.0%	7,898	118	2%	7,920	238	3.0%	7,942	357	4.5%	7,964	478	6.0%	7,986	599	7.5%	8,009	721	9.0%	8,031	843	10.5%	8,054	966	12.0%	8,076	1,090	13.5%	8,099	1,215	15.0%
	Leaves and Grass/Pruning and Trimmings	5.53%	3,169	0	0.0%	3,172	0	0.0%	3,181	270	9%	3,190	542	17.0%	3,199	816	25.5%	3,208	1,091	34.0%	3,217	1,367	42.5%	3,226	1,645	51.0%	3,235	1,925	59.5%	3,244	2,206	68.0%	3,253	2,488	76.5%	3,262	2,773	85.0%
	Total Organics	**19.26%**	11,036	0	0.0%	11,048	0	0.0%	11,078	389	4%	11,110	780	7.0%	11,141	1,173	10.5%	11,172	1,568	14.0%	11,203	1,966	17.5%	11,234	2,366	21.1%	11,266	2,768	24.6%	11,297	3,172	28.1%	11,329	3,579	31.6%	11,361	3,987	35.1%
Textiles	Clothing Footwear, Towels, Sheets	3.90%	2,233	0	0.0%	2,235	45	2.0%	2,241	123	6%	2,248	247	11.0%	2,254	372	16.5%	2,260	497	22.0%	2,266	623	27.5%	2,273	750	33.0%	2,279	877	38.5%	2,286	1,006	44.0%	2,292	1,135	49.5%	2,298	1,264	55.0%
	Carpet	1.44%	826	0	0.0%	827	8	1.0%	829	12	2%	831	25	3.0%	834	38	4.5%	836	50	6.0%	838	63	7.5%	841	76	9.0%	843	89	10.5%	845	101	12.0%	848	114	13.5%	850	126	15.0%
	Total Textiles	**5.34%**	3,058	0	0.0%	3,062	53	1.7%	3,070	136	4%	3,079	272	8.8%	3,088	409	13.3%	3,096	547	17.7%	3,105	686	22.1%	3,114	826	26.5%	3,122	966	30.9%	3,131	1,107	35.4%	3,140	1,249	39.8%	3,149	1,392	44.2%
Wood	***Total Wood (Pallets, crates, adulterated and non-adulterated)***	**4.91%**	2,815	0	0.0%	2,818	0	0.0%	2,826	99	4%	2,834	198	7.0%	2,842	298	10.5%	2,850	399	14.0%	2,858	500	17.5%	2,866	602	21.0%	2,874	704	24.5%	2,882	807	28.0%	2,890	910	31.5%	2,898	1,014	35.0%
Miscellaneous	DIY Construction & Renovation Materials	5.85%	3,354	0	0.0%	3,357	0	0.0%	3,367	67	2%	3,376	135	4.0%	3,385	203	6.0%	3,395	272	8.0%	3,404	340	10.0%	3,414	410	12.0%	3,424	479	14.0%	3,433	961	28.0%	3,443	620	18.0%	3,452	690	20.0%
	Diapers	1.63%	932	0	0.0%	933	0	0.0%	936	19	2%	938	38	4.0%	941	56	6.0%	944	75	8.0%	946	95	10.0%	949	114	12.0%	951	133	14.0%	954	153	16.0%	957	172	18.0%	959	192	20.0%
	Electronics	1.46%	838	0	0.0%	839	0	0.0%	841	76	9%	843	152	18.0%	846	228	27.0%	848	305	36.0%	850	383	45.0%	853	460	54.0%	855	539	63.0%	858	137	16.0%	860	697	81.0%	862	776	90.0%
	Tires	1.65%	944	22	2.3%	945	33	3.5%	948	115	12%	950	198	20.8%	953	281	29.5%	956	364	38.1%	958	448	46.8%	961	532	55.4%	964	617	64.1%	966	696	72.0%	969	788	81.4%	972	875	90.0%
	HHW	0.34%	194	7	3.6%	194	10	5.0%	195	15	8%	195	29	15.0%	196	44	22.5%	196	59	30.0%	197	74	37.5%	197	89	45.0%	198	104	52.5%	198	144	72.7%	199	134	67.5%	200	150	75.0%
	Soils and Fines	0.40%	227	0	0.0%	227	0	0.0%	227	3	2%	228	7	3.0%	229	10	4.5%	225	14	6.0%	230	17	7.5%	231	21	9.0%	231	24	10.5%	232	139	60.0%	233	31	13.5%	233	35	15.0%
	Other Composite Materials - Durable and/or inert	1.71%	978	0	0.0%	979	0	0.0%	982	10	1%	985	20	2.0%	988	30	3.0%	990	40	4.0%	993	50	5.0%	996	60	6.0%	999	70	7.0%	1,002	120	12.0%	1,004	90	9.0%	1,007	101	10.0%
	Total Miscellaneous	**13.03%**	7,465	29	0.4%	7,474	43	0.6%	7,495	305	4%	7,516	578	7.7%	7,537	853	11.3%	7,558	1,129	14.9%	7,579	1,407	18.6%	7,600	1,686	22.2%	7,622	1,967	25.8%	7,643	2,350	30.8%	7,664	2,533	33.0%	7,686	2,818	36.7%

	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028
Population	63,751	63,886	64,221	64,457	64,693	64,930	65,166	65,401	65,636	65,870	66,105	66,341
MSW Generated (tons)	57,296.00	57,357	57,518	57,679	57,840	58,002	58,165	58,328	58,491	58,655	58,819	58,984
Per Capita MSW Generated (lbs/person/day)	1.35	1.35	1.36	1.36	1.36	1.36	1.36	1.36	1.36	1.36	1.36	1.36
MSW Diverted (tons)	3,591.00	4,044	6,273	8,721	11,183	14,336	16,150	18,654	21,172	23,806	26,100	28,808
Per Capita MSW Diverted (lbs/person/year)	86	96	149	207	264	338	379	437	494	554	606	667
MSW Disposed (tons)	53,705.00	53,313	51,245	49,357	46,657	43,667	42,014	39,674	37,319	34,849	32,719	30,176
Per Capita MSW Disposed (lbs/person/year)	1,282	1,270	1,217	1,139	1,102	1,028	987	929	871	812	760	699
Per Capita MSW Disposed (lbs/person/day)	3.51	3.48	3.33	3.18	3.02	2.82	2.70	2.55	2.39	2.22	2.08	1.91

A2 C&D Waste Composition and Diversion Tables

Step 1. Planning Unit and Planning Period Selection

Please, select from the drop-down-list the name of your **planning unit** and the **planning period** of your **LSWMP**. Be aware that a LSWMP must be developed for a **10-year period**, and that your selection will be replicated on each one of the following tabs.

Planning Unit	Clinton County
Planning Period	2018-2028

Step 2. Construction & Demolition (C&D) Debris Material Composition Analysis

In order to Identify the Materials Composition of the C&D Debris waste stream, it is necessary to define the sources of the waste first.

Construction and demolition (C&D) Debris consists of waste that is generated during renovation, demolition or new construction of residential and non residential properties. It also includes the new construction and/or renovation of municipal infrastructure, such as roadways, park facilities, bike trails, bridges, etc. The user should estimate these values and enter them in the purple cells.

The results are presented on the last right column under C&D Debris Waste Stream Composition. Be aware of color changes on the cells, whenever a category represents over 15% of the total generation, the cell will turn red to easy identify key categories on the waste stream. It will also aid with the selection of isolated initiatives, programs, and infrastructure for the solid waste management system.

Note:

• The graphic displays the planning unit's C&D Debris generation data by material categories. It has been designed to help visualize the more representative categories of the waste stream.

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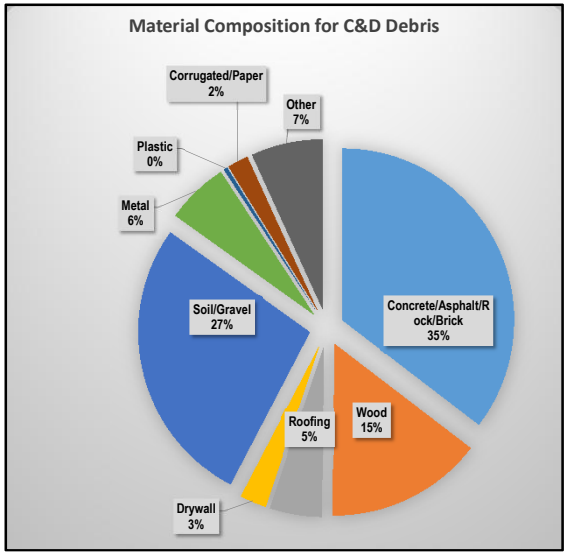
		Generation source									
		Residential				Non- Residential (commercial-institutional)				Other Municipal Infras-tructure	C&D Debris Materials Composition (%)
		17.00%				25.00%				58.00%	
		New Construction	Renovation	Demolition	Combined Residential	New Construction	Renovation	Demolition	Combined Non-Residential	Renovation	
		11.00%	29.00%	60.00%	100.00%	13.00%	48.00%	39.00%	100.00%	100.00%	100.00%
Materials	Concrete/ Asphalt /Rock/Brick	9.80%	16.10%	21.50%	18.65%	30.70%	19.10%	23.10%	22.17%	46.00%	35.39%
	Wood	29.90%	19.10%	25.70%	24.25%	22.70%	12.40%	24.20%	18.34%	10.50%	14.80%
	Roofing	6.00%	22.00%	6.10%	10.70%	2.10%	21.20%	5.10%	12.44%	0.00%	4.93%
	Drywall	15.60%	7.90%	5.10%	7.07%	4.60%	6.40%	4.30%	5.35%	0.00%	2.54%
	Soil/Gravel	11.30%	7.10%	18.50%	14.40%	13.10%	6.50%	15.60%	10.91%	38.00%	27.22%
	Metal	5.30%	11.30%	5.20%	6.98%	12.00%	15.50%	11.10%	13.33%	2.40%	5.91%
	Plastic	1.50%	0.70%	0.30%	0.55%	0.50%	0.70%	0.30%	0.52%	0.30%	0.40%
	Corrugated cardboard/Paper	9.30%	2.90%	3.10%	3.72%	7.10%	4.60%	4.20%	4.77%	0.30%	2.00%
	Other	11.30%	12.90%	14.50%	13.68%	7.20%	13.60%	12.10%	12.18%	2.50%	6.82%
	Total	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%



Step 3. Construction & Demolition (C&D) Debris Generation Projections

This step will estimate the amount of waste generated for each material based on the total amount of waste generated in that year. In the purple cells enter the amount of waste generated in the Planning Unit. It will be a known amount for the first year, **2017** and an estimate of what will be generated for each year of the planning period, **2018-2028**

