Agenda
Public Works Committee – Solid Waste
Department of Public Works
June 23, 2020 – 11:55am

Committee Members: *CONOVER, Hogan, Leggett, Braymer, Bruno, Magowan, Merlino, Strough, Wild*

I. Committee Meeting Call to Order…… Chairman Conover

II. Motion to Approve Minutes of Prior Committee Meeting..... Chairman Conover

III. Action Agenda/New Business
Page

IV. Referral/Pending Items

V. Information for Discussion/Review
Page

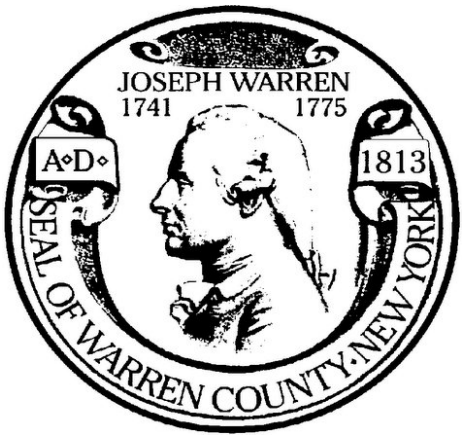
Local Solid Waste Management Plan…….... Kevin Hajos

- 45 day comment period
- Public Hearing
- Responsive summary for all verbal and written comments
- Issues LSWMP AND Responsiveness summary to NYSDEC for final approval.

VI. Privilege of the Floor to discuss any additional items to come before the Committee

VII. Motion to Adjourn…….. Chairman Conover

Warren County, NY



LOCAL SOLID WASTE MANAGEMENT PLAN

(2019-2028)

Prepared By:

R. S. LYNCH & COMPANY

RSL

Helping Municipal Officials Make Good Solid Waste Management Decisions Since 1987

May 28, 2020

I. TABLE OF CONTENTS

II. INTRODUCTION

The purpose of this Local Solid Waste Management Plan (LSWMP) is to document the current waste management practices of Warren County, NY, the Planning Unit. Additionally, this plan will address strategies for improvements upon the Planning Unit's solid waste management system regarding efficiency, cost-effectiveness and environmental impact while putting it in compliance with State LSWMP planning requirements.

On January 1993, Warren County, NY, in conjunction with Washington County, NY, submitted a final LSWMP to the New York State Department of Environmental Conservation (NYSDEC) in conformance with the Solid Waste Management Act of 1988 (the "Act") and subsequent State regulation derived from its power and intent. The following quotation regarding the Legislative findings and intent was taken directly from the Act:

> The Legislature finds and declares that proper management of solid waste is necessary to protect public health and the environment. Toward this end, the State Legislature declared it is necessary to reduce the generation of solid waste, to accelerate the recovery and reuse of secondary materials within the State, to encourage the conservation of resources, to foster public and private initiatives to achieve these ends, and to encourage a new ethic among New York's citizens to conserve and reuse, rather than discard, useful materials.

The Planning Unit consisted of both Warren County, NY and Washington County, NY. The Bi-County LSWMP expired on December 31, 2010. The goals and objectives of the 1993 LSWMP were as follows:

1. Reduce the amount of waste generated as much as possible.
2. Encourage reuse and recycling of waste materials as much as possible.
3. Recover energy from waste materials that cannot be recycled.
4. Dispose of waste that cannot be reused, recycled or incinerated for energy recovery, at environmentally sound landfills.

As demonstrated throughout this report, Warren County has made significant progress towards achieving these goals throughout the previous Planning Period. The key Warren County LSWMP planning milestones are as follows:

KEY WARREN COUNTY SOLID WASTE PLANNING MILESTONES

1992	• A Bi-County (Warren & Washington County) Local Solid Waste Management Plan is adopted. • The 510-ton per day Hudson Falls Waste-to-Energy Facility (HFWTEF) achieved commercial operations. At this time the Counties expected that waste from the two Counties would fill most or all of the HFWTEF's capacity and that any out-of-County waste required would be delivered at Tip Fees high enough to subsidize in-County waste disposal.

1993 - 1997	• Soon after the startup of the HFWTEF local and regional market Tip Fees for waste disposal declined substantially. Since the sale of electricity represents such an important aspect of the HFWTEF economics, the Counties realized that net solid waste costs would be minimized by setting prices for out-of-County waste at the gate low enough to ensure that the HFWTEF always operates at full capacity, even if such Tip Fees were below in-County Tip Fees. Revenue shortfalls in HFWTEF revenue that resulted from such market clearing pricing would be less than shortfalls caused by less waste being processed and thus less electricity being generated and sold. • The Counties successfully managed this ongoing form of economic flow since inception. The HFWTEF had never processed less than its full design annual capacity and the Counties had never failed to pay the resultant monthly revenue shortfalls from their General Funds. • During this period the Facility was owned and operated by Foster Wheeler but received waste under long term contracts with the two Counties as well as through shorter term contracts that Foster Wheeler periodically arranged and administered from out-of-County waste suppliers.

1998	• By 1998, it was clear that there was not enough in-County waste to fill the HFWTEF and that Tip Fees from out-of-County waste would likely remain well below breakeven costs.

TABLE 2.1

	Original 1998 Expectation	**1998 Projection**
In-County Waste Deliveries Tonnage	128,000	62,939
Out-of-County Waste Deliveries Tonnage	0	95,061
Average Out-of-County Tip Fee/Ton	Over $79/Ton if Needed	$50/Ton
Shortfall to be Paid from General Fund	$0	$3,644,952
Net Cost/Ton to County Taxpayers	$79/Ton	$120/Ton

2002	• Warren and Washington Counties assumed responsibility for securing out-of-County HFWTEF waste supply, hauler billing and collections. - $150,000/year increased Tip Fee revenue. - 50% reduction in late account balances. - Industry standard credit procedures for new accounts.

2003	• Both Counties received credit rating upgrades. • Wheelabrator Technologies provided funding to the Counties to buy out Foster Wheeler's ownership interest in the HFWTEF and settle outstanding litigation. - Wheelabrator received an Option to Purchase the HFWTEF in 2011 at fair market value. - Foster Wheeler was replaced by Wheelabrator Technologies as HFTWEF operator. ▪ Change of Law risk shifted from 100% Counties to sharing arrangement with Wheelabrator. ▪ Established cost effective, non-adversarial dispute resolution mechanism. ▪ Established competitive bidding for pass-through costs. ▪ Increased plant throughput guarantee by 5%.

2004	• Using an innovative "Sales Tax Intercept" credit structure, Warren and Washing County IDA refinances the HFWTEF's outstanding debt with new "AAA" rated debt resulting in approximately $1,000,000/year savings.

2011	• Wheelabrator exercised its Option to Purchase the HFWTEF thus removing any further financial or waste delivery obligations on the part of the Counties and allowing them to seek the most advantageous disposal option available in the open market. • Warren County Draft LSWMP 2011-2030 was submitted to the NYSDEC.

2018	• NYSDEC requests revisions and amendments to the Draft 2011 LSWMP.

Upon expiration of the 1993 LSWMP, Warren County, NY has decided to conduct its solid waste planning as a separate Planning Unit from Washington County, NY. The following goals and objectives of this LSWMP are similar to the goals of the 1993 LSWMP with the key differences underlined:

1. Reduce the amount of waste generated as much as possible.
2. Encourage reuse and recycling of waste materials as much as possible.
3. Recover energy from waste materials that cannot be recycled <u>if economically advantageous</u>.
4. Dispose of waste that cannot be reused, recycled or <u>economically</u> incinerated for energy recovery, at environmentally sound landfills.
5. <u>Identify strategies for improvements of the existing solid waste system to be more cost effective, efficient and environmentally responsible</u>.

III. DESCRIPTION OF WARREN COUNTY

Size of Planning Unit:

Situated in northeastern New York in the foothills of the Adirondacks, the County encompasses 932 square miles, which includes 65 square miles of water. The County has a population of over 64,000 residents and consists of over 25,000 permanent households. A noteworthy attribute of the County is that it includes the popular vacation destination of Lake George. According to the United States Census Bureau, in 2018 the County's population density was 73 people per square mile. Warren County is surrounded by the County of Washington to the east, County of Saratoga to the south, County of Hamilton to the west and County of Essex to the north.

Governmental Entities within the Planning Unit and Population Characteristics:

TABLE 3.1

Municipality	Estimated 2018 Population (1)	% of County	Population Density (People/Square Mile of Land)	Rural, Suburban or Urban
Town of Bolton	2,259	3.52%	35.63	R
Town of Chester	3,265	5.08%	38.64	R
City of Glens Falls	14,348	22.33%	3,775.79	S
Town of Hague	679	1.06%	10.61	R
Town of Horicon	1,349	2.10%	20.41	R
Town of Johnsburg	2,311	3.60%	11.32	R
Town of Lake George (2)	2,534	3.94%	83.91	R
Village of Lake George	879	1.37%	1,465	S
Town of Lake Luzerne	3,259	5.07%	61.96	R
Town of Queensbury	27,471	42.75%	435.98	S
Town of Stony Creek	743	1.16%	9.02	R
Town of Thurman	1,187	1.85%	12.97	R
Town of Warrensburg	3,981	6.19%	62.50	R
TOTAL:	**64,265**			

(1) As reported by the U.S. Census Bureau
(2) Does not include Village of Lake George population in order to avoid double counting

Variations in Seasonal Populations and Usage:

In addition to having over 64,000 permanent residents residing within its borders, Warren County also has a large tourist population. The tourist population is the largest in the summer when visitors can enjoy the Lake George area. Winter sporting activities, such as skiing and snowmobiling, also attract tourists to the Planning Unit. To a lesser extent, the fall and spring attract tourists to the area for activities such as hiking and hunting.

The County estimates that from 1994 to 2008, on an average annual basis, overnight guests and day trip tourists that visited the area spent a total of 8,379,677 days in the Planning Unit. Many

tourists that visit Warren County come from within 300 miles of the Lake George area, primarily traveling from New York, New Jersey and Canada.

Industry:

According to the 2007 County Business Patterns report, compiled by the U.S. Census Bureau, the four industries with the most employees in the County are as follows:

TABLE 3.2	
Industry	**Number of Employees (2007)**
Health Care and Social Assistance	6,763
Retail Trade	5,918
Accommodation and Food Services	4,337
Manufacturing	3,970

The largest establishment in the County within the healthcare and social assistance industry is the Glens Falls Hospital, which is the largest hospital between Albany, NY and Montreal and serves five New York counties. It is also the only hospital located in the County.

The retail trade and accommodation and food services industries within the County depend greatly on the tourism the County attracts.

Manufacturing within the County consists mainly of medical equipment and supplies manufacturing as well as forestry papermaking due to the large inventory of natural forests located in Warren County and the surrounding region. Finch Paper, LLC, a Glens Falls-based paper company, employs approximately 800 people.

Colleges, Universities and Other Higher Education Institutions:

The only major higher education institution located in Warren County is Adirondack Community College. Adirondack Community College is located on 141 acres in Queensbury, NY. It enrolls over 3,400 full and part-time students and employs over 240 full and part-time employees.

State or Federal Parks:

The majority of Warren County is located within the Adirondack Park with the exceptions of the City of Glens Falls and parts of the Town of Queensbury and the Town of Lake Luzerne. The Adirondack Park was created by the State of New York in 1892. The park encompasses approximately 6 million acres and is the largest publicly protected area in the contiguous United States. The State of New York owns approximately 43% of the land in the Adirondack Park while the remaining 57% is privately owned.

Large Retail Centers:

In addition to being a popular outdoor activities area, Lake George is also popular due to its large number of retail store outlets. The area, known as the "Factory Outlets of Lake George" consists

of four different major shopping centers with over 80 major brand retail outlets located on a half mile stretch of road in Lake George.

Agricultural Activities:

According to the USDA's 2017 Census of Agriculture, Warren County contains 80 active farms which encompass approximately 10,086 acres. The County is ranked 57th in total value of agricultural products sold out of the 61 New York counties producing goods. Therefore, Warren County is one of the lowest agricultural goods producing counties in New York. The following table summarizes the County's top five crops (by acreage) and top five livestock items produced based on the USDA Census of Agriculture.

TABLE 3.3

Top Crops (Acres)		Top Livestock Inventory	
Forage (Hay/Haylage)	505	Layers (Poultry and Eggs)	782
Cultivated Christmas Trees	70	Horses and Ponies	412
Corn (Silage/Greenchop)	NA	Goats	299
Harvested Vegetables	22	Sheep and Lamb	293
Nursery Stock Crops	8	Cattle and Calves	134

Solid Waste Activities:

Warren County has 12 locally owned Transfer Stations/Recycling centers operating within its borders. It also has 2 locally owned C&D landfills. It does not have any active MSW landfills or waste-to-energy facilities. It has not developed any solid waste disposal facilities within its borders since the implementation of the 1993 LSWMP. As noted in Section II above the County, in 2011, sold its interest in the HFWTEF located in, and co-owned by, Washington County, NY. Also, since the implementation of the 1993 LSWMP, Warren County has closed a Material Recycling Facility (MRF) in Queensbury.