Clinton County

2018-2028

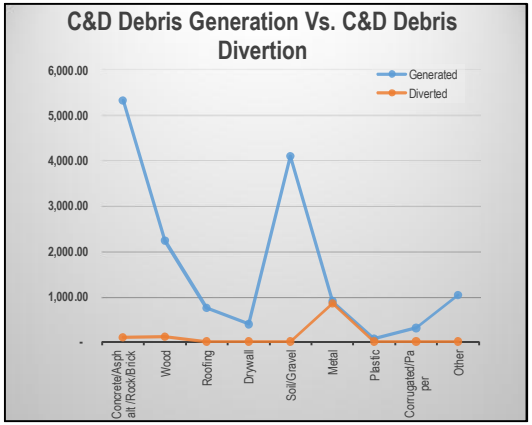
			2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027
		C&D Debris Materials Composition (%)	C&D Debris Generated (Tons)	C&D Debris Generated (Tons)	C&D Debris Generated (Tons)	C&D Debris Generated (Tons)	C&D Debris Generated (Tons)	C&D Debris Generated (Tons)	C&D Debris Generated (Tons)	C&D Debris Generated (Tons)	C&D Debris Generated (Tons)	C&D Debris Generated (Tons)	C&D Debris Generated (Tons)
Materials	Concrete/Asphalt /Rock/Brick	35.4%	5,324.7	5,662.7	6,016.6	6,370.6	6,724.5	7,078.4	7,432.3	7,786.2	8,140.2	8,494.1	8,848.0
	Wood	14.8%	2,226.3	2,367.6	2,515.6	2,663.5	2,811.5	2,959.5	3,107.5	3,255.4	3,403.4	3,551.4	3,699.4
	Roofing	4.9%	741.5	788.6	837.8	887.1	936.4	985.7	1,035.0	1,084.3	1,133.6	1,182.8	1,232.1
	Drywall	2.5%	381.9	406.1	431.5	456.9	482.2	507.6	533.0	558.4	583.8	609.2	634.5
	Soil/Gravel	27.2%	4,094.5	4,354.4	4,626.6	4,898.7	5,170.9	5,443.0	5,715.2	5,987.3	6,259.5	6,531.6	6,803.8
	Metal	5.9%	889.3	945.7	1,004.8	1,064.0	1,123.1	1,182.2	1,241.3	1,300.4	1,359.5	1,418.6	1,477.7
	Plastic	0.4%	59.7	63.5	67.4	71.4	75.4	79.3	83.3	87.3	91.2	95.2	99.2
	Corrugated cardboard/Paper	2.0%	300.8	319.9	339.9	359.9	379.9	399.9	419.9	439.9	459.8	479.8	499.8
	Other	6.8%	1,026.4	1,091.5	1,159.7	1,228.0	1,296.2	1,364.4	1,432.6	1,500.8	1,569.1	1,637.3	1,705.5
	Total	100.0%	**15,045.0**	**16,000.0**	**17,000.0**	**18,000.0**	**19,000.0**	**20,000.0**	**21,000.0**	**22,000.0**	**23,000.0**	**24,000.0**	**25,000.0**

Step 4. Construction & Demolition (C&D) Debris Divertion Projections

Based on the total amount of C&D debris generated in the Planning Unit, which was entered in Step 3, this step will be used to calculate the % of this material that is diverted from the C&D debris waste stream. For this step, enter the amount of waste diverted for each material in the purple cells.

Clinton County | **2018-2028**

			2017		
		C&D Debris Materials Composition (%)	C&D Debris Generated (Tons)	C&D Debris Diverted (Tons)	% C&D Diverted
Materials	Concrete/Asphalt /Rock/Brick	35.4%	5,324.7	87.0	1.6%
	Wood	14.8%	2,226.3	103.0	4.6%
	Roofing	4.9%	741.5	0.0	0.0%
	Drywall	2.5%	381.9	0.0	0.0%
	Soil/Gravel	27.2%	4,094.5	0.0	0.0%
	Metal	5.9%	889.3	835.0	93.9%
	Plastic	0.4%	59.7	0.0	0.0%
	Corrugated cardboard/Paper	2.0%	300.8	0.0	0.0%
	Other	6.8%	1,026.4	0.0	0.0%
	Total	100.0%	15,045.0	1,025.0	6.8%



Step 5. Construction and Demolition (C&D) Debris Generation and Diversion Projections

This tab will be used to create goals for the amount of C&D debris the planning unit will divert for each year of the planning period. These goals will be entered as percentages, based on how much of the material generated that will be diverted for recycling or beneficial use.
The diversion goal percentages will be entered in the purple cells for each material and each year of the planning period.

Clinton County **2018-2028**

Materials	C&D Debris Materials Composition (%)	2017 C&D Debris Generated (Tons)	2017 C&D Debris Diverted	2017 % C&D Diverted	2018 C&D Debris Generated (Tons)	2018 C&D Debris Diverted	2018 % C&D Diverted	2019 C&D Debris Generated (Tons)	2019 C&D Debris Diverted	2019 % C&D Diverted	2020 C&D Debris Generated (Tons)	2020 C&D Debris Diverted	2020 % C&D Diverted
Concrete/Asphalt /Rock/Brick	35.4%	5,324.7	87.0	1.6%	5,662.7	2,548.2	45.0%	6,016.6	5,114.1	85.0%	6,370.6	5,415.0	85.0%
Wood	14.8%	2,226.3	103.0	4.6%	2,367.6	947.0	40.0%	2,515.6	1,006.2	40.0%	2,663.5	1,065.4	40.0%
Roofing	4.9%	741.5	0.0	0.0%	788.6	78.9	10.0%	837.8	125.7	15.0%	887.1	133.1	15.0%
Drywall	2.5%	381.9	0.0	0.0%	406.1	40.6	10.0%	431.5	64.7	15.0%	456.9	68.5	15.0%
Soil/Gravel	27.2%	4,094.5	0.0	0.0%	4,354.4	870.9	20.0%	4,626.6	1,156.6	25.0%	4,898.7	1,224.7	25.0%
Metal	5.9%	889.3	835.0	93.9%	945.7	879.5	93.0%	1,004.8	934.5	93.0%	1,064.0	1,000.1	94.0%
Plastic	0.4%	59.7	0.0	0.0%	63.5	6.3	10.0%	67.4	6.7	10.0%	71.4	7.1	10.0%
Corrugated /Paper	2.0%	300.8	0.0	0.0%	319.9	48.0	15.0%	339.9	68.0	20.0%	359.9	72.0	20.0%
Other	6.8%	1,026.4	0.0	0.0%	1,091.5	109.2	10.0%	1,159.7	145.0	12.5%	1,228.0	184.2	15.0%
Total	**100.0%**	**15,045.0**	1,025.0	6.8%	**16,000.0**	5,528.6	34.6%	**17,000.0**	8,621.6	50.7%	**18,000.0**	9,170.1	50.9%

Materials	2021 C&D Debris Generated (Tons)	2021 C&D Debris Diverted	2021 % C&D Diverted	2022 C&D Debris Generated (Tons)	2022 C&D Debris Diverted	2022 % C&D Diverted	2023 C&D Debris Generated (Tons)	2023 C&D Debris Diverted	2023 % C&D Diverted	2024 C&D Debris Generated (Tons)	2024 C&D Debris Diverted	2024 % C&D Diverted
Concrete/Asphalt /Rock/Brick	6,724.5	5,715.8	85.0%	7078.4	6370.6	90.0%	7,432.3	6,689.1	90.0%	7,786.2	7,007.6	90.0%
Wood	2,811.5	1,124.6	40.0%	2959.5	1331.8	45.0%	3,107.5	1,398.4	45.0%	3,255.4	1,464.9	45.0%
Roofing	936.4	140.5	15.0%	985.7	246.4	25.0%	1,035.0	258.7	25.0%	1,084.3	271.1	25.0%
Drywall	482.2	72.3	15.0%	507.6	101.5	20.0%	533.0	106.6	20.0%	558.4	111.7	20.0%
Soil/Gravel	5,170.9	1,551.3	30.0%	5443.0	1905.1	35.0%	5,715.2	2,000.3	35.0%	5,987.3	2,095.6	35.0%
Metal	1,123.1	1,055.7	94.0%	1182.2	1111.2	94.0%	1,241.3	1,179.2	95.0%	1,300.4	1,235.4	95.0%
Plastic	75.4	11.3	15.0%	79.3	11.9	15.0%	83.3	12.5	15.0%	87.3	13.1	15.0%
Corrugated /Paper	379.9	95.0	25.0%	399.9	100.0	25.0%	419.9	126.0	30.0%	439.9	132.0	30.0%
Other	1,296.2	226.8	17.5%	1364.4	272.9	20.0%	1,432.6	322.3	22.5%	1,500.8	375.2	25.0%
Total	**19,000.0**	9,993.3	52.6%	**20000.0**	11451.3	57.3%	**21,000.0**	12,093.1	57.6%	**22,000.0**	12,706.5	57.8%

Materials	2025 C&D Debris Generated (Tons)	2025 C&D Debris Diverted	2025 % C&D Diverted	2026 C&D Debris Generated (Tons)	2026 C&D Debris Diverted	2026 % C&D Diverted	2027 C&D Debris Generated (Tons)	2027 C&D Debris Diverted	2027 % C&D Diverted
Concrete/Asphalt /Rock/Brick	8,140.2	7,326.1	90.0%	8,494.1	7,644.7	90.0%	8,848.0	7,963.2	90.0%
Wood	3,403.4	1,701.7	50.0%	3,551.4	1,775.7	50.0%	3,699.4	1,849.7	50.0%
Roofing	1,133.6	340.1	30.0%	1,182.8	354.9	30.0%	1,232.1	369.6	30.0%
Drywall	583.8	116.8	20.0%	609.2	152.3	25.0%	634.5	158.6	25.0%
Soil/Gravel	6,259.5	2,190.8	35.0%	6,531.6	2,612.6	40.0%	6,803.8	2,721.5	40.0%
Metal	1,359.5	1,291.5	95.0%	1,418.6	1,347.7	95.0%	1,477.7	1,403.8	95.0%
Plastic	91.2	18.2	20.0%	95.2	19.0	20.0%	99.2	19.8	20.0%
Corrugated /Paper	459.8	138.0	30.0%	479.8	167.9	35.0%	499.8	199.9	40.0%
Other	1,569.1	431.5	27.5%	1,637.3	491.2	30.0%	1,705.5	596.9	35.0%
Total	**23,000.0**	13,554.7	58.9%	**24,000.0**	14,566.0	60.7%	**25,000.0**	15,283.2	**61.1%**

Appendix B

Copy of Clinton County Solid Waste and Recycling Law (Local Law #1 of the Year 2009)

New York State Department of State
162 Washington Avenue, Albany, NY 12231

Local Law Filing

(Use this form to file a local law with the Secretary of State.)

Text of law should be given as amended. Do not include matter being eliminated and do not use italics or underlining to indicate new matter.

County
~~City~~ of Clinton
~~Town~~
~~Village~~

Local Law No. 1 of the year 2009

A local law Establishing Clinton County Solid Waste and Recycling Law and Repealing All Previous Clinton County Solid Waste and Recycling Local Laws

Be it enacted by the Legislature of the
(Name of Legislative Body)
County
~~City~~ of Clinton as follows:
~~Town~~
~~Village~~

CLINTON COUNTY SOLID WASTE AND RECYCLING LAW

SECTION I GENERAL

A. Statement of Findings

The County Legislature of Clinton County finds that:

1. Removal of certain materials from the solid waste stream will decrease the flow of solid waste to County landfills, aid in the conservation of valuable resources, and reduce the required capacity of existing and proposed Solid Waste disposal facilities.

2. New York State Solid Waste Management Act of 1988 required all municipalities to adopt a local law or ordinance by September 1, 1992, with such local law or ordinance to include a provision that requires solid wastes delivered to a Solid Waste Management Facility to be separated into recyclable, reusable or other components for which economic markets for alternate uses exist.

(If additional space is needed, attach pages the same size as this sheet, and number each.)

DOS-239 (Rev. 7/91)

3. Methods of Solid Waste Management emphasizing source reduction, recovery, conservation, and recycling of Solid Wastes are significant to: the preservation of the health, safety, and well being of the public; the economic productivity and environmental quality of Clinton County; and to the conservation of resources.

B. Declaration of Policy

The purpose of this local law is to provide for an orderly program for collection, transportation, treatment and disposal of solid waste in order to promote the welfare, convenience, health, and safety of the citizens of Clinton County (County) and others. This law is in supplementation of and not intended to derogate from all Federal and State Laws and Regulations.

It shall be the policy of the Clinton County Legislature:

1. To increase the life expectancy of existing and potential landfill areas, and decrease the need for alternative refuse disposal facilities through a comprehensive program of waste stream reduction, reuse and recycling.

2. To minimize the threat to human health and safety posed by the effects of landfill disposal on groundwater quality; and to insure the long-range preservation of the health, safety, and well-being of the public, and the economic productivity and environmental quality of Clinton County by conserving resources and reducing the potential for pollution of the environment.

3. To identify methods of collection, reduction, and separation which will encourage the more efficient utilization of solid waste disposal facilities and contribute to more effective programs for the reuse of solid wastes.

4. To set forth a methodology for efficiently separating and collecting reusable and recyclable materials from the community's waste stream.

5. To implement and comply with the applicable provisions of the New York State Solid Waste Management Act of 1988 and Section 120-aa of the General Municipal Law of New York State.

SECTION II DEFINITIONS

1. Asbestos Waste - for the purpose of this Local Law is friable solid waste that contains friable asbestos. Non-friable asbestos waste is accepted for disposal at the Clinton County Landfill

2. Business - any individual, association, partnership, firm or corporation having an established business.

3. Business Hauler - any business that hauls its own solid waste generated as part of its business activity.

4. Clinton County Landfill - sanitary landfill registered and entitled to operate by the New York State Department of Environmental Conservation and located on the Sand Road in the Town of Schuyler Falls.

5. Commercial Hauler - any individual, association, partnership, firm or corporation in the business of collecting and transporting solid waste or recyclables, other than its own solid waste or recyclables.

6. Commercial Waste - any solid waste or a combination of solid wastes which are generated in or upon property used for wholesale or retail commercial purposes.

7. Commingled - recyclable materials that have been separated from non-recyclable materials and placed in the same container.

8. Convenience Station - a facility where solid waste or recyclables are transferred from a vehicle to a County-owned container for transport to a sanitary landfill or materials recovery facility; and is available for use only by residential users.

9. County - shall mean Clinton County New York.

10. Electronic Waste - electronic devices such as computers, computer components, televisions, photo copy/fax machines, DVD/VCR player recorders, home entertainment systems, cell phones, and various other portable personal electronic devices.

11. Governmental Hauler - any Federal, State, or Local Government, or Municipal Corporation, or Agency thereof, that hauls its own solid waste or recyclables, generated as a part of its governmental activity.

12. Hazardous Waste - includes those wastes, which may cause serious injury or disease during their normal storage, collection, and disposal cycle, and pose a substantial present or potential hazard to human health or the environment, including but not limited to flammable or explosive materials, gasoline, gasoline cans, pathological and potentially infectious wastes, radioactive materials, friable asbestos, poisons, acids and dangerous chemicals or combination of chemicals. Those items listed as hazardous wastes under rules and regulations of the New York State Department of Environmental Conservation (6 NYCRR Part 311) and identified and listed by the United States Environmental Protection Agency; in the Resource Conservation and Recovery Act (40 C.F.R., Section 261) as said regulations now exist or are hereinafter each of which are incorporated by reference. Any exemptions granted to any of the hazardous wastes above indicated by either the New York State Environmental Conservation Laws Rules and Regulations and policy of the Federal Resources Conservation and Recovery Act shall still be deemed a hazardous waste under this section and are not exempted.

13. Household Hazardous Waste - means household wastes which but for their point of generation, would be hazardous under Part 371 of this title, including pesticides as defined in the ECL, Article 33.

14. Infectious Waste - means and includes the following:

    a. surgical waste, which consists of materials discarded from surgical procedures involving the treatment of a patient on isolation, other than patients on reverse or protective isolation;

    b. obstetrical waste, which consist of materials discarded from obstetrical procedures involving the treatment of a patient on isolation, other than patients on reverse protective isolation;

    c. pathological waste, which consists of discarded human tissue and anatomical parts which are discarded from surgery, obstetrical procedures, autopsy and laboratory procedures;

    d. biological waste, which consists of discarded excretions, exudates, secretions, suctioning, and disposable medical supplies which have come in contact with these substances that cannot be legally discarded directly into a sewer and that emanate from

the treatment of a patient on isolation, other than patients on reverse or protective isolation;

e. discarded materials soiled with blood emanating from the treatment of a patient on isolation, other than patients on reverse or protective isolation;

f. all waste being discarded from renal dialysis, including tubing and needles;

g. discarded serums and vaccines that have not been autoclaved or returned to the manufacturer or point of origin;

h. discarded laboratory waste which has come in contact with pathogenic organisms which has not been rendered non-infectious by autoclaving or sterilization techniques;

i. animal carcasses exposed to pathogens in research, their bedding, and other waste from such animals that is discarded, and;

j. other articles that are being discarded that are potentially infectious and that might cause punctures or cuts, including intravenous tubing with needles attached, that have not been autoclaved or subjected to similar sterilization techniques rendered incapable of causing punctures or cuts.

15. Litter - any solid waste, or combination of wastes, including secondary materials, which if thrown, placed, disposed of or deposited as, herein prohibited upon any street, road, highway, private or public property, tends to create a public nuisance or danger to public health, safety and welfare.

16. Municipality - a city, town, village, or school district.

17. Materials Recovery Facility (MRF) - a facility registered by NYSDEC, where source separated recyclables are processed for market through use of manual labor and mechanized source separating processing equipment.

18. Non-Recyclable Materials - those materials not included as Recyclable Materials as set forth in the rules and regulations of the "Clinton County Solid Waste and Recycling Law."

19. Person(s) - an individual, trust, firm, joint stock company, corporation (including all classes of co-operations defined in General Construction Law-66), partnership, association, commission, municipality, business, state and agency, or department thereof, public authority, or any interstate body.

20. Private Property - all real property and improvements thereon, other than that owned by a municipality, the State of New York, or the Federal Government, including, but not limited to vacant land or any land, building, structure, or other improvement designed or used for residential, commercial, business, industrial, institutional, or religious purposes together with any yard, grounds, walks, driveway, fence, and other structures or improvements appurtenant thereto.

21. Public Property - all real property and improvements owned by a municipality, the State of New York, or Federal Government, as well as any and all streets, roads, highways, sidewalks, alleys, grounds, parks, buildings, and any other public ways, lakes, rivers, streams, or water courses.

22. Residents - any individual person who is either a legal resident or temporary resident of the County.

23. Recyclable Materials (also referred to as "Recyclables") - those components of the solid waste stream designated by and set forth in the rules and regulations of the Clinton County Solid Waste and Recycling Law.

24. Residential User - any natural person, residing in the County, or temporarily residing at premise in the County, owned or leased to him or her, who transports his or her own solid waste or recyclable materials, generated as part of his or her personal or family activity, and for no compensation, transports solid waste or recyclables of other residents.

25. Scavenging - the removal of materials or wastes from any public or private property or container, recycling facility, or solid waste facility, without the approval or consent of the owner or operator thereof.

26. Secondary Materials - materials as defined in Environmental Conservation Law: 27-0401, as amended, and shall include but not limited to plastic, metal and glass containers, corrugated cardboard, newspaper, and other such materials as designated by the County of Clinton.

27. Sewage - water carried human wastes and liquid or wastes carried from waste water closets, lavatories, sinks, bathtubs, laundry tubs, or devices, floor drains or other sanitary fixtures with the admixture of industrial or other wastes.

28. Sludge - means any solid, semi-solid, or liquid waste generated from a wastewater treatment plant, water supply treatment plant, or air pollution control facility, but does not include the treated effluent from a wastewater treatment plant.

29. Solid Waste - all putrescible and non-putrescible materials or substances that are unable to flow, that are discarded or rejected as being spent, useless, worthless or in excess to the owner at the time of such generation, including, but not limited to recyclable materials, garbage, refuse, industrial and commercial waste, sludge from air or water treatment facilities, rubbish, tires, ashes, contained gaseous material, incinerator residue, construction and demolition debris, discarded automobiles, and offal, but not including sewage, industrial wastewater discharges, waste which appears on the list of hazardous waste promulgated by the Commissioner of the New York State Department of Environmental Conservation pursuant to Section 27-0903 of the ECL of the State of New York, and radioactive materials which are source special, nuclear, or byproduct material as defined by the Atomic Energy Act of 1954, as amended.

30. Solid Waste/Recycling Facilities - a facility where Solid Waste or Recyclables are transferred from a vehicle to Clinton County-owned containers for transport to a sanitary landfill or Materials Recovery Facility (MRF). Shall include Convenience Stations and the Mooers Transfer Station.

31. Transfer Station- a facility where solid waste or recyclables are transferred from a vehicle to a Clinton County-owned container for transport to a sanitary landfill or Materials Recovery Facility (MRF), and is available for use by both permitted Haulers and Residential Users.

32. Waste- those materials and substances as defined in the Environmental Conservation Law: 27-0901 (ii), as amended, and or 6NYCRR Part 360, as amended.

SECTION III ADMINISTRATION

A. The Landfill General Manager (which title, as used herein, shall include his or her designee) shall be responsible for all ministerial and administrative duties described in or reasonably required by this law. The General Manager shall have the powers to perform these duties, including, without limitation the power:

1. To establish and administer a program of permitting Haulers and users of the Solid Waste/Recycling Facilities, including the issuance, renewal and revocation of permits.