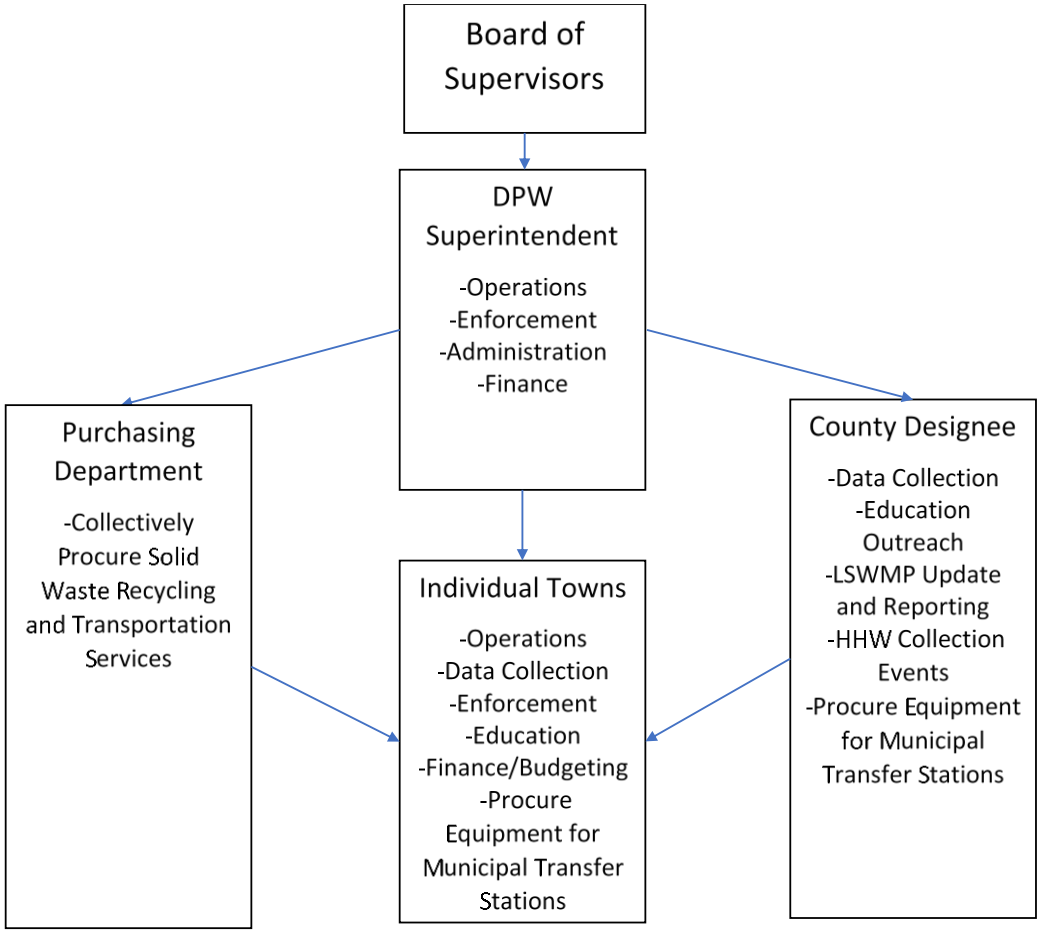
Prior to the closing of the MRF, the individual municipalities would accept recyclables at their town operated transfer stations and the County would transport them to the County operated MRF. Once material was transported to the MRF, the County would process and ship to market. Due to the costs associated with the MRF and the lack of cost-effective markets for the processed material, the County closed the MRF. Subsequently, individual municipalities provide voluntary citizen access to local Transfer Station/Recycling centers.

According to solid waste and recycling practicing surveys conducted in 2009 and 2019, it does not appear that any significant waste generation and/or composition changes have occurred since the last LSWMP Planning Period.

Warren County does not currently have a centralized solid waste and recycling system. Instead, the County asks each Town, City and Village located within its borders to arrange their own solid waste and recycling system. Therefore, the financial structure for each solid waste

management facility and program varies depending on which individual municipality is running them. Please refer to Section V for a detailed description of the existing programs and facilities.

However, the County does provide assistance to municipalities in the Planning Unit with some of their solid waste and recycling needs. The County owns approximately 179 roll-off containers and provides each municipality enough roll-off containers to operate their transfer station. Municipalities use the roll-off containers provided by the County to store solid waste and recyclables at their municipally owned transfer stations. Additionally, the County Purchasing Department also manages the procurement of solid waste and recycling transportation services on behalf of municipalities with transfer stations that choose to be part of a County-administered procurement. Respondents to the County-administered procurement are allowed to bid on solid waste and recycling transportation services for any or all municipally owned transfer station sites that are included in the procurement. The County also offers an annual Household Hazardous Waste collection event for all Planning Unit members. Most solid waste and recycling programs provided on the County level are funded within the County's General Fund. Please refer to the following Administrative Structure chart for guidance.



IV. QUANITY AND TYPES OF SOLID WASTE AND RECYCLABLES

Municipalities within the Planning Unit primarily handle municipal solid waste (MSW) generated by municipal residents and businesses. For the purposes of this report, MSW will be defined as the things commonly used in a household, institution or commercial entity and then thrown away, reused, recycled or composted. These materials range from packaging, food scraps, office-type paper and grass clippings, to old sofas, computers, tires, and refrigerators. This definition of MSW does not include industrial, non-residential or infrastructure/other construction and demolition wastes. Residential construction and demolition (C&D) debris, which is accepted at some municipally owned transfer stations from municipal residents, is considered MSW and is included in MSW waste generation rates used throughout this report. For the purposes of this report, the following types of solid waste have been analyzed for the Planning Unit:

- MSW
  - Residential
  - Household Hazardous Waste
  - Commercial/Institutional
- Construction and Demolition Waste
  - Residential
  - Non-Residential
  - Infrastructure/Other
- Industrial Waste
- Planning Unit Relevant Specialty Wastes
  - Regulated Medical Waste
  - Biosolids and Septage

MSW

As indicated in TABLE 4.2, this analysis has estimated that over 74,000 tons of MSW was generated within the Planning Unit in 2019. We have estimated that approximately 41,500 (56%) tons of MSW generated was residential MSW and approximately 32,500 (44%) was commercial/institutional MSW. These numbers have been estimated using a per capita waste generation rate provided by the New York State Department of Environmental Conservation (NYSDEC). The NYSDEC estimates that the average New York resident generates 5.15 pounds of MSW per day. The NYSDEC developed the waste generation estimates using data inputs that included field-based waste composition studies performed within New York State as well as states and cities that border New York or have similar demographic characteristics to some of New York's regions. Furthermore, the NYSDEC waste generation data used to estimate the total waste generated in the Planning Unit distinguishes the composition of total waste generated in rural and suburban populations. The NYSDEC characterizes rural populations as communities with populations less than 325 people per square mile and suburban populations as communities with a population density between 325 and 5,000 people per square mile. Warren County contains municipalities with both rural and suburban populations. Therefore, we have applied NYSDEC rural waste stream composition data to municipalities in the Planning Unit with a

population density less than 325 people per square mile and have applied NYSDEC suburban waste stream composition data to municipalities in the Planning Unit with a population density between 325 and 5,000 people per square mile. We calculated population density by dividing the total land area of a municipality by the estimated population of the municipality as estimated by the U.S. Census Bureau in 2018. This calculation has not considered non-residential areas, such as parks, located within each municipality since these areas are not typically excluded from the land area when calculating population density.

In order to forecast the waste generation estimates for the County for each year in the 10-year term of this LSWMP, we have assumed that the population will remain constant.

Additionally, since a large volume of tourists and day visitors visit the Planning Unit each year, it was also necessary to estimate the total amount of MSW that they generate in the Planning Unit. The Warren County Departments of Planning and Tourism reported that the average total annual number of days spent in Warren County by both overnight guests and day visitors from 1994 through 2008 to be 8,379,677 in their 2008 Warren County Occupancy Survey and Report released on June 4, 2009. We estimated the total volume of waste that tourists/day visitors generated in 2019 using this number multiplied by the NYSDEC waste generation number of 5.15 pounds per person per day and then discounted the total tourist/day visitor waste generation number by excluding waste components not typically generated by tourists or day visitors such as junk mail, phone books and carpet.

Data collected by the NYSDEC suggests that 58% of the MSW generated in rural municipalities is residential and 42% is commercial/institutional as opposed to suburban municipalities where 55% of the waste generated is residential and 45% is commercial/institutional. Since most of the population in the Planning Unit is located in a suburban municipality (approximately 65%), for the purposes of this analysis we are assuming that 56% of the tonnage generated in the Planning Unit is residential MSW and 44% of it is commercial/institutional MSW.

Residential MSW

As noted above, it is estimated that 56% of the MSW generated in the Planning Unit is residential MSW. This translates into approximately 41,500 tons of residential MSW generated in 2019. Residential MSW is handled by municipalities located within the Planning Unit primarily through a municipally owned solid waste and recycling transfer station. As detailed later in the LSWMP, some municipalities provide their residents with some type of municipal collection services.

Additionally, the County offers an annual Household Hazardous Waste (HHW) collection event for all County residents. HHW volume is considered to be residential MSW by the NYSDEC. The County hires an independent third party to operate an HHW collection event and to ultimately transport and recycle/dispose of the collected material. In 2018, 77 different households participated in the event and 1,150 gallons and 2,150 pounds of material were collected.

TABLE 4.1		
Household Hazardous Waste	**2018 Weight/Volume**	**Units**
Antifreeze	50	Gallons
Hazardous Paint	700	Gallons
Automotive Batteries		Pounds
Hazardous Household Batteries		Pounds
Pesticides (Solids)	600	Pounds
Pesticides (Liquid)	100	Gallons
Mercury Containing Devices		Pounds
Bulk Mercury		Pounds
Fluorescent Bulbs	150	Pounds
CRT TVs/Monitors		Pounds
Non-CRT TVs/Monitors		Pounds
Other Electronics		Pounds
Other HHW (Solids)	600	Pounds
Other HHW (Liquids)	300	Gallons
Misc. Solid Waste (Solids)	800	Pounds
Misc. Solid Waste (Liquids)		Gallons
TOTAL SOLIDS:	**2,150**	**Pounds**
TOTAL LIQUIDS:	**1,150**	**Gallons**

Commercial/Institutional MSW

It is estimated that 44% of the total MSW generated in the Planning Unit, or approximately 32,500 tons in 2019, is commercial/institutional MSW. Commercial/institutional MSW is typically not handled by the Planning Unit or its municipalities. Commercial/institutional MSW generated in the Planning Unit is typically handled by private haulers who collect, process, transport and recycle/dispose of the material using their own facilities and resources. However, as later discussed, some municipalities located within the Planning Unit will accept commercial/institutional MSW at their transfer stations from businesses and institutions located within their municipality. Also, some municipalities in the Planning Unit will transport institutional MSW generated from their own municipal buildings directly to their municipal transfer station.

Table 4.2 demonstrates the estimated total waste generated by each municipality in the Planning Unit as well as the waste generated by the tourists/visitors that visit the Planning Unit for the term of this Planning Period assuming that the Planning Unit does not implement any new waste generation reduction initiatives. Please refer to ATTACHMENT A for a more detailed waste generation analysis.

Additionally, as later discussed in SECTION V of this report, we have calculated and assumed the recycling rates for the individual Planning Unit municipalities. We derived these recycling rate assumptions utilizing data provided by Planning Unit municipalities responding to information requests for the purpose of completing this LSWMP. Some of the municipalities did

not have complete waste disposal and recycling data, resulting in the inability to calculate their recycling rate. Municipalities that did not provide enough data to calculate a recycling rate were given an assumed recycling rate of 21.15%, which is the average recycling rate of the Planning Unit municipalities with a complete data set.

We have applied these assumed recycling rates to the total estimated amount of waste generated in the Planning Unit in order to estimate the amount of waste that the Planning Unit will dispose of for the term of this LSWMP (2019-2028) providing that no new waste generation reduction, reuse or recycling initiatives are implemented.

WARREN COUNTY, NY
Local Solid Waste Management Plan
Estimated Future MSW Generation Rates
TABLE 4.2
Summary of MSW Generators
5/6/2020
Prepared By: R.S. Lynch & Company, Inc.

MSW Generator	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2019-2028 Total
Tourist/Visitor	13,938	13,938	13,938	13,938	13,938	13,938	13,938	13,938	13,938	13,938	**139,381**
Town of Bolton	2,123	2,123	2,123	2,123	2,123	2,123	2,123	2,123	2,123	2,123	**21,232**
Town of Chester	3,069	3,069	3,069	3,069	3,069	3,069	3,069	3,069	3,069	3,069	**30,687**
City of Glens Falls	13,485	13,485	13,485	13,485	13,485	13,485	13,485	13,485	13,485	13,485	**134,853**
Town of Hague	638	638	638	638	638	638	638	638	638	638	**6,382**
Town of Horicon	1,268	1,268	1,268	1,268	1,268	1,268	1,268	1,268	1,268	1,268	**12,679**
Town of Johnsburg	2,172	2,172	2,172	2,172	2,172	2,172	2,172	2,172	2,172	2,172	**21,721**
Town of Lake George(1)	2,382	2,382	2,382	2,382	2,382	2,382	2,382	2,382	2,382	2,382	**23,816**
Village of Lake George	826	826	826	826	826	826	826	826	826	826	**8,262**
Town of Lake Luzerne	3,063	3,063	3,063	3,063	3,063	3,063	3,063	3,063	3,063	3,063	**30,631**
Town of Queensbury	25,819	25,819	25,819	25,819	25,819	25,819	25,819	25,819	25,819	25,819	**258,193**
Town of Stony Creek	698	698	698	698	698	698	698	698	698	698	**6,983**
Town of Thurman	1,116	1,116	1,116	1,116	1,116	1,116	1,116	1,116	1,116	1,116	**11,156**
Town of Warrensburg	3,742	3,742	3,742	3,742	3,742	3,742	3,742	3,742	3,742	3,742	**37,416**
TOTAL:	**74,339**	**74,339**	**74,339**	**74,339**	**74,339**	**74,339**	**74,339**	**74,339**	**74,339**	**74,339**	**743,392**
COMPOSITION OF WASTE GENERATED											
Newspaper	3,095	3,095	3,095	3,095	3,095	3,095	3,095	3,095	3,095	3,095	**30,952**
Corrugated Cardboard	7,008	7,008	7,008	7,008	7,008	7,008	7,008	7,008	7,008	7,008	**70,080**
Paperboard	1,878	1,878	1,878	1,878	1,878	1,878	1,878	1,878	1,878	1,878	**18,775**
Office Paper	1,373	1,373	1,373	1,373	1,373	1,373	1,373	1,373	1,373	1,373	**13,727**
Junk Mail	1,246	1,246	1,246	1,246	1,246	1,246	1,246	1,246	1,246	1,246	**12,462**
Other Commercial Printing	1,689	1,689	1,689	1,689	1,689	1,689	1,689	1,689	1,689	1,689	**16,893**
Magazines	788	788	788	788	788	788	788	788	788	788	**7,877**
Books	250	250	250	250	250	250	250	250	250	250	**2,497**
Paper Bags	304	304	304	304	304	304	304	304	304	304	**3,036**
Phone Books	181	181	181	181	181	181	181	181	181	181	**1,812**
Poly Coated	179	179	179	179	179	179	179	179	179	179	**1,785**
Other Compostable Paper	5,388	5,388	5,388	5,388	5,388	5,388	5,388	5,388	5,388	5,388	**53,881**
Ferrous Containers	937	937	937	937	937	937	937	937	937	937	**9,369**
Aluminum Containers	408	408	408	408	408	408	408	408	408	408	**4,077**
Other Aluminum	199	199	199	199	199	199	199	199	199	199	**1,989**
Automotive Batteries	365	365	365	365	365	365	365	365	365	365	**3,646**
Other Non-Aluminum	297	297	297	297	297	297	297	297	297	297	**2,968**
Other Ferrous Metals	3,690	3,690	3,690	3,690	3,690	3,690	3,690	3,690	3,690	3,690	**36,905**
PET Containers	758	758	758	758	758	758	758	758	758	758	**7,577**
HDPE Containers	689	689	689	689	689	689	689	689	689	689	**6,889**
Plastic Containers (#3-#7)	154	154	154	154	154	154	154	154	154	154	**1,537**
Film Plastic	4,676	4,676	4,676	4,676	4,676	4,676	4,676	4,676	4,676	4,676	**46,757**
Durables	1,877	1,877	1,877	1,877	1,877	1,877	1,877	1,877	1,877	1,877	**18,765**
Non-Durables	1,401	1,401	1,401	1,401	1,401	1,401	1,401	1,401	1,401	1,401	**14,007**
Packaging	1,047	1,047	1,047	1,047	1,047	1,047	1,047	1,047	1,047	1,047	**10,475**
Glass Containers	3,206	3,206	3,206	3,206	3,206	3,206	3,206	3,206	3,206	3,206	**32,064**
Other Glass	318	318	318	318	318	318	318	318	318	318	**3,179**
Food Scraps	12,082	12,082	12,082	12,082	12,082	12,082	12,082	12,082	12,082	12,082	**120,820**
Yard Trimmings	4,596	4,596	4,596	4,596	4,596	4,596	4,596	4,596	4,596	4,596	**45,956**
Clothing, Footwear, Towels & Sheets	3,161	3,161	3,161	3,161	3,161	3,161	3,161	3,161	3,161	3,161	**31,613**
Carpet	906	906	906	906	906	906	906	906	906	906	**9,057**
Wood	2,621	2,621	2,621	2,621	2,621	2,621	2,621	2,621	2,621	2,621	**26,211**
C&D Material	2,911	2,911	2,911	2,911	2,911	2,911	2,911	2,911	2,911	2,911	**29,115**
Other Durables	991	991	991	991	991	991	991	991	991	991	**9,909**
Diapers	1,359	1,359	1,359	1,359	1,359	1,359	1,359	1,359	1,359	1,359	**13,591**
Electronics	934	934	934	934	934	934	934	934	934	934	**9,338**
Tires	995	995	995	995	995	995	995	995	995	995	**9,949**
HHW	203	203	203	203	203	203	203	203	203	203	**2,034**
Fines	182	182	182	182	182	182	182	182	182	182	**1,818**
TOTAL WASTE GENERATED:	**74,339**	**74,339**	**74,339**	**74,339**	**74,339**	**74,339**	**74,339**	**74,339**	**74,339**	**74,339**	**743,392**
TOTAL WASTE DISPOSED(2):	**54,876**	**54,876**	**54,876**	**54,876**	**54,876**	**54,876**	**54,876**	**54,876**	**54,876**	**54,876**	**548,755**