2. To recommend amendment of regulations and laws covering recycling activities. Such amendments shall be effective upon approval by the Clinton County Legislature and upon filing with the Clinton County Clerk and Secretary of State.

3. To take appropriate action to enforce this law, and Federal, and State Laws, and Regulations issued thereunder.

4. To encourage and conduct studies, investigations, and research related to various aspects of solid waste management as he or she deems necessary or appropriate, or as requested by the Clinton County Legislature.

B. The General Manager shall meet with the Clinton County Legislature, and/or its designee, as appropriate and as requested, from time to time, to discuss possible amendments to this law. All permitted Haulers shall be notified in writing of any amendments to the "Clinton County Solid Waste and Recycling Law." Copies of this Local Law, regulations, and amendments will be on file at the Clinton County Landfill and the County Legislative Office, and available upon request.

SECTION IV REGULATIONS AND PERMITS

A. General

1. It shall be a violation of this Local Law for any person to deliver to a solid waste/recycling facility a container which contains recyclable materials mixed with other solid waste.

2. All recyclable materials shall be separated from solid waste and prepared in accordance with the "Clinton County Solid Waste and Recycling Law."

3. Clinton County shall have no obligation to pick up and remove any solid waste or recyclable materials from any persons within the County.

B. Permit Procedures for Haulers (Commercial, Business, Governmental)

1. No Hauler shall collect, transfer or dispose of solid waste and recyclable materials in Clinton County without possessing a current permit issued by the General Manager.

2. An application for a solid waste/recycling permit shall be in writing and shall contain such information as required by the General Manager.

3. The application shall be accompanied by the following:

a. Evidence of insurance, conforming with current "Application for Permit for Clinton County Landfill."

b. Payment of fee pursuant to the County Landfill's current "Solid Waste and Recycling Fee Schedule."

4. Within five (5) business days of receipt of application, the General Manager shall, in writing, grant or deny the application, or require other further information and/or documentation.

5. Permits shall expire annually on **April 30th**. They may be renewed pursuant to the provisions of this law.

6. Permits may be suspended or revoked by the General Manager pursuant to this local law.

7. Registration stickers provided by the County Landfill for each permit issued shall be placed on the passenger and driver side door of the permitted vehicle in a location visible to the scale attendant. The sticker must be visible at all times.

8. Permit fees and or changes in permit fees shall be reviewed and approved by the Clinton County Legislature.

9. Termination of a permitted hauler's insurance automatically invalidates the hauling permit.

10. Permits shall not be transferable to another vehicle without express written permission of the General Manager.

11. Permits may be suspended by the General Manager for the following:

a. If upon inspection, the hauler's vehicle is in such a condition as to allow leakage while in transit, or

b. If the body of the truck is not wholly enclosed and or the contents (load) are not secured with a cover or tarping mechanism or other appropriate load securing device or

c. If the operation or unloading of vehicles is not conducted in a manner so as to prevent the premature spillage or loss of contents, or

d. The hauler fails to pay invoices for solid waste fees according to the payment requirements outlined below in Section VIII, PAYMENT OF LANDFILL USER FEES BY HAULER; or

e. If the hauler has failed to remedy the conditions leading to a suspension of a permit within the time specified in such order of suspension, or

f. Any other violation of law of these regulations.

12. Suspension or revocation of a permit will be followed by a written notice of such violation, addressed to the permittee. The permittee may, within five (5) days of the receipt of said written notice of suspension or revocation, notify, in writing, the General

Manager of an appeal to the Finance Committee of the Clinton County Legislature, and shall file therewith a petition stating the reasons and basis for said appeal.

13. Within ten (10) days of an appeal, the Finance Committee shall conduct a hearing, upon notice to the permittee to review the action of the General Manager with respect to suspension or revocation of a permit. The permittee shall present all witnesses and documents, and shall be entitled to be represented by counsel at any stage of the proceedings. Said proceedings may be adjourned only once by right of the permittee; and all other adjournments shall be determined by the members of the Committee. Within ten (10) days of said hearing, said appeals committee shall by written decision, affirm the actions of the General Manager, reinstate such permit, and/or take any other appropriate action. Permittee may continue to conduct hauling operations during the appeal period.

C. Requirements for Residential Users

1. Residential Users collecting, transporting or disposing of their own solid waste and recyclables will be required to conform to the following requirements:

a. all solid waste delivered to convenience stations must be placed in bags of not more than 50 gallon capacity, tightly bound so that solid waste cannot accidentally fall or otherwise escape from the bag.

b. only bagged wastes of a quantity less than a level pickup truck load may be delivered to convenience stations; any loads in excess of a level pickup box full must be delivered to the Clinton County Landfill or transfer station for disposal, or hauled by a Commercial, Governmental or Business Hauler.

c. all bagged waste to be disposed at convenience station, prior to disposal, must contain the appropriate quantity of County-issued "solid waste stickers," with the appropriate number determined to be: one sticker for each bag of less than 17 gallon capacity, two stickers for each bag with a capacity in excess of 17 gallons and not exceeding 33 gallons, and three stickers for each bag with a capacity in excess of 33 gallons and not exceeding 50 gallons. (Cost of stickers shall be established in the CLINTON COUNTY FEE SCHEDULE.

d. stickers may be purchased at each County Solid Waste/Recycling Facility.

2. Residential users may be required to provide acceptable proof of residency or ownership of property within Clinton County at the time of disposing of waste at a County convenience station.

D. Requirements for Contractees

1. Contractees shall comply with their contracts, this local law to the extent applicable, and any further requirements of the General Manager.

SECTION V DISPOSAL OF SOLID WASTE

A. Only Residential Users (County residents) may use convenience stations.

B. Access to Solid Waste/Recycling Facilities is limited to hours of operation only, as such shall be determined from time to time by the General Manager and appropriately noticed and posted.

C. The disposal at the Clinton County Landfill and Solid Waste/Recycling Facilities of liquid wastes, hazardous wastes, radioactive materials, pesticides and chemicals, infectious wastes, large dead animals, explosives, manure, raw or treated sewage sludge, sealed containers, septic tank pumpings, tree stumps, junked vehicles, waste oils, tree limbs larger than 3 inches in diameter, hot ashes, friable asbestos and other waste materials prohibited by the New York State Department of Environmental Conservation is prohibited.

D. Except for the solid wastes listed below as exceptions, it shall be unlawful for any person to dispose, throw, dump, or cause to be thrown, dumped, or disposed in Clinton County except at a Solid Waste Management Facility entitled to operate by permit issued by the New York State Department of Environmental Conservation.

Exceptions:

a. brush, leaves, grass clippings, and other vegetative matter, and uncontaminated concrete, brick, stone or soil that is to be disposed on property upon which it was generated.

b. common farm wastes including: crop residuals, animal manure, and animal carcasses and parts that are to be disposed on the farm property upon which it was generated.

c. waste pesticides that are to be disposed on the farm property upon which such pesticides are utilized, providing the farmer/owner complies with New York State Environmental Conservation Law.

E. It shall be unlawful to place, deposit, dispose or discard or cause to be placed, deposited, disposed, or discarded, any solid waste or secondary materials in other than the designated locations provided at the Clinton County Landfill or County Solid Waste/Recycling Facilities.

a. Each designated location shall be properly posted by the COUNTY indicating the designated material for such disposal.

F. It shall be unlawful to operate on any public highway any vehicle carrying solid waste or recyclables unless said vehicle has a cover, tarpaulin or other device which completely encloses the solid waste including bagged refuse or recyclables, so as to prevent the discharge of solid waste or recyclables from the vehicle.

G. Beginning September 1, 1992, disposal of recyclables shall be prohibited in the landfill, and shall instead be disposed at the Materials Recovery Facility at the Clinton County Landfill, or other designated facilities such as convenience stations or the Mooers Transfer Station.

H. Any hauler or residential user shall not have any more than 20% (by volume) recyclables contained within a solid waste load. If a solid waste load is composed of more than 20% recyclables, as judged by the General Manager or solid waste enforcement officer, hauler of said load shall be subject to a revocation of their Solid Waste/Recyclables permit upon a third (3rd) violation within one (1) calendar year.

SECTION VI DISPOSAL OF RECYCLABLES & DESIGNATED RECYCLABLE MATERIALS

A. The term RECYCLABLE MATERIALS (also referred to as Recyclables) shall mean such materials designated by the "Clinton County Solid Waste and Recycling Law" 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 and reuse value. Effective July 1, 2005, the following materials, as may be modified from time to time, shall be considered recyclables:

1. Mixed glass bottles and jars, clear, green & brown (may be commingled)
2. Metal cans - (steel and aluminum food and beverage containers)
3. Plastic Bottles - HDPE #2 opaque and colored; PET #1 clear
4. Corrugated cardboard and boxboard
5. Newspapers and newsprint
6. Tires (must be off rims)
7. Ferrous and Non-Ferrous Scrap Metals
8. Office paper
9. Junk mail
10. Used clothing (clean & dry)
11. Magazines & glossy print stock
12. Yard waste (grass clippings & garden vegetative matter)
13. Brush (less than three inches in diameter)
14. Electronic Waste (computers, computer components and TVs)

B. Prior to delivery to the Clinton County Landfill or drop-off facilities, recyclables shall be prepared as follows:

1. Glass bottles and jars (clear, green & brown mixed) shall be separated from non-recyclables and other recyclables. Glass bottles so separated shall be clean of contents, with lids and caps removed. No other glass, other than food or beverage bottles or jars are acceptable.
2. Metal cans must be separated from non-recyclables and other recyclables except from plastic bottles. Metal cans so separated shall be clean of contents with labels removed. No other containers other than metal food or beverage cans are acceptable.
3. Plastic bottles must be separated from non-recyclables and other recyclables except from metal cans. HDPE #2 opaque and colored and PET #1 clear are the only plastic bottles acceptable. All bottles must be clean; dry; drained and free of contents; with caps and lids removed. Items such as margarine, yogurt, cottage cheese, diaper wipes, pesticide containers, six pack holders and rings, medicine bottles, plastic tableware,

plastic toys, and plastic bags are not acceptable. In addition, motor oil containers are prohibited.

4. Corrugated cardboard and boxboard shall be separated from non-recyclables and other recyclables. Corrugated cardboard and boxboard must be clean, dry and free of contamination. Wax coated cardboard, glossy coated beverage boxboard cases and plastic-laminated boxes are not recyclable cardboard items.

5. Newspaper shall be separated from non-recyclables and other recyclables. Glossy inserts must be removed. Newspapers must be clean, dry, and free from all bags and string, and unsoiled by paint, grease, or other contamination.

6. Tires shall be separated from non-recyclables and other recyclables. Tires must be clean, free of dirt; and removed from the rims. Tires must be separated by size prior to disposal at the Clinton County Landfill.

7. Ferrous and non-ferrous scrap metals shall be separated from recyclables and non-recyclables, and disposed of in the designated scrap metal location at the County Solid Waste/Recycling Facilities. All refrigerators, air conditioners, dehumidifiers, or any other appliance containing refrigerant, must be accompanied by documentation specifying that refrigerant has been removed prior to disposal at a County Solid Waste/Recycling Facility.

8. Yard waste shall consist of leaves, grass clippings, garden vegetative matter, and brush less than three (3") inches in diameter. Brush must be separated from leaves and grass. Yard waste shall not include plastic or any other type of garbage. Any bags must be removed before disposal of yard waste occurs. Yard waste shall be accepted for disposal at the Clinton County Landfill and the Mooers Transfer Station only.

C. Disposal of Recyclables

1. It shall be unlawful for any person to throw, dump, deposit or place, or cause to be thrown, dumped, deposited or placed any designated recyclable material in any place in Clinton County except at a Materials Recovery Facility or a drop-off convenience station, registered and entitled to operate by the New York State Department of Environmental Conservation.

2. Recyclables shall be separated from solid waste and further separated into the following categories at the point intended for collection:

    a. Glass bottles and jars-clear, green and brown glass bottles and jars are acceptable, and may be placed in the designated container co-mingled (all three colors together).

    b. Corrugated cardboard

    c. Newspapers

    d. Plastic bottles (#2 HDPE and #1 PET) and Metal cans.

3. All recyclables except for rubber tires, appliances containing CFC freon, electronic waste, and brush are accepted at no charge at any County Solid Waste/Recycling Facility.

4. Disposal of tires shall conform to the following:

   a. In order to be accepted, tires must be off the rim. Charges for tires are listed in the "Clinton County Solid Waste Fee Schedule."

   b. Tires shall not be accepted for disposal from any Hauler or Residential User in the amounts in excess of 500 tires over a one-month period.

   c. Tires shall be accepted for disposal at the Clinton County Landfill, and Mooers Transfer Station only.

5. Only residential users (County residents) may use Convenience Stations.

6. Commercial, Business and Governmental Haulers shall only dispose of recyclables at the County Materials Recovery Facility or Mooers Transfer Station.

7. Access to Solid Waste/Recycling Facilities is limited to hours of operation only, as such shall be determined from time to time by the General Manager and appropriate notice posted.

8. Any Hauler or Residential User shall not have any more than 20% (by volume) recyclables contained within a solid waste load. If a solid waste load is composed of more than 20% recyclables, as judged by the General Manager or Solid Waste Enforcement Officer, Hauler of said load shall be subject to a revocation of Solid Waste/ Recyclables permit upon the third (3rd) violation within one (1) calendar year.

9. Hauler permits may be revoked by the General Manager, if:

   a. upon the third (3rd) offense in a one (1) calendar year period, Hauler delivers recyclables to a County Solid Waste Facility that are not prepared and separated in accordance to this law or regulations.

   b. upon the third (3rd) offense in a one (1) calendar year for non-compliance of operational procedures at either the Clinton County Landfill or Mooers Transfer Station.

10. Residential users collecting, transporting, or disposing of their own recyclables shall be required to conform to the following requirements:

    a. all recyclables shall be placed in the proper recycling containers or designated areas provided at Solid Waste/Recycling Facilities; and

    b. Recyclables must be prepared in accordance with this Law.

SECTION VII PROHIBITED ACTIVITIES

1. No person(s) placing litter in any container shall do so in such manner as to cause or permit litter from being carried or deposited by the elements upon any public or private property.

2. No person(s) shall upset or tamper with any container designed or used for the deposit of litter, solid waste, recyclables, or other wastes so as to cause or permit its contents to be deposited or strewn in or upon any public or private property.

3. No person(s) shall throw, dump, deposit, place, or cause to thrown, dumped, deposited, or placed upon any highway, roadside, street, or within the limits of the right of way of such highway, roadside, street, or upon public or private lands adjacent thereto, any refuse, trash, garbage, rubbish, litter, recyclables, or any noxious or offensive matter.

   a. Nothing herein contained shall be construed as prohibiting the use, in a reasonable manner, of ashes, sand, salt or other material for the purpose of reducing the hazard of or providing traction on snow, ice, or sleet.

   b. Nothing herein contained shall be construed as prohibiting the use of any highway, roadway, street, or private lands adjacent thereto for the transit of agricultural trucks, machines, or implements or dairy or domestic animals or agricultural stock with any accompanying reasonable or unavoidable deposit of noxious or offensive matter.

4. No person(s) shall burn any solid waste, plastics, tin cans, aluminum foil, disposable diapers, tires, or any other noxious substances in or on private or public property in the COUNTY, except as authorized by the town, village or municipality having jurisdiction pursuant to Title NYCRR Part 215 of the New York State Department of Environmental Conservation Law.

5. No person(s) shall engage in any scavenging of materials or wastes from any public or private property or containers or from the Clinton County Landfill or County Solid Waste/Recycling Facilities.

6. No person(s) shall deposit solid waste at any County Solid Waste Facility without paying the solid waste disposal fees established therefor.

7. No person(s) shall avoid payment, attempt to avoid payment by himself or another person for a prospective or already rendered service the charge or compensation for which is measured by a meter or other mechanical device, by tampering with such device, or in any manner attempt to prevent the meter or device from performing its measuring function, without the consent of the supplier of services.

8. No person(s) shall permit, deposit, dispose, discard, dump, or cause to be deposited, disposed, discarded, or dumped upon, any highway, roadway, street, or within such limits of the right of way of such highway, roadway, street, or upon private or public lands adjacent thereto, sewage.

9. No person(s) shall cause or allow emissions of air contaminates to the outdoor atmosphere of such quality, characteristic or duration which are injurious to human, plant, or animal life, or which unreasonably interferes with the comfortable enjoyment of life or property. Not withstanding the existence of specific air quality standards or emission limits, this prohibition applies, but is not limited to any particulate, fuel, gas, mist, odor, smoke, vapor, pollen, toxic, or deleterious emission, either alone or in combination with others.

10. It shall be unlawful to place, deposit, leave, dump, or accumulate large quantities of refuse, recyclables, or building demolition & construction debris or other materials except as otherwise noted in Section V, 4, a-c, on either public or private property within Clinton County so as to either a.) create an unsanitary health nuisance/hazard or b.) a visual degradation to the property and or adjacent properties

SECTION VIII PAYMENT OF LANDFILL USER FEES BY HAULERS

1. The amount of fees to be charged for disposal of waste at the Clinton County Landfill or County Solid Waste/Recycling Facilities is specified in the CLINTON COUNTY FEE SCHEDULE.

2. Landfill billings will be prepared and mailed on a weekly basis. Payment, in full, is due no later than thirty (30) days from the date of the invoice. Partial payments or overpayments will not be accepted.

3. In the event that a bill is not paid within the 30 day time period permitted, the Hauler will be notified of their past due account.

4. A fee of $15.00 shall be charged for the return of all checks due to insufficient funds.

5. A permit to use the facility may be revoked if the account is not paid by the tenth day of the month following the previous statement.

6. Re-issuance of a permit revoked, for any reason, shall require payment of a renewal fee as follows:

   First Offense - $200.00
   Second Offense - $300.00
   Third Offense - $400.00

   *Offenses will be based on occurrences within a one (1) year period

7. In no case will partial payment be considered sufficient to meet the above requirements

SECTION IX PAYMENT OF LANDFILL USER FEES BY THIRD PARTIES

1. The term third party shall mean any person or company who contracts with a permitted hauler to dispose of Solid Waste to any County facility and is billed directly by the County or its designated operator for disposal fees.

2. No third party shall be allowed to dispose of solid waste at any County facility without having first established an approved account with the Clinton County Landfill or having made a cash advance of sufficient amount to cover disposal fees.

3. Third parties located within Clinton County will be required to apply for and establish an approved open account. At the discretion of the General Manager, the use of the cash advance system may be approved in lieu of a charge account.

4. Third parties located outside of Clinton County shall be required to utilize the cash advance payment system for the disposal of those solid wastes delivered to the Clinton County Landfill.

5. Under the cash advance system, third parties may utilize solid waste facilities until disposal fees equal the amount of the cash advance. Once the cash advance is expended, the third party shall deposit a new cash advance prior to further disposing of solid wastes at any facility. In no case shall a third party be allowed to utilize any County solid waste facility if a cash advance amount is NOT sufficient to cover disposal fees.

SECTION X ENFORCEMENT

1. Inspection Procedure

   a. All vehicles used to collect, haul, or transport solid waste, recyclables, and the loads therein, shall be subject to periodic inspection by the General Manager, or his designee.

2. Liability of Violators

   a. The General Manager shall have the power to suspend or revoke any permit issued hereunder for a violation of the Law or any regulation issued by the General Manager pursuant thereto. The procedure for such suspension or revocation shall be set forth in the Regulations issued by the General Manager.

   b. In the case of violations by other than permit holders, the General Manager is authorized to issue written warnings to violators, and is authorized to file complaints with appropriate law enforcement officers.

3. Joint Liability

   a. For the purpose of this Local Law, when a hauler is utilized to transport solid waste or recyclables to the landfill or transfer station, both the waste generator and the hauler will share responsibility for the solid waste and/or recyclables, until the solid waste and/or recyclables are properly deposited at an approved landfill facility.

4. Unauthorized Collection of Recyclables

   a. It shall be a violation of this Local Law for any person without authority of the County to collect, pick-up, remove or cause to be collected, picked up or removed, any Recyclables delivered to a Solid Waste/Recycling Facility. Each such unauthorized collection, pick-up or removal from a Solid Waste/Recycling Facility shall constitute a separate and distinct violation of this Local Law.

5. Residential

   a. All residential users shall be subject to periodic inspections at the County Solid Waste/Recycling Facilities by the General Manager, or designee.

   b. Periodic inspections at the curb may be performed by the Enforcement Officer for proper preparation of recyclables.

6. Haulers - (Commercial, Business, Institutional, Governmental)

a. All haulers shall be subject to periodic inspections at the County Solid Waste/Recycling Facilities by either the General Manager, solid waste/recycling personnel or the County Solid Waste Enforcement Officer.

b. The landfill will bill haulers at the current tipping fee for loads of recyclables that are rejected at the County's Materials Recovery Facility or Transfer Station because of violations to the County Solid Waste and Recycling Law.

c. Haulers shall be allowed to notify the County Solid Waste Enforcement Officer of non-complying customers only after three (3) documented attempts have been made by the Hauler to correct the problem.

1. Receipts from certified registered letter(s) sent to violators by the Hauler must be presented to the County Solid Waste Enforcement Officer as well as a description of the complaint.