(1) Does not include Village of Lake George population in order to avoid double counting.
(2) Estimated assuming each individual municipality's recycling rate, or in some instances, an average of the available member municipality recycling rates.

MSW Generation Empirical Data

As detailed in TABLE 4.2, using the most recently published NYSDEC per capita waste generation rate of 5.15 pounds per person per day, we have estimated that over 743,000 tons of MSW will be generated in the Planning Unit from 2019 through 2028. In order to compare the preceding waste generation projections with actual empirical data, we have collected data from surrounding solid waste disposal and transfer station facilities and analyzed the amount of waste they received from Warren County in 2018. For this analysis, we have assumed that the Planning Unit generated the same amount of waste in 2018 as we have calculated for 2019 in TABLE 4.2. We have also applied the assumed recycling rate of each member municipality as described and calculated in SECTION V. TABLE 4.3 lists the surrounding transfer stations and disposal facilities which accepted waste from Warren County in 2018.

TABLE 4.3		
Private Waste Hauler	**2018 Warren County MSW**	**2018 Warren County C&D**
Hudson Falls Waste-to-Energy	31,809.18	
Green Ridge Landfill	3,886.92	7,302.98
Ace Carting Transfer Station	5,315.12	
Hiram Hollow Transfer Station	2,104.04	3,139.35
Colonie Landfill		40.09
High Acres Landfill		4.80
Seneca Meadows Landfill		3.00
Fulton County Landfill	NA	NA
Warren County HHW Event	1.08	
TOTAL:	**43,115.26**	**10,490.22**

As demonstrated in ATTACHMENT A, after the assumed recycling rates of each Planning Unit member municipality as well as the tourist/visitors have been applied, we have estimated that approximately 55,000 tons of MSW generated in the Planning Unit was ultimately sent for disposal. When comparing the amount of MSW we have estimated to have been generated within the Planning Unit and disposed of to available empirical data summarized in TABLE 4.3, it appears that the waste generation assumptions utilized in our analysis may be slightly high (55,000 tons vs 43,115 tons of MSW plus 10,490 tons of C&D).

As described in the following C&D material section, it is reasonable to classify 2,911 tons of the C&D material collected at surrounding facilities as Residential C&D/MSW. Therefore, we have assumed that approximately 46,000 tons of MSW were sent to surrounding facilities for disposal in 2018.

One contributing factor for the discrepancy between the waste generation assumption and the collected empirical data is that the amount of waste sent to the Fulton County landfill is unknown. They note in their 2018 NYSDEC Solid Waste Facility Report that they received waste from Warren County, however the volume was not reported. Depending on the amount of

unaccounted material sent to the Fulton County landfill for disposal, the discrepancy could get substantially smaller.

Another variable that we believe contributes to the discrepancy is the assumed recycling rate of yard trimmings of individual municipalities. We have applied average recycling rates to the total amount of waste generated by each Planning Unit member. We believe that residents of the Planning Unit may achieve a much higher recycling rate of their yard trimmings compared to other MSW waste component items due to the ease and rural nature of the Planning Unit's geography.

Furthermore, we have assumed that the Planning Unit only sent approximately 5,300 tons of MSW to the Ace Carting transfer station located in Washington County. However, in the facility's 2018 NYSDEC Solid Waste Facility Report, it was recorded that almost 13,000 tons of MSW were received from Warren County at the Ace Carting transfer station. The Ace Carting transfer station sends approximately 59% of MSW collected at its facility to the HFWTEF. In order to avoid double counting, we have assumed that 59%, or approximately 7,500 tons, of the MSW received at the Ace Carting transfer station was sent to the HFWTEF and subtracted from total Planning Unit MSW collected at the Ace Carting transfer station. It was necessary to make this adjustment due to the fact that we have already accounted for the amount of Planning Unit MSW disposed of at the HFWTEF in this analysis. This generalized assumption could contribute to the discrepancy between the recorded amount of Planning Unit MSW ultimately disposed of at solid waste disposal facilities and the amount of Planning Unit MSW estimated to have been generated and disposed of using NYSDEC generation numbers.

Data Gaps and Additional Information Required

During the preparation of this LSWMP, it has been discovered that the County does not currently collect enough solid waste disposal and recycling data to reliably measure actual recycling rates. Furthermore, the data that is collected is occasionally incomplete and inconsistent. A goal for the County during this Planning Period will be to evaluate future options for improving the amount and accuracy of the data which the County receives in order to measure actual system performance and make more informed future solid waste planning decisions. Future tasks in the Implementation Schedule provided in SECTION XI include improving reporting and data gathering methods.

Construction and Demolition Waste

Construction and demolition waste (C&D) is defined by the NYSDEC as uncontaminated solid waste resulting from the construction, remodeling, repair and demolition of utilities, structures and roads and from land-clearing. Although it is difficult to estimate the amount of C&D generated within a Planning Unit due to fluctuations in construction and demolition activities, we have attempted to do so using data reported by the NYSDEC. The NYSDEC estimates that 17% of the C&D generated in the State is residential, 25% is non-residential and 58% is infrastructure/other.

Since it has been estimated that 2,911 tons of residential C&D was generated in the Planning Unit in 2019, as calculated in Table 4.2, and that accounts for 17% of total C&D generated in the Planning Unit, we have algebraically calculated that the total tonnage of C&D generated in the Planning Unit in 2019 was 17,124 tons.

TABLE 4.4		
C&D Type	**%**	**Estimated 2019 Tonnage**
Residential C&D	17	2,911
Non-Residential C&D	25	4,281
Infrastructure/Other C&D	58	9,932
	100	**17,124**

Residential C&D

As demonstrated in TABLE 4.2 using data provided by the NYSDEC, we have estimated that approximately 2,911 tons of residential C&D material was generated in the Planning Unit in 2019. This volume of residential C&D generated in the Planning Unit is considered MSW since it is part of the NYSDEC 5.15 pounds per capita MSW generation rate. Most municipalities in the Planning Unit accept a limited amount of residential C&D debris at municipally owned transfer stations. Typically, quantities of C&D material collected at municipally owned transfer stations in the Planning Unit are low and consist of material generated from small home improvement projects undertaken by homeowners. Most of the C&D material collected at municipal transfer stations is separated from MSW and transported by a private hauler to a facility of its choice. However, some municipalities collect C&D material and mix it with MSW collected at the facility, which is eventually sent to the HFWTEF. The municipalities that do mix C&D material with MSW do not accept C&D material that is not accepted at the HFWTEF, such as gypsum board and roof shingles.

Additionally, there are two C&D landfills located in the Planning Unit that residents of the towns in which they are located can dispose of their residential C&D material.

Non-Residential C&D

Non-residential C&D generated in the Planning Unit is typically handled by private haulers who collect, process, transport and recycle/dispose of the material using their own facilities and resources. Since it has been estimated that approximately 2,911 tons of residential C&D was generated in the Planning Unit in 2019, and that accounts for 17% of total C&D generated in the Planning Unit, we have algebraically calculated that the total tonnage of C&D generated in the Planning Unit in 2019 was approximately 17,124 tons. Using the assumption that 25% of C&D generated in the Planning Unit is Non-residential C&D, we can assume that Warren County generated approximately 4,281 tons of Non-residential C&D in 2019.

As previously mentioned, two Towns located in the Planning Unit own C&D landfills. Each municipality only accepts C&D generated by their residents.

Infrastructure/Other C&D

Infrastructure/other C&D material is typically generated by municipalities located within the Planning Unit and mainly consists of concrete, asphalt, rock and bricks (CARBS) and soil and gravel. Many municipalities who generate this type of C&D material will reuse the material on other infrastructure-type projects. Municipalities that cannot reuse the C&D material or dispose of it in their own C&D landfill generally contract a private hauler to collect, process, transport and recycle/dispose of the material using their own facilities and resources. Using the NYSDEC assumption that 58% of the total 17,124 tons of C&D generated in the Planning Unit was Infrastructure/other C&D, we have assumed that Warren County generated approximately 9,932 tons of Infrastructure/other C&D material in 2019.

Industrial Waste

As previously discussed in SECTION III, manufacturing within the County consists mainly of medical equipment and supplies manufacturing as well as forestry papermaking due to the large inventory of natural forests located in Warren County and the surrounding region. Therefore, the largest volume of Industrial waste generated in the Planning Unit is paper sludge and paper making byproducts. The County does not currently collect waste generation or disposal information from Industrial waste producers. However, we can get some empirical data by referencing local Industrial landfill annual NYSDEC reports. The Green Ridge RDF landfill, located in Saratoga County, adjacent to the Warren County border, is indisputably the closest Industrial landfill. It is assumed that this facility takes most or all of Warren County's Industrial waste. According to the Green Ridge RDF- Consolidated Landfill Active Solid Waste Landfill 2018 annual report, it was reported that the landfill accepted approximately 13,460 tons of Industrial waste from Warren County and approximately 8,000 more tons of paper slag, brown stock, boiler ash and percepted calcium carbonate.

TABLE 4.5

Green Ridge RDF- Consolidated Landfill

Waste Type	2018 Tonnage
Brown Stock	5,653.14
Boiler Ash	1,275.34
Concrete-Small	1,523.75
Asbestos	154.95
Mixed C&D	7,148.03
Industrial Waste (including Paper Sludge)	13,459.51
Mixed MSW	3,886.92
Sewage Treatment Plant Sludge	28.23

Paper Slag	386.00
Precepted Calcium Carbonate	614.01
	34,129.88

Specialty Wastes

For the purposes of this report, we are defining specialty wastes as wastes generated in the Planning Unit that do not fall under the MSW, C&D or Industrial waste categories.

Regulated Medical Waste

Since the healthcare and social assistance industry is the largest employer in the Planning Unit, it is necessary to discuss regulated medical waste being generated in the Planning Unit. The State of New York has adopted a comprehensive regulatory framework covering all aspects of Regulated Medical Waste (RMW) including handling, storage, treatment and disposal. New York State's RMW program is jointly administered by the New York State Department of Health (DOH) and the NYSDEC which oversee all RMW generated within the Planning Unit from facilities such as the Glens Falls Hospital or any other medical facilities located in the Planning Unit such as doctors' offices, clinics or animal hospitals. RMW is not directly handled by the Planning Unit or any of its municipalities. RMW generators in the Planning Unit directly handle their own RMW or contract a third party to collect, process, transport and recycle/dispose of the material using their own facilities and resources. The Glens Falls Hospital currently has private contractors collect all RMW generated and collected at the facility. The private contractors process and transport the collected material to a waste-to-energy facility in Massachusetts or North Carolina.

Biosolids and Septage

Biosolids are defined by the NYSDEC as solid or semi-solid organic materials generated as a result of the treatment of wastewater. Characteristics of biosolids can vary greatly depending on the treatment methods used at the wastewater treatment facility that generates it.

Septage is waste stored in septic tanks. Typically, residents who live in rural populations, such as Warren County, use septic tanks. The NYSDEC estimates that more than 90% of septage generated in New York is further processed at wastewater treatment facilities.

There are currently five active wastewater treatment facilities operating in Warren County. TABLE 4.6 identifies the five municipalities that currently operate a wastewater treatment facility and how the biosolids associated with each wastewater treatment facility are being handled.