SECTION XI FINES AND FEES

A. Any person who commits a violation of this local law is subject to arrest. Except as otherwise set forth in this Section XI, punishment upon conviction shall be as follows:

1. For any violation of this law, except those provisions regarding hazardous waste:

a. First Offense: Conviction of a first offense under this local law shall be punishable by a fine of not less than $50.00 nor more than $500.00, and/or a term of imprisonment not to exceed fifteen (15) days, together with restitution based on avoided disposal fees and cost of collection and hauling and/or community service. Violation of this provision shall be a violation as defined by Section 55.10(3) of the Penal Law of the State of New York.

b. Second Offense: Conviction of a second or subsequent offense within a year of the first shall be punishable by a fine of not less than $100.00 nor more than $1,000.00 and/or a term of imprisonment not to exceed six months, together with restitution based on avoided disposal fees and cost of collection and hauling and/or community service. Violation of this provision shall be a misdemeanor as defined by Section 55.10(2) of the Penal Law of the State of New York.

c. Conviction of any company, partnership, municipality, or any entity other than an individual person shall be subject to a fine of not less than $500.00 nor more than $2,500.00 and/or community service and/or restitution.

2. Any person who illegally disposes of hazardous waste at any solid waste facility owned, operated, or leased by the County of Clinton upon conviction, shall be punishable by a fine of not less than $500.00 nor more than $5,000.00 for a first offense; and for a second or any subsequent offense(s), upon conviction thereof shall be punishable for a fine of not less than $3,000.00 nor more than $20,000.00 or a term of imprisonment of not more than six months or both.

3. Any person who commits a violation of this local law shall, in addition to any other fines and penalties provided for by this local law, be liable to pay restitution to the County or any other person that incurs costs in collecting, hauling, or properly disposing of waste or hazardous waste, incurred as a result of the offense.

B. Each day during which an offense continues shall be deemed a separate offense.

C. Enforcement of subsections A and B shall be effected as follows:

1. By a peace officer or police officer as provided by the criminal procedure law of the State of New York, or

2. By the Clinton County Landfill General Manager and/or Public Health Director or their designees by issuance of an appearance ticket pursuant to Article 150 of the Criminal Procedure Law of the State of New York.

D. Civil Enforcement: Not-withstanding the penalties set forth above, the Clinton County Attorney may institute a Civil Action to obtain restitution to the County of Clinton from such offender for the actual costs incurred in rectifying the problem created by the aforesaid violations or improper disposal of solid waste or recyclables, or to abate, enjoin, or otherwise compel cessation of the violation of any provision of this law.

E. Enforcement: This local law is enforceable throughout the County. It does not supercede ordinances enacted by municipalities within Clinton County that regulate the disposal of solid waste if such ordinances are not inconsistent with this local law.

F. The monies collected from these funds will become the property of Clinton County.

G. Additionally, a Court surcharge fee of $35.00 shall be assessed to any person, company, partnership, or municipality found guilty or in violation of any of the heretofore local laws and regulations.

SECTION XII SEVERABILITY

1. If any clause, sentence, paragraph, section or part of this title shall be judged by any court of competent jurisdiction to be invalid, such judgment shall not affect, impair, or invalidate the remainder thereof, but shall be confined in its operation to the clause, sentence, paragraph, section, or part thereof involved in the controversy in which such judgment shall have been rendered.

SECTION XIII EFFECTIVE DATE

1. Local Law #1 of the year 1996 of Clinton County is hereby repealed.

2. Resolution #165 (2/28/96) Amendment to Local Law #1 of the year 1996 of Clinton County is hereby repealed.

3. Local Law #4 (Resolution #994, 12/14/94 Amending Clinton County Recycling Laws) of 1994 of Clinton County is hereby repealed.

4. Resolution #995 (12/14/94) Amendment to Local Law #4 of 1994, Amending Recycling Regulations of Clinton County is hereby repealed.

5. Resolution #909 (12/14/05) Adopting Local Law #3 of 2005 Titled, "Amending Clinton County Solid Waste and Recycling Law – Solid Waste" is hereby repealed.

6. This Local Law shall become effective upon filing the same with the Secretary of State of the State of New York.

(Complete the certification in the paragraph that applies to the filing of this local law and strike out that which is not applicable.)

1. (Final adoption by local legislative body only.)

I hereby certify that the local law annexed hereto, designated as Local Law No. 1 of the (County) ~~(City) (Town) (Village)~~ of Clinton was duly passed by the Clinton County Legislature on May 27, 2009 in accordance with the applicable provisions of law.
(Name of Legislative Body)

2. (Passage by local legislative body with approval, no disapproval or repassage after disapproval by the Elective Chief Executive Officer*.)

I hereby certify that the local law annexed hereto, designated as Local Law No. _ of 20___ of the (County) (City) (Town) (Village) of _____ was duly passed by the _____ on _____, and was (approved) (not approved) (repassed after
(Name of Legislative Body)
disapproval) by the _____ and was deemed duly adopted on
(Elective Chief Executive Officer)
_____ 20_____ in accordance with the applicable provisions of law.

3. (Final adoption by referendum.)

I hereby certify that the local law annexed hereto, designated as Local Law No. _ of 20___ of the (County) (City) (Town) (Village) of _____ was duly passed by the _____ on _____ 20__ and was (approved) (not approved) (repassed after
(Name of Legislative Body)
disapproval) by the _____ on _____ 20_____. Such local
(Elective Chief Executive Officer)
law was submitted to the people by reason of a (mandatory) (permissive) referendum, and received the affirmative vote of a majority of the qualified electors voting thereon at the (general) (special) (annual) election held on _____ 20_____ in accordance with the applicable provisions of law.

4. (Subject to permissive referendum and final adoption because no valid petition was filed requesting referendum.)

I hereby certify that the local law annexed hereto, designated as Local Law No. _ of 20___ of the (County) (City) (Town) (Village) of _____ was duly passed by the _____ on _____ 20__ and was (approved) (not approved) (repassed after
(Name of Legislative Body)
disapproval) by the _____ on _____ 20_____. Such local
(Elective Chief Executive Officer)
law was subject to permissive referendum and no valid petition requesting such referendum was filed as of _____ in accordance with the applicable provisions of law.

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* **Elective Chief Executive Officer means or includes the chief executive officer of a county elected on a county-wide basis or, if there be none, the chairperson of the county legislative body, the mayor of a city or village, or the supervisor of a town where such officer is vested with the power to approve or veto local laws or ordinances.**

5. **(City local law concerning Charter revision proposed by petition.)**

I hereby certify that the local law annexed hereto, designated as Local Law No. _ of 20___ of the City of _____having been submitted to referendum pursuant to the provisions of Section (36)(37) of the Municipal Home Rule Law, and having received the affirmative vote of a majority of the qualified electors of such city voting thereon at the (special) (general) election held on _____ became operative.

6. **(County local law concerning adoption of Charter.)**

I hereby certify that the local law annexed hereto, designated as Local Law No. _ of 20___ of the County of _____ _____, State of New York, having been submitted to the electors at the General Election of November __, 20____, pursuant to Subdivisions 5 and 7 of Section 33 of the Municipal Home Rule Law, and having received the affirmative vote of a majority of the qualified electors of the cities of said county as a unit and a majority of the qualified electors of the towns of said county considered as a unit voting at said general election, became operative.

(If any other authorized form of final adoption has been followed, please provide an appropriate certification.)

I further certify that I have compared the preceding Local Law with the original on file in this office and that the same is a correct transcript therefrom and of the whole of such original Local Law, and was finally adopted in the manner indicated in paragraph 1 above.

Michael E. Zurlo
Clerk of the County Legislative Body, City, Town of Village Clerk
or officer designated by local legislative body

(Seal)

Date: May 27, 2009

(Certification to be executed by County Attorney, Corporation Counsel, Town Attorney, Village Attorney or other authorized attorney of locality.)

STATE OF NEW YORK
COUNTY OF CLINTON

I, the undersigned, hereby certify that the foregoing local law contains the correct text and that all proper proceedings have been had or taken for the enactment of the local law annexed hereto.

Signature

County Attorney
Title

County
~~City~~ of Clinton
~~Town~~
~~Village~~

Date: May 27, 2009

Appendix C

Existing Education Material

CLINTON COUNTY LANDFILL RECYCLING & SOLID WASTE DISPOSAL FACILITIES

Altona Convenience Station
259 Devil's Den Road, Altona, NY
Thursday 10AM—2PM/Saturday 9AM—3PM

AuSable Convenience Station
242 Dry Bridge Road, AuSable, NY
Tuesday & Saturday, 8AM—4PM

Champlain Convenience Station
144 Castine Road, Champlain, NY
Thursday & Saturday, 8AM—4PM

Chazy Convenience Station
49 Esker Road, Chazy, NY
Wednesday & Saturday, 8AM-4PM

Churubusco Convenience Station
Clinton Mills Road, Churubusco, NY
Wednesday 10AM—2PM/Saturday 9AM—3PM

Dannemora Convenience Station
958 General Leroy Manor Road, Dannemora, NY
Tuesday & Saturday, 8AM—4PM

Ellenburg Convenience Station
6576 Military Turnpike, Ellenburg, NY
Thursday & Saturday, 8AM—4PM

Lyon Mountain Convenience Station
4353 Route 374, Lyon Mountain, NY
Wednesday & Saturday, 8AM—4PM

Mooers Transfer Station
1590 North Star Road, Mooers, NY
Tuesday/Thursday/Saturday, 8:30AM—4PM

Peru Convenience Station
526 Barney Downs Road, Peru, NY
Tuesday & Saturday, 8AM—4PM

Saranac Convenience Station
802 Ore Bed Road, Saranac, NY
Wednesday & Saturday, 8AM—4PM

Schuyler Falls Convenience Station
Sand Road, Morrisonville, NY
Monday - Saturday, 7AM-3PM

Clinton County Landfill
286 Sand Road, Morrisonville, NY
Monday - Friday, 7AM-3PM/Saturday 7AM-Noon

FACTS ABOUT RECYCLING

- *The average person generates over 4 pounds of trash every day and about 1.5 tons of trash annually.*
- *Over 75% of waste is recyclable, but we only recycle about 30% of it.*
- *Recycling one aluminum can saves enough energy to listen to a full album on your iPod; Recycling 100 aluminum cans could light your bedroom for 2 whole weeks.*
- *Americans throw away **25 million** plastic bottles every hour.*
- *If every American recycled just one-tenth of their newspapers, we could save 25 million trees annually.*
- *Recycling a single run of the Sunday New York Times would save 75,000 trees.*
- *The average American uses seven trees a year in paper, wood, and other products made from trees.*
- *Each ton of recycled paper can save 17 trees, 380 gallons of oil, three cubic yards of landfill space, 4,000 kilowatts of energy, and 7,000 gallons of water.*
- *A modern glass bottle would take 4,000 years or more to decompose.*
- *Each American disposes of ~1,200 pounds of organic waste annually; 100% of that waste can be composted.*
- *The U.S. is the #1 trash-producing country in the world; that translates to 5% of the population produces 40% of the world's waste.*
- *Casella processed over 8,200 tons of recyclable materials (collected in Clinton County) in 2013.*