TABLE 4.6		
Municipality	**Material Handling Description**	**Annual Tonnage**
Town of Bolton	The biosolids generated by the Bolton sewer system are hauled to the Schenectady County landfill. Grit and grease from the pump stations are hauled away by Cassella Waste. The town does not accept any septage.	The Town does not currently collect this data
City of Glens Falls	The biosolids are dried onsite and incinerated at the HFWTEF. The source is the Glens Falls sewer district and septage from approximately 40 haulers. The WWTP runs at 40% capacity.	7,118.74
Town of Hague	The Biosolids generated by the Hague sewer district are being transported to the Franklin County landfill by a private hauler. No septage is accepted at the WWTP. The plant has a private hauler take the biosolids to the landfill	60 cubic yards
Village of Lake George	The biosolids are processed through a belt press. The biosolids are then hauled to Washington Compost facility or the Northumberland landfill. The WWTP accepts septage from seven local haulers.	1,500
Town of Warrensburg	The Town of Warrensburg is operating a lagoon-type wastewater treatment facility. The Town is currently removing biosolids under DEC supervision. The source of the biosolids is the Warrensburg sewer district. No outside septage is accepted.	NA

V. EXISTING PROGRAMS AND FACILITIES DESCRIPTION

Warren County does not currently have a centralized solid waste and recycling system. Instead, the County asks each Town, City and Village located within its borders to manage their own solid waste and recycling system. However, the County does assist municipalities in the Planning Unit with some of their solid waste and recycling needs. The County owns approximately 179 roll-off containers and provides each municipality, with a transfer station, roll-off containers to operate their transfer stations. Municipalities use the roll-off containers provided by the County to store solid waste and recyclables at their municipally owned transfer stations. Sizes of the County-owned roll-off containers range from 3 cubic yards to 50 cubic yards. Additionally, the County Purchasing Department also manages the procurement of solid waste and recycling transportation services on behalf of municipalities with transfer stations. Respondents to the County-administered procurement are allowed to bid on solid waste and recycling transportation services for any, or all municipally owned transfer station sites that are included in the procurement. Individual municipalities are able to choose whether they wish to participate in the County-administered procurement. The County also provides an annual Household Hazardous Waste collection event.

As detailed later in the Town-by-Town overview, all the municipalities in the Planning Unit either own a transfer station or have joined with another Planning Unit municipality to share a transfer station. MSW is handled by municipalities located within the Planning Unit primarily through a municipally owned solid waste and recycling transfer station. As detailed later in the LSWMP, some municipalities provide their residents with some type of municipal collection services. As indicated in TABLE 5.1, there are 11 municipally owned and -operated transfer stations, 1 municipally owned and privately-operated transfer station and 2 municipally owned and operated C&D landfills located in the Planning Unit.

TOWN-BY-TOWN OVERVIEW

TOWN OF BOLTON

Solid Waste/Recycling Facilities

Transfer Station

There is one transfer station located in the Town of Bolton. The transfer station is Town-owned and -operated and is located at the Town's closed landfill on Finkle Road. The Town transfer station is open seven days a week during the summer and five days a week during the winter, except for holidays. Town businesses and residents must obtain a permit from the Town in order to use the facility.

In 2019, the Town-owned and -operated transfer station accepted 498.18 tons of MSW for disposal which included 2.88 tons of tires. Additionally, 198.21 tons and approximately 210 cubic yards of material were accepted for recycling. The Town also collected 496.9 tons of C&D material as well as large non-processable residential MSW items (bulky waste) that were disposed of in a large regional New York State landfill. The Town's transfer station currently has the physical capacity to accept extra waste, although under its current registration with the NYSDEC it can accept no more than 12,500 tons of solid waste on an annual basis.

MSW accepted at the Town transfer station is transported by a municipally contracted private hauler to the HFWTEF. The Town sent 499.18 tons of MSW to the HFWTEF in 2019. The Town also accepts bulky waste MSW at the Town transfer station center including items such as: mattresses, couches, rugs, tires, recliners and box springs. Bulky waste MSW items received at the Town transfer station are placed in a roll-off container along with the C&D material accepted at the facility.

MSW brought to the Town transfer station, except for bulky waste items, is placed in a 42-yard roll-off container by the facility user or facility attendant, if required. The roll-off container is equipped with a compactor. Residents are charged a fee on a per bag basis. Non-processable bulky waste items accepted at the Town transfer station have set disposal rates.

The Town also accepts leaf debris and grass clippings at the transfer station which are composted on-site. Brush accepted at the Town transfer station is ground on premises by a private tree company and utilized as mulch.

Recyclables accepted at the Town transfer station include, among others: newspaper, magazines, phonebooks, junk mail, office paper, corrugated cardboard, glass, aluminum cans, metal, batteries, plastics (#1-#7) and tin. In 2019, the Town transfer station accepted approximately 14.98 tons of newspaper, 10.99 tons of magazines, 44.91 tons of corrugated cardboard, 210 cubic yards of glass, 4.54 tons of metal cans, 102.88 tons of

metal and 19.91 tons of plastics (#1-#7). Most of the recyclables accepted by the Town are either transported by a municipally contracted private hauler to the ultimate recycler or are transported by the ultimate recycler to their remanufacturing and recycling facility. Additionally, glass received at the Town transfer station is sent to the County-operated gravel pit to be used as aggregate.

The Town has three 30-yard roll-off containers for recyclables located at the transfer station. One is designated for commingled plastic, one for mixed glass and one for tin cans. Additionally, the Town has four 40-yard roll-off containers, two for corrugated cardboard, one for newspaper and one for magazines, junk mail, colored inserts and soft-cover books. Individuals that bring recyclables to the Town transfer station may leave the recyclables on a "recycling table" where an attendant will place them into the corresponding roll-off container or residents may place the recyclables directly into the appropriate roll-off container themselves. Individuals that bring in metal structures for recycling are asked to place the metal into a pile which is later picked up by a local private metal recycler.

C&D material brought to the Town transfer station is measured by volume by an attendant. Once the volume of C&D material is estimated and the fee has been paid accordingly, the facility user or facility attendant, if required, throws the accepted C&D material into a roll-off container. The Town municipally contracts a private hauler to transport the collected C&D material to ultimately be disposed of at another facility.

The Town accepts household batteries and white goods at its transfer station. It also accepts electronics waste such as computers and televisions, although not a large enough quantity that would deem it hazardous waste.

Material Collection

MSW

Businesses and residents of the Town of Bolton who do not use the Town transfer station typically contract private haulers to collect their MSW for disposal. Private haulers who collect MSW in the Town may deliver the collected waste to any disposal facility of their choice.

Recyclables

Businesses and residents of the Town of Bolton who do not use the Town transfer station typically contract private haulers to collect their recyclables.

Construction and Demolition Material

Businesses and residents of the Town of Bolton who do not use the Town transfer station typically contract private haulers to collect their C&D material.

System Expenses

The Town spent $227,259 for its 2019 solid waste and recycling services. Of this expenditure, $67,107 was spent on solid waste and recycling services personnel, $7,900 for equipment and $152,252 for contractual expenses such as municipally contracted private haulers, solid waste Tip Fees and utility bills.

TOWN OF CHESTER

Solid Waste/Recycling Facilities

Transfer Station

There is one transfer station located in the Town of Chester. The transfer station is Town-owned and -operated and is located at the Town's closed landfill on Landfill Road. The Town transfer station is open five days a week, except for holidays. Town businesses and residents must obtain a permit from the Town in order to use the facility.

In 2019, the Town-owned and -operated transfer station accepted approximately 467.86 tons of MSW for disposal. The Town also collected 419.66 tons of residential C&D material as well as large non-processable residential MSW items (bulky waste) that were transported to the Fort Ann Transfer Station. The Town's transfer station currently has the physical capacity to accept extra waste, although under its current Registration with the NYSDEC it can accept no more than 12,500 tons of solid waste on an annual basis.

MSW accepted at the Town transfer station is transported by a municipally contracted private hauler to the HFWTEF. The Town also accepts bulky waste MSW at the Town transfer station center including items such as: mattresses, couches, rugs, tires, recliners and box springs. Bulky waste MSW items received at the Town transfer station are placed in a roll-off container along with the C&D material accepted at the facility.

MSW brought to the Town transfer station, except for bulky waste items, is placed in a 40-yard roll-off container by the facility user or facility attendant, if required. The roll-off container is equipped with a compactor. Residents are charged a fee on a per bag basis.

Non-processable bulky waste items accepted at the Town transfer station have set disposal rates. All bulky waste items accepted at the facility are placed in a roll-off container designated for C&D material by the facility user or attendant, if required.

The Town also accepts leaf debris and grass clippings at the transfer station which are composted on-site.

Recyclables accepted at the Town transfer station include, among others: glass, tin, plastic bottles, aluminum, newspapers, magazines and corrugated cardboard. In 2019, the

town accepted 86.29 tons of metal containers, 25.38 tons of commingled paper, 12.4 tons of corrugated cardboard, 70 tons of glass, 13 tons of scrap metal, 16.29 tons of commingled plastic and 11.33 tons of electronics. All of the recyclables accepted by the Town are either transported by a municipally contracted private hauler to the ultimate recycler or are transported by the ultimate recycler to their remanufacturing and recycling facility.

Individuals that bring recyclables to the Town transfer station are required to presort recyclables and place the recyclables into wheeled containers located near the transfer station facility. When the containers are full, attendants wheel the containers to large open-top 40-yard containers and throw them into the appropriate roll-off container. The Town has separate 40-yard roll-off containers for commingled plastic (#1-#3), mixed glass, tin cans, newspaper and corrugated cardboard. Additionally, the Town maintains a scrap metal pile where residents are asked to place their scrap metal.

C&D material brought to the Town transfer station is measured in cubic yards by an attendant. Once the volume of C&D material is estimated and the fee has been paid accordingly, the facility user or facility attendant throws the accepted C&D material into a roll-off container. The Town municipally contracts a private hauler to transport the accepted C&D material to ultimately be disposed of at another facility.

The Town accepts household batteries and white goods at its transfer station. It also accepts electronics waste such as computers and televisions, although not a large enough quantity that would deem it hazardous waste.

The Town of Chester transfer station also has a Reuse Center where residents are able drop off and pick up items for reuse free of charge.

Material Collection

MSW

Businesses and residents of the Town of Chester who do not use the Town transfer station typically contract private haulers to collect their MSW for disposal. Private haulers who collect MSW in the Town may deliver the collected waste to any disposal facility of their choosing.

Recyclables

Businesses and residents of the Town of Chester who do not use the Town transfer station typically contract private haulers to collect their recyclables.

Construction and Demolition Material

Businesses and residents of the Town of Chester who do not use the Town transfer station typically contract private haulers to collect their C&D material.

System Expenses

The Town budgeted 241,000 for its 2019 solid waste and recycling services. Of this expenditure, $118,000 is budgeted for solid waste and recycling services personnel payroll, $5,000 for the closed landfill well monitoring and $118,000 for contractual expenses such as municipally contracted private haulers, solid waste Tip Fees and utility bills.

CITY OF GLENS FALLS

Solid Waste/Recycling Facilities

Transfer Station

There is one transfer station located in the City of Glens Falls on Luzerne Road. However, the land on which the transfer station is located is leased to the Town of Queensbury. Therefore, the transfer station located in the City of Glens Falls, at the City's old landfill, is operated by the Town of Queensbury. City businesses and residents may use the Town of Queensbury-operated transfer station.

City businesses and residents are also allowed to use the Town of Queensbury transfer station located on Ridge Road, in Queensbury.

Material Collection

MSW

Businesses and residents of the City of Glens Falls who do not use either of the two Town of Queensbury-operated transfer stations typically contract private haulers to collect their MSW for disposal. Private haulers who collect MSW in the City may deliver the collected waste to any disposal facility of their choosing.

Additionally, the City collects yard waste from its residents' curbside using municipal employees and equipment from April to November. The collected material is transported to a private company and/or the City of Glens Falls' composting pile.

Recyclables

Businesses and residents of the City of Glens Falls who do not use either of the two Town of Queensbury-operated transfer stations typically contract private haulers to collect recyclables.

Construction and Demolition Material

Businesses and residents of the City of Glens Falls who do not use either of the two Town of Queensbury-operated transfer stations typically contract private haulers to collect and dispose of C&D material.

TOWN OF HAGUE

Solid Waste/Recycling Facilities

Transfer Station

There is one transfer station located in the Town of Hague. The transfer station is Town-owned and privately-operated and is located at the Town's closed landfill on Valley View Road. The Town transfer station is open three days a week during the summer and two days a week during the winter, except for holidays.

In 2019, the Town transfer station accepted 138.26 tons of MSW for disposal. Additionally, 37.27 tons of MSW were accepted for recycling. The Town transfer station also accepted 104.56 tons of C&D material including large non-processable residential MSW items (bulky waste). The Town transfer station is registered with the NYSDEC and can accept no more than 12,500 tons of solid waste on an annual basis. There is no additional physical capacity to accept additional waste beyond this imposed limit.

MSW accepted at the Town transfer station is transported by the municipally contracted private operator to the HFWTEF as well as the Clinton County landfill. Bulky waste MSW items are also accepted at the Town transfer station center including items such as: mattresses, couches, rugs, tires, recliners and box springs. Bulky waste MSW items received at the Town transfer station are placed in a roll-off container along with the C&D material accepted at the facility.

MSW brought to the Town transfer station, except for bulky waste items, is placed in a 40-yard roll-off container by the facility user or facility attendant, if required. The roll-off container is equipped with a compactor. Residents are charged a fee on a per bag basis. Non-processible bulky waste items accepted at the town transfer station have set disposal rates.

Brush accepted at the Town transfer station is transported by the municipally contracted private operator to a private tree company for further processing.

Recyclables accepted at the Town transfer station include, among others: newspaper, magazines, office paper, corrugated cardboard, glass, aluminum cans, metal, plastic (#1-#7) and tin. In 2019, the Town transfer station accepted 11.55 tons of corrugated cardboard, 13.26 tons of bulk metal and 12.46 tons of mixed recyclables. Recyclables accepted at the Town transfer station are transported by the municipally contracted private operator to the ultimate recycler.

There is one roll-off container designated for recyclables located at the transfer station. All the recyclables accepted at the facility are placed into this container and later transported by the transfer station private operator to a single-stream recycling MRF in Vermont.

C&D material brought to the Town transfer station is measured by volume by an attendant. Once the volume of C&D material is estimated and the fee has been paid accordingly, the facility user or facility attendant, if required, throws the accepted C&D material into a roll-off container along with bulky waste MSW accepted at the facility. The municipally contracted private operator transports the accepted C&D and bulky waste material to ultimately be disposed of at the Clinton County landfill.

The private operator also accepts electronics waste at the Town-owned transfer station which is ultimately transported to an electronics recycler.

Material Collection

MSW

Businesses and residents of the Town of Hague who do not use the Town transfer station typically contract private haulers to collect their MSW for disposal. Private haulers who collect MSW in the Town may deliver the collected waste to any disposal facility of their choosing.

Recyclables

Businesses and residents of the Town of Hague who do not use the Town transfer station typically contract private haulers to collect their recyclables.

Construction and Demolition Material

Businesses and residents of the Town of Hague who do not use the Town transfer station typically contract private haulers to collect their C&D material.

System Expenses

The Town does not spend any money on solid waste and recycling services since the Town transfer station is currently privately operated.

TOWN OF HORICON

Solid Waste/Recycling Facilities

Transfer Station

There is one transfer station located in the Town of Horicon. The transfer station is Town-owned and -operated and is located at the Town's closed landfill at 19 Town Dump Road. The landfill has been closed since 1994. The Town transfer station is open four days a week.

In 2018, the Town-owned and -operated transfer station accepted approximately 252.35 tons of MSW and 307.59 tons of C&D material for disposal and an additional 118.64 tons of material recovered for recycling. The Town's transfer station currently has the physical capacity to accept extra waste, although under its current registration with the NYSDEC it can accept no more than 12,500 tons of solid waste on an annual basis.

MSW accepted at the Town transfer station is transported by a municipally contracted private hauler to the HFWTEF. In 2018, the Town sent approximately 252.35 tons of MSW to the HFWTEF. MSW accepted at the Town transfer station center includes bulky waste items such as: mattresses, couches, rugs, tires, recliners and box springs. Bulky waste MSW items are accepted in a separate roll-off container from other MSW accepted at the facility. However, all bulky waste MSW items accepted at the facility are sent to the HFWTEF.

MSW brought to the Town transfer station for disposal, except for a few bulky waste items, is weighed on a small scale located at the facility by an attendant. Once the MSW is weighed and the fee has been paid accordingly, the attendant throws the accepted MSW into a roll-off container. The roll-off container is equipped with a compactor.

Bulky waste items accepted at the Town transfer station that are too large to be weighed on the facility's scale have set disposal rates. All bulky waste items accepted at the facility are placed in a roll-off container by an attendant.

Recyclables accepted at the Town transfer station include, among others: plastic food, juice, detergent and shampoo containers, glass, tin and aluminum food containers, newspaper, junk mail and corrugated cardboard. In 2018, the Town transfer station accepted approximately 66 tons of glass, 19.9 tons of corrugated cardboard, 19.33 tons of mixed paper, 6.89 tons of commingled plastic and 6.52 tons of metal. All recyclables

accepted at the Town transfer station were transported to a privately-operated facility in either Warren or Washington County. The Town also accepts return bottles and cans at the Town transfer station which are donated to local charities.

Individuals that bring recyclables to the Town transfer station are required to presort recyclables on a table inside the transfer station's recycling center. Attendants take the recyclables off the table and throw them into the corresponding roll-off container for the individual. The Town has separate 40-yard roll-off containers for commingled plastic, mixed glass, tin cans, newspaper and corrugated cardboard.

C&D material brought to the Town transfer station for disposal, except for large quantities which are measured by cubic yards, is weighed on a small scale located at the facility by an attendant. Once the C&D material is weighed or the cubic yards have been estimated and the fee has been paid accordingly, the attendant throws the accepted C&D material into a roll-off container. The roll-off container is equipped with a compactor. The Town contracted a private hauler to transport approximately 307.59 tons of C&D and bulky waste material to a privately-operated transfer station in Washington County which was ultimately disposed of at another facility in 2018.

The Town accepts household batteries, car batteries, electronic waste and white goods at its transfer station. It does not accept propane tanks or motor oil.

Material Collection

MSW

Businesses and residents of the Town of Horicon who do not use the Town transfer station typically contract private haulers to collect their MSW for disposal. Private haulers who collect MSW in the Town may deliver the collected waste to any disposal facility of their choosing.

Recyclables

Businesses and residents of the Town of Horicon who do not use the Town transfer station typically contract private haulers to collect recyclables.

Construction and Demolition Material

Businesses and residents of the Town of Horicon who do not use the Town transfer station typically contract private haulers to collect and dispose of C&D material.

System Expenses

The Town budgeted $115,195 for its 2019 solid waste and recycling services. $56,565 was budgeted for Labor and $63,630 was budgeted for Tip Fees and material transport.

TOWN OF JOHNSBURG

Solid Waste/Recycling Facilities

Transfer Station

There is one transfer station located in the Town of Johnsburg. The transfer station is Town-owned and -operated and is located at the Town's closed landfill on Loop Road in the Hamlet of North Creek. The Town transfer station is open five days a week, except for holidays. Town residents must obtain a permit from the Town in order to use the facility.

In 2019, the Town-owned and -operated transfer station accepted approximately 905 tons of MSW and 340 tons of C&D material for disposal and an additional 149 tons of material recovered for recycling. The Town's transfer station currently has the physical capacity to accept minimal extra waste, although under its current registration with the NYSDEC it can accept no more than 12,500 tons of solid waste on an annual basis.

MSW accepted at the Town transfer station is transported by a municipally contracted private hauler to the HFWTEF. The Town sent approximately 905 tons of MSW handled at the Town transfer station to the HFWTEF in 2019 for disposal.

MSW brought to the Town transfer station, except for bulky waste items, is placed in a 40-yard roll-off container by the Town resident. The roll-off container is equipped with a compactor. Residents are charged a fee on a per bag basis.

All bulky waste items accepted at the facility are placed in a roll-off container designated for C&D material by the Town resident.

The Town also accepted yard waste at the Town transfer station until the NYSDEC issued open burning regulations in October 2009. The quantity of yard waste accepted at the Town transfer station was not measured. The Town acquired a burning permit for this purpose. However, due to the NYSDEC's open burning regulations, the Town no longer accepts most yard waste to be burned. Currently, the Town only accepts leaf debris and grass clippings which are composted on-site.

Recyclables accepted at the Town transfer station include glass (clear, green & brown), plastics (HDPE, PETE and clear vinyl), steel cans, aluminum cans, metal structures and corrugated cardboard. In 2019, the Town transfer station accepted approximately 9 tons of glass, 11.27 tons of plastic, 39.27 tons of corrugated cardboard, 8.65 tons of tin cans, 43.21 tons of scrap metal and 37.89 tons of newspaper. All of the recyclables accepted at the Town transfer station were transported by a municipally contracted private hauler to a privately-operated MRF.

The Town has separate 40-yard roll-off containers for commingled plastic, mixed glass, tin cans, newspaper and corrugated cardboard. Individuals that bring recyclables to the Town transfer station are required to sort recyclables and place them into the corresponding roll-off container. Individuals that bring in metal structures for recycling are asked to place the metal in a pile which is later picked up by a local private metal recycler.

C&D material brought to the Town transfer station is placed in a 40-yard roll-off container along with bulky waste MSW by the Town resident. In 2019, the Town sent approximately 340 tons of C&D and bulky waste material to a privately-operated transfer station in Washington County to ultimately be disposed of at another facility through a municipally contracted private hauler.

The Town accepts household batteries (Dry Cell only) and white goods at its transfer station. However, all the Freon must be removed from the material before it is accepted at the facility.

Material Collection

MSW

Businesses and residents of the Town of Johnsburg who do not use the Town-operated transfer station typically contract private haulers to collect their MSW for disposal. Private haulers who collect MSW in the Town may deliver the collected waste to any disposal facility of their choosing.

Recyclables

Businesses and residents of the Town of Johnsburg who do not use the Town transfer station typically contract private haulers to collect recyclables.

Construction and Demolition Material

Businesses and residents of the Town of Johnsburg who do not use the Town transfer station typically contract private haulers to collect and dispose of C&D material.

System Expenses

In 2019, the Town spent $201,959.71 on its solid waste and recycling services. Of this expenditure, $114,138.65 was spent on solid waste and recycling services personnel payroll and $87,821.16 was spent on municipally contracted private haulers and solid waste Tip Fees.

TOWN OF LAKE GEORGE

Solid Waste/Recycling Facilities

Transfer Station

The Town of Lake George operates a transfer station located within its borders. The land on which the transfer station is located is Village-owned. However, the Village leases the land to the Town of Lake George. The Town previously operated a landfill at the transfer station site. The transfer station is open six days a week in the summer and five days a week for the rest of the year, excluding holidays. Only Town and Village of Lake George residents and businesses are allowed to use the transfer station. The Town operated transfer station currently has the physical capacity to accept extra waste, although under its current registration with the NYSDEC it can accept no more than 12,500 tons of solid waste on an annual basis.

MSW accepted at the Town-operated transfer station is transported by the Town to the HFWTEF. The Town sent approximately 615.7 tons of MSW to the HFWTEF in 2019. This includes bulky waste MSW items such as: mattresses, couches, rugs, tires, recliners and box springs.

MSW brought to the Town-operated transfer station, except for bulky waste items, is placed in a 40-yard roll-off container by the Town resident or transfer station attendant. The roll-off container is loaded with a compactor. Transfer station users are charged a fee on a per bag basis.

All bulky waste items, accepted at the facility are placed in a separate roll-off container by the facility user or transfer station attendant, if required. Bulky waste MSW items accepted at the Town transfer station have set disposal rates. Transfer station attendants compact bulky waste material with a bucket loader.

The Town also accepts leaf debris, brush and grass clippings at the transfer station which are composted on-site, which is processed and used by a private company.

Recyclables accepted at the Town-operated transfer station include glass (clear and colored), plastics (#1-#3), steel cans, aluminum cans, metal structures, newspaper, magazines and corrugated cardboard. In 2019, the Town transfer station accepted approximately 49.22 tons of commingled paper, 92.69 tons of corrugated cardboard, 82.51 tons of mixed metal, 75 tons of glass, 10.9 tons of electronics and 8.41 tons of commingled plastic.

Recyclables accepted at the Town-operated transfer station are transported by the Town to various buyers of the material. Additionally, glass received at the Town-operated transfer station is sent to the County-operated gravel pit and used as aggregate.

Individuals that bring recyclables to the Town-operated transfer station are required to presort recyclables and place them into 3′ x 3′ metal bins. When the 3′ x 3′ metal containers are full, transfer station attendants will transfer the recyclables from the metal bins into 40-yard roll-off containers. The transfer station has separate 40-yard roll-off containers for commingled plastic, mixed glass, metal cans, newspaper, scrap metal and corrugated cardboard.

C&D material brought to the Town-operated transfer station is placed in a 40-yard roll-off container by the facility user or by the facility attendant, if required. Transfer station users are charged by the cubic yard. The Town sends all the C&D material accepted at the Town-operated transfer station to the Town-owned and -operated C&D landfill. In 2019, the Town transfer station accepted approximately 53.4 of C&D material.

C&D Landfill

The Town owns and operates a C&D landfill located on Transfer Road. The Town estimates that the C&D landfill has approximately 20 years of remaining, but not yet constructed, landfill capacity as authorized by its Part 360 permit.

Up until the beginning of 2010, Town residents could bring their C&D debris directly to the Town C&D landfill. Individuals that used the Town C&D landfill were asked to dump their C&D material onto a concrete pad. Once the volume had been estimated and the fee had been paid accordingly, a landfill attendant pushed the dumped material off the concrete pad into a pit.

However, the C&D landfill is currently not open to the public and Town residents are asked to bring their C&D material to the Town transfer station. Once the C&D material is centralized at the Town transfer station, town personnel transport the material to the Town C&D landfill using Town equipment. Town personnel have noted that this method allows the Town to pull recyclables out of the C&D material waste stream before it is deposited into the landfill.

Material Collection

MSW

Businesses and residents of the Town of Lake George who do not use the Town-operated transfer station typically contract private haulers to collect their MSW for disposal. Private haulers who collect MSW in the Town may deliver the collected waste to any disposal facility of their choosing.

Recyclables

Businesses and residents of the Town of Lake George who do not use the Town transfer station typically contract private haulers to collect recyclables.

Additionally, the Town collects yard waste from residents twice per year using Town-owned collection vehicles and municipal employees.

Construction & Demolition Material

Businesses and residents of the Town of Lake George who do not use the Town-operated transfer station typically contract private haulers to collect and dispose of C&D material.

System Expenses

In 2019, the Town spent $192,602 on its solid waste and recycling services. $132,016 of this budget was spent on full and part time personnel. Additionally, $9,057 was spent on refuse Tip Fees.

VILLAGE OF LAKE GEORGE

Solid Waste/Recycling Facilities

Transfer Station

The transfer station located in the Village of Lake George is operated by the Town of Lake George. Village businesses and residents may use the Town of Lake George-operated transfer station.

Material Collection

MSW

Businesses and residents in the Village of Lake George who do not use the Town-operated transfer station typically contract private haulers to collect their MSW for disposal. Private haulers who collect MSW in the Village may deliver the collected waste to any disposal facility of their choosing.

Recyclables

Businesses and residents of the Village of Lake George who do not use the Town transfer station typically contract private haulers to collect their recyclables.

Additionally, the Village collects yard waste from residents twice per year using Village-owned collection vehicles and municipal employees.

Construction and Demolition Material

Businesses and residents of the Village of Lake George who do not use the Town-operated transfer station typically contract private haulers to collect and dispose of their C&D material.

System Expenses

The Village did not provide information for its 2019 solid waste and recycling services.

TOWN OF LAKE LUZERNE

Solid Waste/Recycling Facilities

Transfer Station

There is one transfer station located in the Town of Lake Luzerne. The transfer station is Town-owned and -operated and is located at the Town's closed landfill at 123 Towner Road. The Town transfer station is open four days a week, except for holidays. Town businesses and residents must obtain a permit from the Town in order to use the facility.

The Town's transfer station currently has the physical capacity to accept minimal extra waste, although under its current registration with the NYSDEC it can accept no more than 12,500 tons of solid waste on an annual basis.

MSW accepted at the Town transfer station, except for bulky waste MSW, is transported by a municipally contracted private hauler to the HFWTEF. In 2019, the Town sent approximately 1,030 tons of MSW to the HFWTEF for disposal.

MSW brought to the Town transfer station, except for bulky waste items, is placed in a 40-yard roll-off container by the Town resident or transfer station attendant. The roll-off container is equipped with a compactor. Transfer station users are charged a fee on a per bag basis or asked to drive their vehicle over a scale to be weighed and then charged a fee accordingly.

All bulky waste items, such as mattresses, couches, rugs, tires, recliners and box springs, accepted at the facility are placed in a roll-off container designated for C&D material by the Town resident or transfer station attendant, if required. Transfer station users are required to weigh their bulky waste on the facility scale and charged accordingly.