CONVENIENCE STATION STICKER PRICES

One (1) Sticker $2.00
1-16 gallon trash bag .....1 Sticker
17-33 gallon trash bag .....2 Stickers
34-50 gallon trash bag .....3 Stickers
51-80 gallon trash bag .....4 Stickers
>80 gallon trash bag .....NOT ACCEPTED

casella

CLINTON COUNTY LANDFILL AND RECYCLING FACILITY

286 Sand Road
Morrisonville, New York 12962
(518) 563-5514

CLINTON COUNTY RECYCLES

WE RECYCLE

CORRUGATED CARDBOARD (OCC)

This brown, double-walled material has a wavy center and is used in most shipping boxes. Cereal boxes, boxboard, and cardboard egg crates are acceptable. To prepare cardboard for recycling, all contaminates must be removed, and the boxes must be flattened. Wax coated materials are not acceptable and are considered contaminates. Grease and cheese residue on pizza boxes also act as contaminates, therefore pizza boxes are not accepted. **ALL STATIONS ACCEPT**

PLASTIC (PETE # 1)

Examples of this type of plastic bottle are soda and water bottles. The bottle must have a PETE # 1 recycling logo stamped on the bottom of it. The plastic bottles must be clean. The lids must be removed and discarded in the trash. **ALL STATIONS ACCEPT**

PLASTIC (HDPE # 2)

There are two types of HDPE # 2, natural and colored. Examples of natural HDPE # 2 are water and milk jugs. Examples of colored HDPE # 2 are plastic detergent, soap, and shampoo bottles. Both of these types of plastic must have a HDPE # 2 recycling symbol on the bottom of them. The plastic bottles must be clean. The lids must be removed and discarded in the trash. Medicine bottles are not accepted for recycling. **ALL STATIONS ACCEPT**

TIN & ALUMINUM

Only cans are accepted. Remove labels if possible. Cans must be clean. Aerosol cans, food trays, pie plates, and foil are not accepted. **ALL STATIONS ACCEPT**

SORTED MIXED OFFICE PAPER

The materials accepted are envelopes (with or without windows), white and color ledger (bond, typing, copier, index cards), manila and bleached file folders/envelopes, direct mail (opened and sorted for contaminates), and paper. These materials can be shredded. Unacceptable materials in this category include: unbleached paper, carbon paper, transparencies, Mylar, self-sealing envelopes, and padded envelopes. **ALL STATIONS ACCEPT**

NEWSPAPER & PHONEBOOKS

Newspapers, advertising inserts, phonebooks, and paper bags are acceptable. They must be clean and dry. NO envelopes, junk mail, notebooks, or books are accepted with the newspaper. **ALL STATIONS ACCEPT**

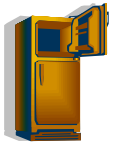
MAGAZINES

Magazines and catalogs are both acceptable and they must be clean and dry. **ALL STATIONS ACCEPT**

GLASS

Only jars and bottles are accepted. All colors may be mixed together. ***ALL*** *lids must be removed the glass must be clean. Window glass or ceramics are* ***NOT*** *acceptable.* **ALL STATIONS ACCEPT**

SCRAP METAL/APPLIANCES



Scrap metal and appliances are accepted. Propane tanks are accepted when empty and the valve is removed. Vacuums are not acceptable and are considered trash. A processing fee is charged to dispose of refrigerators, freezers, air conditioners, and dehumidifiers (to remove freon, etc.). Because these require special handling, they cannot be placed in the scrap metal container. **ALL STATIONS ACCEPT (except Churubusco CS and Altona CS); APPLIANCES ARE ONLY ACCEPTED AT CLINTON COUNTY LANDFILL AND MOOERS TS**

ELECTRONICS

Computers, TVs, VCRs, stereos, home entertainment centers, etc are accepted. ***A handling fee may apply.*** **ACCEPTED ONLY AT MOOERS TS AND CLINTON COUNTY LANDFILL.**

CLOTHING/TEXTILES

The clothing must be clean, dry, and in usable condition. If clothing contains stains and/or tears, must be treated as trash. Also acceptable are shoes, purses, curtains, sheets, bedspreads, blankets, towels, and pillowcases. Clothing/Textiles shall be placed in a clear plastic bags. All articles should be free from any moisture, grease, mold, solvents, or food waste. Unacceptable items include: carpets and pillows. **ACCEPTED AT ELLENBURG CS, SCHUYLER FALLS CS, AND MOOERS TS**

TIRES

Tires are accepted for recycling. Tires must be removed from rim and must be relatively clean. The following are charges for tires:

- ***Car/pickup/SUV Tires:.....$4.00 each***
- ***Truck Tires:.....$10.00 each***
- ***Equipment Tires:..... NOT ACCEPTED***

ACCEPTED ONLY AT MOOERS TS AND CLINTON COUNTY LANDFILL

BRUSH/YARD WASTE

Leaves, grass clippings, garden clean-up (stalks), tree limbs, wood chips, and brush are accepted for recycling. Bags shall be removed prior to placing in disposal area. Stumps are not accepted. The following are charges for brush/yard waste:

- ***Small car.....$5.00***
- ***Small pickup $10.00***
- ***Large pickup $15.00***
- ***Larger loads.....Discretional***

ACCEPTED ONLY AT CLINTON COUNTY LANDFILL

NOT ACCEPTED AT RECYCLE FACILITIES

The following items are not accepted for recycling at any of our facilities: Plastic bags, window glass, mirrors, light bulbs, dishes, ceramics, paper towels, facial tissue, Styrofoam, recyclables containing food-waste, paint, oils, hazardous materials, needles, syringes, VCR tapes, CD's/DVD's, batteries, and styrofoam "peanuts".

Appendix D

HHW Collection Data

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

DIVISION OF MATERIALS MANAGEMENT

HOUSEHOLD HAZARDOUS WASTE COLLECTION DAY REPORT

Please read and follow all instructions on the back before completing this report form. Please Type or Print Clearly.

GENERAL INFORMATION

1.	**Sponsor Name:** New England Waste Services of N.Y., Inc.		2.	**Contractor Name:** Clean Harbors Environmental Services	
	Street: 286 Sand Road			**Street:** 6741 VIP Parkway	
	City/State/Zip: Morrisonville, NY 12962			**City/State/Zip:** East Syracuse, NY 13057	
	Contact: Amy Davies	**Telephone Number:** 518-225-2753		**Contact:** Robert Aiello	**Telephone Number:** 315-741-3272
3.	**Co-Sponsor, If any:**	**Telephone Number:**	4.	**Location of Collection:** 286 Sand Road Morrisonville, NY 12962	**Date of Collection:** 6/17/2017
5.	**Total Population of Area Served:** 81,251			**Town:** Morrisonville, NY	**County:** Clinton
	# of Participants During the Year: **Households:** 167		**Farmers:**		**CESQGS:** 2

CESQGS: = Conditionally exempt small quantity generators

HOUSEHOLD HAZARDOUS WASTE COLLECTION / DISPOSAL DETAILS

6.	**Antifreeze**	43.58 **Gallons**	7.	**Hazardous Paint**	533 **Gallons**
8.	**Automotive Batteries**	0 **Pounds**	9.	**Hazardous Household Batteries**	0 **Pounds**
10.	**Pesticides (Solids)**	800 **Pounds**	11.	**Pesticides (Liquids)**	85 **Gallons**
12.	**Mercury Containing Devices**	1 **Pounds**	13.	**Bulk Mercury**	5 **Pounds**
14.	**Fluorescent Bulbs**	610 **Pounds**	15.	**# CRTs**	0 **Pounds**
16.	**# TVs**	0 **Pounds**	17.	**Other Electronics**	0 **Pounds**
18.	**Other HHW (Solids)**	117 **Pounds**	19.	**Other HHW (Liquids)**	731 **Gallons**
20.	**Miscellaneous Solid Waste (Solids)**	0 **Pounds**	21.	**Miscellaneous Solid Waste (Liquids)**	0 **Gallons**

NOTE: Attach copies of all manifests or shipping papers to this form for submittal to Regional Office and submit a copy of this form to Central Office.

OTHER INFORMATION / DATA

22.	**Disposal Costs, Including Contractor Fees:** $19,368.27	23.	**Other Costs:** $0
24.	**Publicity and Educational Costs:** $1174.00	25.	**Total Cost (22 + 23 + 24):** $20,542.27
26.	**Comments:** Wastes not accepted include: Automotive/Marine/Household Batteries, Tires, Compressed Gas Cylinders, Electronic Waste, Explosives, Shock-Sensitive Materials, Ammunition, Radioactive Wastes, Pathological Wastes, Infectious Wastes, Medicines, Dioxins, Used Oil, Materials Containing PCBs, Asbestos, Latex Paint, Smoke Detectors.		

CERTIFICATION: I hereby affirm under penalty of perjury that information provided on this form and attached statements and exhibits was prepared by me or under my supervision and direction and is true to the best of my knowledge and belief, and that I have the authority as Environmental Analyst **(title)** of New England Waste Services of N.Y., Inc. **(entity)** to sign this report form pursuant to 6NYCRR Part 360. I am aware that any false statement made herein is punishable as a Class A misdeamenor pursuant to Section 210.45 of the Penal Law.

PREPARER'S INFORMATION AND SIGNATURE

Name (Printed / Typed):	**Title (Printed / Typed):**	**Signature:**	**Date:**
Amy S. Davies	Environmental Analyst		8/15/2017

Revised 12/14

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

DIVISION OF MATERIALS MANAGEMENT

HOUSEHOLD HAZARDOUS WASTE COLLECTION DAY REPORT

Please read and follow all instructions on the back before completing this report form. Please Type or Print Clearly.