The Town also accepts leaf debris and grass clippings at the transfer station which are composted on-site.

Recyclables accepted at the Town transfer station include glass, plastics (#1-#7), steel cans, aluminum cans, metal structures, newspaper, magazines, phonebooks, junk mail, office paper, textiles and corrugated cardboard. All of the recyclables accepted by the Town are either transported by a municipally contracted private hauler to the ultimate recycler or are transported by the ultimate recycler to their remanufacturing and recycling facility.

The Town has separate 40-yard roll-off containers for commingled plastic, mixed glass, tin cans, newspaper, periodicals, scrap metal and corrugated cardboard. Town transfer station users are required to sort recyclables and place them into the corresponding roll-off container. A transfer station attendant will assist, if required.

C&D material brought to the Town transfer station is placed in a 40-yard roll-off container by the facility user or by the facility attendant. Transfer station users are required to weigh their C&D material on the facility scale and charged accordingly. In 2019, the Town sent all of the C&D accepted at the Town transfer station to a privately-operated transfer station in Saratoga County to ultimately be disposed of at another facility through a municipally contracted private hauler.

The Town accepts household batteries, white goods and empty paint cans at its transfer station. It does not accept any other type of Household Hazardous Waste.

Material Collection

MSW

The Town of Lake Luzerne collects MSW from its residents and businesses once a week using municipally owned collection vehicles and municipal employees. The municipally collected MSW is brought directly to the HFWTEF. Additionally, the Town collects yard waste from its residents twice per year using municipally owned collection vehicles and municipal employees. Collected yard waste is transported back to the Town transfer station where it is composted on-site.

Recyclables

The Town municipally collects recyclables from its businesses and residents on a bi-weekly basis. Collected recyclables are transported back to the Town transfer station.

Construction and Demolition Material

Businesses and residents of the Town of Lake Luzerne who do not use the Town transfer station typically contract private haulers to collect and dispose of C&D material.

System Expenses

The Town budgeted 345,000 for its 2019 solid waste and recycling services. Of the $345,000, $182,000 is budgeted for solid waste and recycling services personnel payroll, $5,000 for equipment and $158,000 for contractual expenses such as municipally contracted private haulers, solid waste Tip Fees and utility bills.

TOWN OF QUEENSBURY

Solid Waste/Recycling Facilities

Transfer Station

The Town of Queensbury operates two transfer stations for property owners in the Town of Queensbury and City of Glens Falls. One Transfer station is Town-owned and operated and is located at the Town's closed landfill on Ridge Road. The Ridge Road transfer station is open three days a week, except for holidays. The Ridge Road transfer station is registered with the NYSDEC and can accept no more than 12,500 tons of solid waste on an annual basis. There is currently no additional physical capacity to accept additional waste beyond this imposed limit. However, if the Town were to invest capital into the current infrastructure for expansion, it would be possible to accept additional waste.

The Town also operates a transfer station located on Luzerne Road. The land on which the Luzerne Road transfer station is located is owned by the City of Glens Falls and leased to the Town of Queensbury. It is located at the City's closed landfill and is open three days a week. The Luzerne Road transfer station is registered with NYSDEC and can accept no more than 12,500 tons of solid waste on an annual basis. There is no additional physical capacity to accept additional waste beyond this imposed limit.

Ridge Road Transfer Station

MSW accepted at the Ridge Road transfer station is transported by a municipally contracted private hauler to the HFWTEF. The Town accepted approximately 874.51 tons of MSW at the Ridge Road transfer station in 2018. MSW accepted at the Ridge Road transfer station center includes bulky waste items such as: mattresses, couches, rugs, tires, recliners and box springs.

MSW brought to the Ridge Road transfer station, including bulky waste MSW, is placed into two 50-yard roll-off containers by the facility user or transfer station attendant, if required. The roll-off containers are equipped with a compactor. Transfer station users are charged a fee per bag or cubic yard, whichever is applicable. Bulky waste MSW items accepted at the Ridge Road transfer station have set disposal rates.

The Town also accepts yard waste and brush at the Ridge Road transfer station. Yard waste is composted on-site, and brush is processed into mulch by a private company. Both end products are used for multiple purposes.

Recyclables accepted at the Ridge Road transfer station include glass (clear and colored), plastics (#1 - #3), steel cans, aluminum cans, scrap metal, newspaper, magazines, junk mail and corrugated cardboard. In 2018, the Town accepted 111.49 tons of paper, 30 tons of glass, 21.78 tons of plastic, 8.23 tons of tin cans, 123.86 tons of bulk metal and 1,600 yards of brush at the Ridge Road transfer station. Most of the recyclables accepted at the Ridge Road transfer station are either transported by a municipally contracted private hauler to the ultimate recycler or are transported by the ultimate recycler to their remanufacturing and recycling facility. Glass received at the Ridge Road transfer station is sent to the County-operated gravel pit to be used as aggregate.

The Ridge Road transfer station has three 40-yard roll-off containers: one for commingled plastic, one for newspaper and one corrugated cardboard. The Ridge Road transfer station also has four 30-yard roll-off containers: one for scrap metal, one for colored glass, one for clear galls and one for comingled magazines, junk mail and paper. Additionally, the Ridge Road transfer station has a 40-yard roll-off container for steel/tin cans. Individuals that bring recyclables to the Ridge Road transfer station are required to sort recyclables and place them into the corresponding roll-off container. A transfer station attendant will assist when necessary.

C&D material brought to the Ridge Road transfer station is measured by volume by an attendant. Once the volume of C&D material is estimated and the fee has been paid accordingly, the facility user or facility attendant, if required, places the accepted C&D material into the roll-off container in which the MSW is placed. C&D material accepted at the Ridge Road transfer station is mixed in with MSW accepted at the facility and transported by a municipally contracted private hauler to the HFWTEF. The Town does not accept C&D material that is not accepted at the HFWTEF, such as gypsum board or roof shingles.

Luzerne Road Transfer Station

MSW accepted at the Luzerne Road transfer station is transported by a municipally contracted private hauler to the HFWTEF. In 2018, the Town accepted approximately 991.16 tons of MSW at the Luzerne Road transfer station. MSW accepted at the Luzerne Road transfer station center includes, bulky waste items such as: mattresses, couches, rugs, tires, recliners and box springs.

MSW brought to the Luzerne Road transfer station, including bulky waste MSW, is placed in a 50-yard roll-off container by the facility user or transfer station attendant, if required. The roll-off container is equipped with a compactor.

Transfer station users are charged a fee per bag or cubic yard, whichever is applicable. Bulky waste MSW items accepted at the Luzerne Road transfer station have set disposal rates.

The Town does not accept yard waste or brush at the Luzerne Road transfer station.

Recyclables accepted at the Luzerne Road transfer station include: glass (clear and colored), plastics (#1 - #3), steel cans, aluminum cans, scrap metal, newspaper, magazines, junk mail and corrugated cardboard, In 2018, the Town accepted 121.65 tons of paper, 30 tons of glass, 28.64 tons of plastic, 16.71 tons of tin cans and 95.16 tons of bulk metal at the Luzerne Road transfer station. Most of the recyclables accepted at the Luzerne Road transfer station are either transported by a municipally contracted private hauler to the ultimate recycler or are transported by the ultimate recycler to their remanufacturing and recycling facility. Additionally, glass received at the Luzerne Road transfer station is sent to the County-operated gravel pit to be used as aggregate.

The Luzerne Road transfer station has three 40-yard roll-off containers: one for commingles plastic, one for newspaper and one for corrugated cardboard. The Luzerne Road transfer station also has five 30-yard roll-off containers: one for colored glass, one for clear glass, one for steel/tin cans, one for scrap metal and one for comingled magazines, junk mail and paper. Individuals that bring recyclables to the Luzerne Road transfer station are required to sort recyclables and place them into the corresponding roll-off container or pile. A transfer station attendant will assist when necessary.

C&D material brought to the Luzerne Road transfer station is measured by volume by an attendant. Once the volume of C&D material is estimated and the fee has been paid accordingly, the facility user or facility attendant, if required, places the accepted C&D material into the roll-off container in which the MSW is placed. C&D material accepted at the Luzerne Road transfer station is mixed in with MSW accepted at the facility and transported by a municipally contracted private hauler to the HFWTEF. The Town does not accept C&D material that is not accepted at the HFWTEF, such as gypsum board and roof shingles.

Material Collection

MSW

Businesses and residents of the Town of Queensbury who do not use either of the two Town-operated transfer stations typically contract private haulers to collect their MSW for disposal. Private haulers who collect MSW in the Town may deliver the collected waste to any disposal facility of their choosing.

Additionally, the Town collects yard waste from its residents' curbside two times per year using municipal employees and equipment. The collected material is transported to a private company or the Town of Queensbury Highway Department gravel pit for a composting pile.

Recyclables

Businesses and residents of the Town of Queensbury who do not use either of the two Town-operated transfer stations typically contract private haulers to collect recyclables.

Construction and Demolition Material

Businesses and residents of the Town of Queensbury who do not use either of the two Town-operated transfer stations typically contract private haulers to collect and dispose of C&D material.

System Expenses

In 2018, the Town spent approximately $490,362 for solid waste and recycling services.

TOWN OF STONY CREEK

Solid Waste/Recycling Facilities

Transfer Station

There is one transfer station located in the Town of Stony Creek. The transfer station is Town-owned and -operated and is located at the Town's closed landfill on Hill Road. The Town transfer station is open five days a week, except for holidays.

In 2019, the Town-owned and -operated transfer station accepted approximately 139 tons of MSW and 77 tons of C&D and bulky waste MSW material for disposal and an additional 67 tons of material recovered for recycling or composting. The Town's transfer station is registered with the NYSDEC and can accept no more than 12,500 tons of solid waste on an annual basis. There is no additional physical capacity to accept additional waste beyond this imposed limit.

MSW brought to the Town transfer station, except for bulky waste items, is placed in a 40-yard roll-off container by the Town resident. The roll-off container is equipped with a compactor. Residents are charged a fee on a per bag basis. MSW accepted at the Town transfer station is transported by the Town to the HFWTEF. All bulky waste MSW items accepted at the facility have set disposal rates and are placed in a separate roll-off container by the facility user, or transfer station attendant if required. In 2019, the Town also accepted approximately 20 cubic yards of leaves and yard trimmings.

Recyclables accepted at the Town transfer station include glass, plastics (#1-#7), metal containers, bulk metal, aluminum and corrugated cardboard. In 2019, the Town transfer station accepted 11.4 tons of glass, 8 tons of plastic, 6.16 tons of corrugated cardboard, 4.64 tons of metal containers, 15.96 tons of scrap metal, .8 tons of aluminum and 16.25 tons of newspaper and magazines. All of the recyclables accepted at the Town transfer station were transported by a municipally contracted private hauler to a privately-operated MRF.

The Town has five 40-yard roll-off containers for recyclables: one for commingled plastic (#1-#7), one for newspaper and magazines, one for scrap metal, one for corrugated cardboard and one with two different compartments for mixed glass and tin cans. Individuals that bring recyclables to the Town transfer station are required to sort recyclables and place them into the corresponding roll-off container

The Town accepts a limited quantity of C&D material at the Town transfer station. C&D material accepted at the Town transfer station is placed in a 40-yard roll-off container along with bulky waste MSW by the Town resident, or transfer station attendant if required. In 2019, the Town contracted a private hauler to transport approximately 77 tons of C&D and bulky waste material to a privately-operated transfer station in Saratoga County which was ultimately disposed of at another facility.

The Town also accepts batteries at its transfer station.

Material Collection

MSW

Businesses and residents of the Town of Stony Creek who do not use the Town transfer station typically contract private haulers to collect their MSW for disposal. Private haulers who collect MSW in the Town may deliver the collected waste to any disposal facility of their choosing.

Recyclables

Businesses and residents of the Town of Stony Creek who do not use the Town transfer station typically contract private haulers to collect their recyclables.

Construction and Demolition Material

Businesses and residents of the Town of Stony Creek who do not use the Town transfer station typically contract private haulers to collect and dispose of their C&D material.

System Expenses

In 2019, the Town spent $8,789 on hauling fees, $14,825 on Tip Fees and $27,421 on labor for its solid waste and recycling services.

TOWN OF THURMAN

Solid Waste/Recycling Facilities

C&D Landfill

The Town owns and operates a C&D landfill located on Irving Baker Road. Only Town residents and businesses can use the Town C&D landfill. The Town charges users of the C&D landfill by the cubic yard. It is estimated that the Town C&D landfill is currently two-thirds full.

Additionally, the Town operates a Drop-Off Center located at the C&D landfill. Town residents are able to drop off bulky waste MSW and recyclables at the Drop-Off Center. The C&D landfill and Drop-Off Center are open three days a week, excluding holidays.

Bulky waste MSW items, such as sofas, couches, or mattresses, are placed in a 40-yard roll-off container by the Town resident or Drop-Off Center attendant, if required. The attendant compacts the bulky waste with a loader.

Recyclables accepted at the Town Drop-Off Center include glass, plastics, steel cans, aluminum cans, metal structures, newspaper and corrugated cardboard. All of the recyclables accepted by the Town are either transported by a municipally contracted private hauler to the ultimate recycler or are transported by the ultimate recycler to their remanufacturing and recycling facility.

The Town has separate 40-yard roll-off containers for commingled plastic, mixed glass, metal cans, newspaper and corrugated cardboard. Facility users are required to sort recyclables and place them into the corresponding roll-off container. Additionally, the Town has a metals pile where Drop-Off Center users are asked to place their metal structures.

Material Collection

MSW

Businesses and residents of the Town of Thurman who do not use the Town Drop-Off Center typically contract private haulers to collect their MSW for disposal. Private haulers who collect MSW in the Town may deliver the collected waste to any disposal facility of their choosing.

Recyclables

Businesses and residents of the Town of Thurman who do not use the Town Drop-Off Center typically contract private haulers to collect their recyclables.

Construction and Demolition Material

Businesses and residents of the Town of Thurman who do not use the Town C&D landfill typically contract private haulers to collect and dispose of their C&D material.

System Expenses

The Town did not provide information for its 2019 solid waste and recycling services.

TOWN OF WARRENSURG

Solid Waste/Recycling Facilities

Transfer Station

There is one transfer station located in the Town of Warrensburg. The transfer station is Town-owned and operated and is located at the Town's closed landfill. The Town transfer station is open six days a week, closed on Mondays and holidays. In October 2019, the Town started to charge $0.10 per pound for all waste accepted, except recyclables.

In 2018, the Town-owned and operated transfer station accepted 937.8 tons of MSW for disposal. This material was taken to the HFWTEF. The Town received 243.8 tons of C&D material which was sent to a regional facility in Saratoga County.

All the materials brought to the Town transfer station are placed in 40-yard roll-off containers for transport. Newspapers and magazines are in a smaller covered container. The Town currently contracts for hauling of all the materials with a private company.

In 2018, the Town also received 18 tons of glass, 38.60 tons of co-mingled paper, 20.7 tons of plastics, 11.75 tons of magazines, 9.89 tons of newspaper and 48.32 tons or corrugated cardboard which was taken to Perkins Recyclables in Queensbury.

103.6 tons of bulk metals and tin & aluminum containers were accepted at the facility and transported to R. Cohen in Glens Falls for recycling. 11.13 tons of electronics materials were taken in during the year and picked up by Evolution Recycling of Johnston, New York. Since the recycling market has dried up, it costs the Town to continue to recycle materials.

Material Collection

MSW

Businesses and residents of the Town of Warrensburg who do not use the Town transfer station typically contract with private haulers to collect their MSW for disposal. Private haulers who collect MSW in the Town may deliver the collected waste to any disposal facility of their choosing.

Recyclables

Businesses and residents of the Town of Warrensburg who do not use the Town Transfer station typically contract private haulers to collect their recyclables.

Construction and Demolition Material

Businesses and residents of the Town of Warrensburg who do not use the Town transfer Station typically contract with private haulers to collect their C&D material.

System Expenses

In 2019 the Town of Warrensburg budgeted $158,000 for its solid waste and recycling services. Warren County currently handles the bidding process for the Towns.

SOLID WASTE MANAGEMENT FACILITY INVENTORY TABLE 5.1			
Owner	**Facility Type**	**Current Permitted or Registered Limit**	**Physical Capacity**
Town of Bolton	Transfer Station	Registered with the DEC and can accept up to 12,500 tons of solid waste on an annual basis.	Accepted approximately 1,299 tons of solid waste in 2019. Of the material accepted, 303.21 tons were recycled, giving the Town an 23.34% recycling rate. The Town has physical capacity to accept additional waste.
Town of Chester	Transfer Station	Registered with the DEC and can accept up to 12,500 tons of solid waste on an annual basis.	Accepted approximately 926 tons of solid waste in 2019. Of the material accepted, 234.69 tons were recycled, giving the Town an 20.91% recycling rate. The Town has physical capacity to accept additional waste.
City of Glens Falls	Transfer Station **Operator**: Town of Queensbury	Registered with the DEC and can accept up to 12,500 tons of solid waste on an annual basis.	Accepted approximately 1,283 tons of solid waste in 2019. Of the material accepted, 292.16 tons were recycled. The City does not have physical capacity to accept much additional waste. Combined with waste received at the Town of Queensbury transfer station, the total combined recycling rate of both municipalities is 30.73%.
Town of Hague	Transfer Station **Operator**: Casella Waste Management	Registered with the DEC and can accept up to 12,500 tons of solid waste on an annual basis.	Accepted approximately 280 tons of solid waste in 2019. Of the material accepted, 37.27 tons were recycled, giving the Town an 13.31% recycling rate. The Town does not have physical capacity to accept much additional waste
Town of Horicon	Transfer Station	Registered with the DEC and can accept up to 12,500 tons of solid waste on an annual basis.	Accepted approximately 679 tons of solid waste in 2018. Of the material accepted, 118.64 tons were recycled, giving the Town an 17.4% recycling rate. The Town has physical capacity to accept additional waste.
Town of Johnsburg	Transfer Station	Registered with the DEC and can accept up to 12,500 tons of solid waste on an annual basis.	Accepted approximately 1,394 tons of solid waste in 2019. Of the material accepted, 234.69 tons were recycled, giving the Town an 10.70% recycling rate. The Town currently has physical capacity to accept minimal additional waste.
Village of Lake George	Transfer Station **Operator**: Town of Lake George	Registered with the DEC and can accept up to 12,500 tons of solid waste on an annual basis.	Accepted approximately 988 tons of solid waste in 2019. Of the material accepted, 318.73 tons were recycled, giving the Town an 32.27% recycling rate. The Town has physical capacity to accept additional waste.
Town of Lake George	C&D Landfill	There is currently no permitted limit on the amount of C&D material that can be accepted at the Town's C&D landfill since it only accepts material from Town residents.	Accepted approximately 284 tons of C&D material in 2018. Remaining permitted but not yet constructed landfill capacity = 40,900 cubic yards.
Town of Lake Luzerne	Transfer Station	Registered with the DEC and can accept up to 12,500 tons of solid waste on an annual basis.	Volume of material collected at facility is not available. Currently has physical capacity to accept minimal additional waste.
Town of Queensbury	Transfer Station	Registered with the DEC and can accept up to 12,500 tons of solid waste on an annual basis.	Accepted approximately 1,170 tons of solid waste in 2018. Of the material accepted, 535.36 tons were recycled. Combined with waste received at the City of Glens Falls transfer station, the total combined recycling rate of both municipalities is 30.73%. The Town currently has physical capacity to accept additional waste.
Town of Stony Creek	Transfer Station	Registered with the DEC and can accept up to 12,500 tons of solid waste on an annual basis.	Accepted approximately 284 tons of solid waste in 2019. Of the material accepted, 66.71 tons were recycled, giving the Town an 23.51% recycling rate. The Town does not have physical capacity to accept much additional waste.

Town of Thurman	C&D Landfill/ Recyclable Drop Off Center	There is currently no permitted limit on the amount of C&D material which can be accepted at the Town's C&D landfill since it only accepts material from Town residents.	The Town C&D landfill accepted approximately 3.58 tons of C&D material in 2018. Constructed capacity estimated to currently be two-thirds full. The Town does not track the quantity of material received at its Drop Off Center located at the Town landfill.
Town of Warrensburg	Transfer Station	Registered with the DEC and can accept up to 12,500 tons of solid waste on an annual basis.	Accepted approximately 1,444 tons of solid waste in 2019. Of the material accepted, 261.99 tons were recycled, giving the Town an 18.15% recycling rate. The Town does not have physical capacity to accept a significant amount of additional waste.

OVERVIEW OF EXISTING RECYCLING PROGRAMS

As previously indicated, Warren County does not currently have a centralized recycling system. However, on March 15, 1991 the County adopted Local Law #2 of 1991, "A Local Law Requiring the Source Separation and Segregation of Recyclable or Reusable Materials from the Solid Waste Stream in Warren County" (ATTACHMENT B), which mandated the following stipulations, among others:

- Effective April 1, 1991, source separation and segregation of recyclable or reusable materials from solid waste shall be required by every person and business generating such waste in Warren County.
- Solid waste that has been left for collection or is delivered by the generator of such wastes to a solid waste management facility, shall be separated by the generator into recyclable, reusable or other components as described and directed by the rules and regulations promulgated by the Warren County Superintendent of Public Works.
- Each town, city and village within the County shall be responsible for the separation, segregation and storage on-site for disposal, the material described in the orders, rules and regulations promulgated by the Superintendent and shall adopt such uniform local laws or ordinances to accomplish the objectives of this Local Law.
- Each municipality in the County shall be responsible for the operation of a recycling/solid waste transfer station. Any municipality may join with one or more municipalities in establishing a joint recycling/solid waste transfer station.

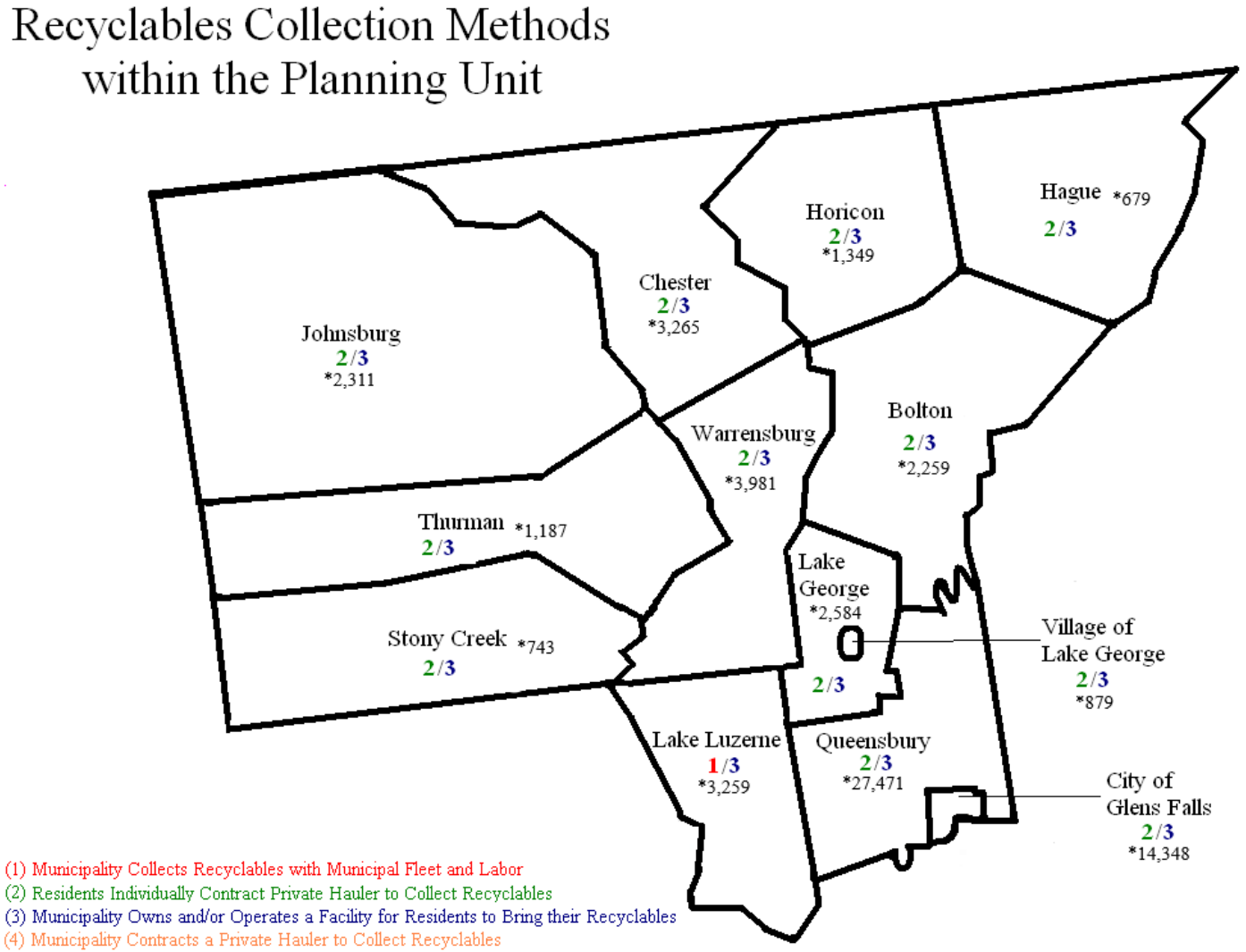
Enforcement of the above listed requirements was delegated to each municipality within the County through the following clause provided in Local Law #2 of 1991:

- Each Town, City, or Village within the County shall be responsible for the adoption, implementation and enforcement of local laws, rules and regulations adopted by such municipality relating to the source separation and segregation of recyclables or reusable material from solid waste.

In addition to owning and/or operating a solid waste transfer station for municipal residents to bring their recyclables, some municipalities located in the Planning Unit also collect recyclables from their residents by using municipal equipment and personnel.

Recyclables commonly handled by municipalities within the Planning Unit include glass, newspaper, magazines, phonebooks, junk mail, plastics (#1-#2), steel cans, aluminum cans, metal structures and corrugated cardboard. Some municipalities also handle additional items such as office paper and plastics (#3-#7). TABLE 5.2 indicates the type and total quantity of recyclables handled by each municipality within the Planning Unit in either 2018 or 2019, as reported by each municipality to the Warren County DPW for the purpose of completing this LSWMP. Municipalities that responded earlier to the Warren County DPW information request submitted annual numbers for 2018. It will be assumed that municipalities and disposal facilities that submitted data for 2018 experienced similar waste volumes and recycling rates in 2019.

The following map indicates the recycling services offered by each municipality located within the Planning Unit:



* Indicates estimated population, as reported by the U.S. Census Bureau in 2018.