GENERAL INFORMATION

1.	**Sponsor Name:** New England Waste Services of N.Y., Inc.		2.	**Contractor Name:** Clean Harbors Environmental Services	
	Street: 286 Sand Road			**Street:** 6741 VIP Parkway	
	City/State/Zip: Morrisonville, NY 12962			**City/State/Zip:** East Syracuse, NY 13057	
	Contact: Sean Lukas	**Telephone Number:** (802) 249-4347		**Contact:** Robert Aiello	**Telephone Number:** (315) 741-3272
3.	**Co-Sponsor, If any:** N/A	**Telephone Number:** N/A	4.	**Location of Collection:** 286 Sand Rd. Morrisonville, NY 12962	**Date of Collection:** June 11, 2016
5.	**Total Population of Area Served:** 81,591			**Town:** Morrisonville	**County:** Clinton
	# of Participants During the Year: **Households:** 171		**Farmers:**		**CESQGS:** 4

CESQGS: = Conditionally exempt small quantity generators

HOUSEHOLD HAZARDOUS WASTE COLLECTION / DISPOSAL DETAILS

6.	**Antifreeze**	42.02 Gallons	7.	**Hazardous Paint**	576.23 Gallons
8.	**Automotive Batteries**	0 Pounds	9.	**Hazardous Household Batteries**	0 Pounds
10.	**Pesticides (Solids)**	1000 Pounds	11.	**Pesticides (Liquids)**	120.05 Gallons
12.	**Mercury Containing Devices**	0 Pounds	13.	**Bulk Mercury**	10 Pounds
14.	**Fluorescent Bulbs**	490 Pounds	15.	**# CRTs**	0 Pounds
16.	**# TVs**	0 Pounds	17.	**Other Electronics**	0 Pounds
18.	**Other HHW (Solids)**	1,870 Pounds	19.	**Other HHW (Liquids)**	403.96 Gallons
20.	**Miscellaneous Solid Waste (Solids)**	0 Pounds	21.	**Miscellaneous Solid Waste (Liquids)**	0 Gallons

NOTE: Attach copies of all manifests or shipping papers to this form for submittal to Regional Office and submit a copy of this form to Central Office.

OTHER INFORMATION / DATA

22.	**Disposal Costs, Including Contractor Fees:**	$14,016.21	23.	**Other Costs:** $0
24.	**Publicity and Educational Costs:**	$1,803.00	25.	**Total Cost (22 + 23 + 24):** $15,819.21
26.	**Comments:** Wastes nots accepted include: Automotive/Marine/Household Batteries, Tires, Compressed Gas Cylinders, Electronic Waste, Explosives, Shock-Sensitive Materials, Ammunition, Radioactive Wastes, Pathological Wastes, Infectious Wastes, Medicines, Dioxins, Used Oil, Materials Containing PCB's, Asbestos, Latex Paint, Smoke Detectors.			

CERTIFICATION: I hereby affirm under penalty of perjury that information provided on this form and attached statements and exhibits was prepared by me or under my supervision and direction and is true to the best of my knowledge and belief, and that I have the authority as ___Environmental Analyst_____ **(title)** of __New England Waste Services of N.Y., Inc.,__ **(entity)** to sign this report form pursuant to 6NYCRR Part 360. I am aware that any false statement made herein is punishable as a Class A misdemeanor pursuant to Section 210.45 of the Penal Law.

PREPARER'S INFORMATION AND SIGNATURE

Name (Printed / Typed):	**Title (Printed / Typed):**	**Signature:**	**Date:**
Sean Lukas	Environmental Analyst		

Revised 12/14

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

DIVISION OF MATERIALS MANAGEMENT

HOUSEHOLD HAZARDOUS WASTE COLLECTION DAY REPORT

Please read and follow all instructions on the back before completing this report form. Please Type or Print Clearly.

GENERAL INFORMATION

1.	**Sponsor Name:** New England Waste Services of N.Y., Inc.		2.	**Contractor Name:** Clean Harbors Environmental Services	
	Street: 286 Sand Road			**Street:** 6057 Corporate Drive	
	City/State/Zip: Morrisonville, NY 12962			**City/State/Zip:** East Syracuse, NY 13057	
	Contact: Sean Lukas	**Telephone Number:** (802) 249-4347		**Contact:** David Chmielewski	**Telephone Number:** (315) 463-9901
3.	**Co-Sponsor, If any:** N/A	**Telephone Number:** N/A	4.	**Location of Collection:** 286 Sand Rd. Morrisonville, NY 12962	**Date of Collection:** June 13, 2015
5.	**Total Population of Area Served:** 81,591			**Town:** Morrisonville	**County:** Clinton
	# of Participants During the Year: **Households:** 183		**Farmers:**		**CESQGS:** 3

CESQGS: = Conditionally exempt small quantity generators

HOUSEHOLD HAZARDOUS WASTE COLLECTION / DISPOSAL DETAILS

6.	**Antifreeze**	48.02 Gallons	7.	**Hazardous Paint**	672.27 Gallons
8.	**Automotive Batteries**	0 Pounds	9.	**Hazardous Household Batteries**	0 Pounds
10.	**Pesticides (Solids)**	300 Pounds	11.	**Pesticides (Liquids)**	69.03 Gallons
12.	**Mercury Containing Devices**	20 Pounds	13.	**Bulk Mercury**	0 Pounds
14.	**Fluorescent Bulbs**	67 Pounds	15.	**# CRTs**	0 Pounds
16.	**# TVs**	0 Pounds	17.	**Other Electronics**	0 Pounds
18.	**Other HHW (Solids)**	75 Pounds	19.	**Other HHW (Liquids)**	327.25 Gallons
20.	**Miscellaneous Solid Waste (Solids)**	0 Pounds	21.	**Miscellaneous Solid Waste (Liquids)**	0 Gallons

NOTE: Attach copies of all manifests or shipping papers to this form for submittal to Regional Office and submit a copy of this form to Central Office.

OTHER INFORMATION / DATA

22.	**Disposal Costs, Including Contractor Fees:** $15,868.45	23.	**Other Costs:** $0	
24.	**Publicity and Educational Costs:** $919.00	25.	**Total Cost (22 + 23 + 24):** $16,787.45	
26.	**Comments:** Wastes nots accepted include: Automotive/Marine/Household Batteries, Tires, Compressed Gas Cylinders, Electronic Waste, Explosives, Shock-Sensitive Materials, Ammunition, Radioactive Wastes, Pathological Wastes, Infectious Wastes, Medicines, Dioxins, Used Oil, Materials Containing PCB's, Asbestos, Latex Paint, Smoke Detectors.			

CERTIFICATION: I hereby affirm under penalty of perjury that information provided on this form and attached statements and exhibits was prepared by me or under my supervision and direction and is true to the best of my knowledge and belief, and that I have the authority as ___Environmental Analyst_____ **(title)** of __New England Waste Services of N.Y., Inc.,__ **(entity)** to sign this report form pursuant to 6NYCRR Part 360. I am aware that any false statement made herein is punishable as a Class A misdemeanor pursuant to Section 210.45 of the Penal Law.

PREPARER'S INFORMATION AND SIGNATURE

Name (Printed / Typed):	**Title (Printed / Typed):**	**Signature:**	**Date:**
Sean Lukas	Environmental Analyst		

Revised 12/14

Appendix E

Example Compliance Report Outline

Clinton County
Local Solid Waste Management Plan

Compliance Report

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

April 20XX

Table of Contents

Section Page

Executive Summary

I. Overview of Clinton County's Solid Waste Management System

II. Status of the County's Program Strategies
- A. Summary of Program Strategies
- B. Obstacles Met in Efforts to Reach Milestones Contained Within the LSWMP, and Attempts to Overcome Such Obstacles
- C. Deviations from the Clinton County LSWMP
- D. Solid Waste Issues Not Previously Addressed in the LSWMP
- E. Revised Implementation Schedule

III. Funding and Staffing Resources
- A. Financial Resources
- B. Staffing Levels

IV. Accomplishments/New Issues

V. Waste Reduction, Reuse, and Recycling
- A. Elements of the County's Current Recycling Program
- B. Differences between Current Recycling Program and Recycling Program Contained Within the LSWMP
- C. Evaluation of Recycling Potential of Materials Not Currently Recycled
- D. Recycling Goals

VI. Solid Waste and Recyclables Inventories

Appendices

Appendix A – 20XX Clinton County Solid Waste and Recyclables Inventory
Appendix B – 20XX Clinton County Solid Waste and Recyclables Inventory

Appendix F

Responsiveness Summary

The public comment period for the Draft Local Solid Waste Management Plan (LSWMP) commenced on November 15, 2017. It was advertised in the Press Republican, the newspaper of record for Clinton County, as well as being displayed on the County website. Copies of the draft LSWMP were made available for public review in the Clinton County Legislative Office and on the Clinton County website.

A public hearing was held at 10:00 a.m. on Wednesday, December 13, 2017 in the Clinton County Legislative Chambers, Clinton County Government Center, 137 Margaret Street in Plattsburgh, New York for the purpose of hearing public comments. No members of the public attended the public hearing.

The public notice indicated that written comments would be received until December 31, 2017 and were provided with a mailing and an email address for comment submission.

No public comments were received on the draft LSWMP.

Appendix G

Resolution Adopting Plan

RESOLUTION #762 - 09/26/18

AUTHORIZING THE ADOPTION OF THE CLINTON COUNTY LOCAL SOLID WASTE MANAGEMENT PLAN – SOLID WASTE

BY: Mr. Dame

WHEREAS, the County of Clinton (County) is the planning unit responsible for developing a Local Solid Waste Management Plan (LSWMP) pursuant to Section 27-0107, paragraph 1(a) of the Environmental Conservation Law of the State of New York; and

WHEREAS, on September 11, 2018, the New York State Department of Environmental Conservation issued a letter stating that the current draft of the LSWMP constitutes an approvable plan (the NYSDEC Letter); and

WHEREAS, Section 366-4.1(d)(2) of the New York State Department of Environmental Conservation's solid waste management regulations contains several provisions that must be included in a planning unit's resolution to adopt a Final LSWMP, and such clauses are included herein as required; now, therefore,

BE IT RESOLVED, the County Final LSWMP is hereby adopted by the County Legislature, acting as the solid waste planning unit for County; and

BE IT FURTHER RESOLVED, as required by Sections 366-4.1(d)(2)(i), 366-4.1(d)(2)(ii), and 366-4.1(d)(2)(iii), of the New York State Department of Environmental Conservation's solid waste management regulations, the County will (i) adopt the LSWMP, effective upon New York State Department of Environmental Conservation approval of the LSWMP, (ii) implement and maintain the solid waste management system described in the LSWMP, and (iii) submit annual planning unit reports and biennial updates; and

BE IT FURTHER RESOLVED, the Clerk of the Legislature is hereby directed to send notices of the availability of the Final LSWMP to adjacent solid waste planning units and will ensure that an electronic copy of the Final LSWMP is made available for public review on the County's website; and

BE IT FURTHER RESOLVED, the Clerk of the Legislature is hereby directed to furnish all items to the New York State Department of Environmental Conservation as indicated in the NYSDEC Letter referenced above and attached hereto.

SECONDED BY: Mr. Beach
ADOPTED

"Yes" 9
"No" 0
Absent 1 (Mr. Rosenquest)

RESOLUTION #762 - 09/26/18

STATE OF NEW YORK)
COUNTY OF CLINTON) SS:
LEGISLATIVE CHAMBERS)

I HEREBY CERTIFY, that the foregoing is a true copy of a resolution acted upon by the County Legislature in Regular Session on September 26, 2018.

A quorum being present, and a majority voting therefor.

Michael E. Zurlo
Clerk of the Legislature

(SEAL)