TABLE 5.2	
Municipality	**Recyclable Material Handled & Volume**
Town of Bolton	In 2019, the Town transfer station accepted approximately 14,98 tons of newspaper, 10.99 tons of magazines, 44.91 tons of corrugated cardboard, 4.54 tons of metal cans, 102.88 tons of bulk metal, 19.91 tons of plastics (#1-#7) and 210 cubic yards of glass (approximately 105 tons @ 1,000 lbs./cy). The Town received approximately 303.21 total tons of recycled material at the Town transfer station in 2019, giving it an estimated recycling rate of 23.34%.
Town of Chester	In 2019, the Town transfer station accepted approximately 86.29 tons of metal containers, 25.38 tons of commingled paper, 12.4 tons of corrugated cardboard, 70 tons of glass, 13 tons of scrap metal, 16.29 tons of commingled plastic and 11.33 tons of electronics. The Town received approximately 234.69 total tons of recycled material at the Town transfer station in 2019, giving it an estimated recycling rate of 20.91%.
City of Glens Falls	Material accepted on behalf of the City of Glens Falls by the Town of Queensbury is not accounted for separately from the total volume of material accepted at the two Town of Queensbury-operated transfer stations. Of the material accepted at the City of Glens Falls transfer station, 292.16 tons were recycled. The City does not have physical capacity to accept much additional waste. Combined with waste received at the Town of Queensbury transfer station, the total combined recycling rate of both municipalities is 30.73%.
Town of Hague	In 2019, the Town transfer station accepted 11.55 tons of corrugated cardboard, 13.26 tons of scrap metal and 12.46 tons of mixed single stream recyclables. The Town received approximately 37.27 total tons of recycled material at the Town transfer station in 2019, giving it an estimated recycling rate of 13.31%.
Town of Horicon	In 2018, the Town transfer station accepted approximately 66 tons of glass, 6.89 tons of commingled plastic, 19.9 tons of corrugated cardboard, 19.33 tons of mixed paper and 6.52 tons of Bulk Metal. The Town received approximately 118.64 total tons of recycled material at the Town transfer station in 2018, giving it an estimated recycling rate of 17.4%.
Town of Johnsburg	In 2019, the Town transfer station accepted approximately 9 tons of glass, 11.27 tons of plastic, 39.24 tons of corrugated cardboard, 8.65 tons of tin cans, 43.21 tons of scrap metal and 37.89 tons of newspaper. The Town received approximately 234.69 total tons of recycled material at the Town transfer station in 2019, giving it an estimated recycling rate of 10.70%.
Town of Lake George	In 2019, the Town accepted approximately 49.22 tons of commingled paper, 92.69 tons of corrugated cardboard, 82.51 tons of mixed metal, 75 tons of glass, 10.9 tons of electronics and 8.41 tons of commingled plastic at the Village owned transfer station. The transfer station received approximately 234.69 total tons of recycled material at the Village transfer station in 2019, giving it an estimated recycling rate of 32.27%.
Village of Lake George	Material accepted at the Village of Lake George transfer station operated by the Town of Lake George is not accounted for separately between Village and Town residents. Therefore, we have assumed a 32.27% combined recycling rate for both municipalities.
Town of Lake Luzerne	Recyclables accepted at the Town transfer station include glass, plastics (#1-#7), steel cans, aluminum cans, metal structures, newspaper, magazines, phonebooks, junk mail, office paper, textiles and corrugated cardboard. Additionally, the Town collects recyclables from Town residents, using municipal vehicles and labor, including newspaper, magazines, phonebooks, junk mail, office paper, glass, aluminum cans, steel cans and plastics #1-#7. Volume of the collected material is not available.
Town of Queensbury	In 2018 the Town accepted approximately 233.14 tons of paper, 60 tons of glass, 50.42 tons of plastic, 24.94 tons of metal containers, 219.02 tons of bulk metal and 1600 cubic yards (approximately 240 tons @ 300 lbs./cy) of brush at the Ridge Road and Luzerne Road transfer stations. . The Town transfer station received approximately 295.36 total tons of recycled

TABLE 5.2	
Municipality	**Recyclable Material Handled & Volume**
	material. Combined with waste received at the City of Glens Falls transfer station, the total combined recycling rate of both municipalities is 30.73%.
Town of Stony Creek	In 2019, the Town transfer station accepted approximately 11.4 tons of glass, 8 tons of plastic, 6.16 tons of corrugated cardboard, 5.44 tons of metal containers, 15.96 tons of scrap metal and 16.25 tons of newspaper and magazines. The Town also accepted 20 cubic yards of yard waste (approximately 3.5 tons @ 350 lbs./cy) for composting. The Town received approximately 66.71 total tons of recycled material at the Town transfer station in 2019, giving it an estimated recycling rate of 23.51%.
Town of Thurman	Recyclables accepted at the Town Drop-Off Center include mixed glass, plastics, steel cans, aluminum cans, metal structures, newspaper and corrugated cardboard. Volume of the material handled by the Town is not available.
Town of Warrensburg	In 2018, the Town transfer station accepted approximately 9.89 tons of newspaper, 11.75 tons of magazines, 38.6 tons of co-mingled paper, 48.32 tons of corrugated cardboard, 18 tons of glass, 103.6 tons of bulk metal and aluminum/tin cans, 20.7 tons of plastic and 11.13 tons of household electronics. The Town received approximately 261.99 total tons of recycled material at the Town transfer station in 2018, giving it an estimated recycling rate of 18.15%.

It is difficult to determine a precise volume of waste actually being recycled in the Planning Unit due to a variety of reasons: lack of complete recycling data from member municipalities, lack of recycling data from private haulers servicing the area and issues which arise when estimating waste generation volume and composition within the Planning Unit. However, a good indication of the approximate recycling rate of a Planning Unit is to analyze the recycling rate of all waste handled by each municipality located within the Planning Unit.

In order to calculate the recycling rate of each municipality within the Planning Unit, we examined the data submitted by the individual municipalities to the Warren County DPW for purposes of completing this LSWMP. We calculated the recycling rate of total material handled at each participating municipality transfer station. This calculated recycling rate was then applied to future waste disposal generation estimates. It is important to note that the calculated recycling rate does not take into consideration the amount of waste, collected and recycled, that is not handled at a municipally controlled transfer station. Furthermore, the estimated recycling rates do not take into consideration the amount of waste that is composted in Planning Unit members' back yards.

For Planning Unit municipalities that did not provide enough data to estimate a municipal recycling rate, we assumed that they realized the average recycling rate of the member municipalities that provided complete data sets.

Data Gaps and Additional Information Required

During the preparation of this LSWMP, it has been discovered that the County does not currently collect enough solid waste disposal and recycling data to reliably measure actual recycling rates. Furthermore, the data that is collected is occasionally incomplete and inconsistent. A goal for the County during this Planning Period will be to evaluate future options for improving the amount

and accuracy of the data which the County receives in order to measure actual system performance and make more informed future solid waste planning decisions. Future tasks in the Implementation Schedule provided in SECTION XI include improving reporting and data gathering methods.

OVERVIEW OF EXISTING SOLID WASTE PROGRAMS

As detailed earlier in this LSWMP, all municipalities in the Planning Unit handle various types of solid waste generated by their residents. Although Warren County does not have a centralized waste collection system, as per Local Law #2 of 1991, each municipality in the County is required to own and/or operate a recycling/solid waste transfer station. Any municipality may join with one or more municipalities in establishing a joint recycling/solid waste transfer station.

In addition to owning and/or operating a solid waste transfer station for municipal residents to bring their MSW, some municipalities located in the Planning Unit also collect MSW from their residents by using municipal fleet and personnel.

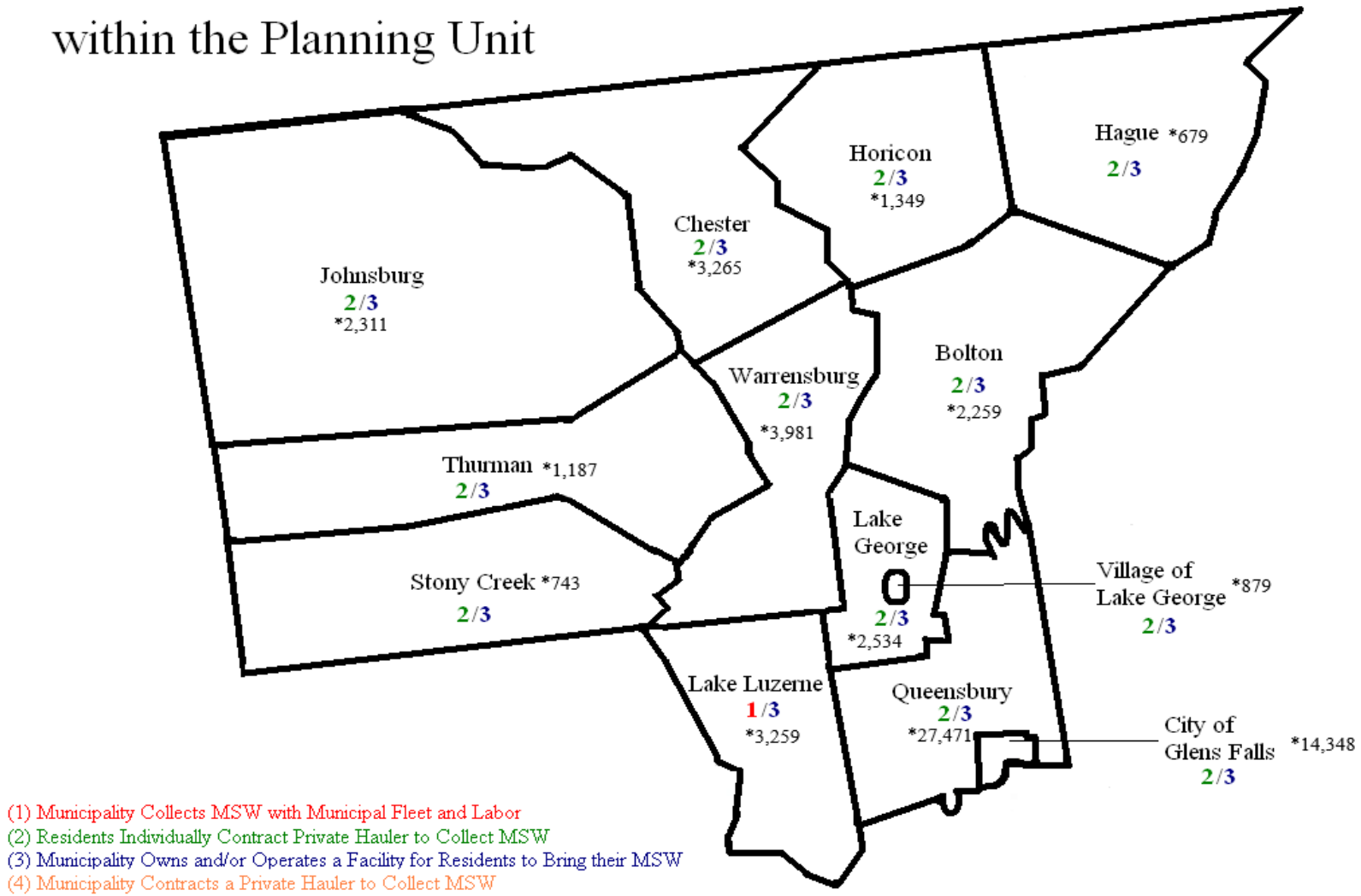
Additionally, many municipalities in the Planning Unit also accept residential C&D material at their municipal transfer stations or C&D landfills. However, no municipalities in the Planning Unit currently collect C&D material from residents via a curbside pickup service. TABLE 5.3 indicates the total amount of solid waste handled and disposed of by each municipality within the Planning in either 2018 or 2019, as reported by each municipality to the Warren County DPW for the purpose of completing this LSWMP. Municipalities that responded earlier to the Warren County DPW information request submitted annual numbers for 2018. It will be assumed that municipalities and disposal facilities that submitted data for 2018 experienced similar waste volumes and recycling rates in 2019.

During the preparation of this LSWMP, it has been discovered that the County does not currently collect enough solid waste disposal and recycling data for the waste generated within its borders. Furthermore, the data that is collected is occasionally incomplete and inconsistent. A goal for the County during this Planning Period will be to evaluate future options for improving the amount and accuracy of the data which the County receives in order to make more informed future solid waste planning decisions. Future tasks in the Implementation Schedule provided in SECTION XI include improving reporting and data gathering methods.

TABLE 5.3	
Municipality	**Volume of MSW and C&D Material Handled for Disposal**
Town of Bolton	In 2019, the Town transfer station accepted approximately 499.18 tons of MSW and 496.9 tons of C&D material for disposal.
Town of Chester	In 2019, the Town transfer station accepted approximately 467.86 tons of MSW and 419.66 tons of C&D material for disposal.
City of Glens Falls	Material accepted on behalf of the City of Glens Falls by the Town of Queensbury is not accounted for separately from the total volume of material accepted at the two Town of Queensbury-operated transfer stations.
Town of Hague	In 2019, the Town transfer station accepted approximately 138.26 tons of MSW and 104.56 tons of C&D material for disposal.
Town of Horicon	In 2018, the Town transfer station accepted approximately 252.35 tons of MSW and an additional 307.59 tons of C&D material for disposal.
Town of Johnsburg	In 2019, the Town transfer station accepted approximately 905 tons of MSW and an additional 340 tons of C&D material for disposal.
Town of Lake George	In 2019, the Town transfer station accepted approximately 615.7 tons of MSW and approximately 53.4 tons of C&D material for disposal.
Village of Lake George	Material accepted on behalf of the Village of Lake George by the Town of Lake George is not accounted for separately from the total volume of material which the Town accepted at the Town-operated transfer station.
Town of Lake Luzerne	In 2019, the Town transfer station accepted approximately 1,030 tons of MSW for disposal. The Town also accepted C&D material at the Town transfer station, however, this data was not recorded.
Town of Queensbury	In 2018, the Town accepted approximately 1,865.67 tons of solid waste material for disposal at both Town-operated transfer stations. This volume includes waste accepted from City of Glens Falls residents.
Town of Stony Creek	In 2019, the Town transfer station accepted approximately 139 tons of MSW and an additional 77 tons of C&D material for disposal.
Town of Thurman	The Town accepts C&D material and bulky waste MSW items at the Town Drop Off Center. Volume of the material handled by the Town is not available.
Town of Warrensburg	In 2018, the Town transfer station accepted approximately 937.8 tons of MSW and 243.8 tons of C&D material for disposal.

The following map indicates the solid waste services offered by each municipality located within the Planning Unit.

MSW Collection Methods within the Planning Unit



(1) Municipality Collects MSW with Municipal Fleet and Labor
(2) Residents Individually Contract Private Hauler to Collect MSW
(3) Municipality Owns and/or Operates a Facility for Residents to Bring their MSW
(4) Municipality Contracts a Private Hauler to Collect MSW

* Indicates estimated population, as reported by the U.S. Census Bureau in 2018.

VI. REDUCING SOLID WASTE GENERATION IN THE PLANNING UNIT

As defined by the NYSDEC, waste prevention, also known as source reduction or waste reduction, refers to changes in the design, manufacture, purchase or use of materials or products to reduce their volume and toxicity before they become waste. The benefits of reducing solid waste include saving natural resources, conserving valuable disposal capacity, reducing toxicity of waste and reducing costs. Waste reduction stands at the top tier in the NYSDEC solid waste management hierarchy, and therefore is viewed by the State as the strategy with the greatest environmental benefit.

Although waste reduction can be difficult to implement on the local level, due to lack of control over private sector manufacturers located across the globe, there are several activities which the Planning Unit can engage in to reduce waste generation. The following solid waste generation reduction opportunities have been identified to assist the Planning Unit in decreasing the quantity of waste that it generates:

Establish a Green Procurement and Sustainability Program

In April 2008, Governor Patterson signed Executive Order #4 which, among other things, established the development of "green procurement specifications" ("procurement specifications") for use by State agencies and public authorities in the procurement of commodities, services and technology. The procurement specifications focus on commodities, services and technology that reasonably will: (a) reduce or eliminate the health and environmental risks from the use or release of toxic substances; (b) minimize risks of the discharge of pollutants into the environment; (c) minimize the volume and toxicity of packaging; (d) maximize the use of recycled content and sustainably-managed renewable resources; and (e) provide other environmental and health benefits.

In developing the procurement lists and procurement specifications, the following factors were considered: (a) protection of the public health and the environment, including the health of children and other vulnerable populations; (b) avoidance of risks from the use or release of toxic substances; (c) pollution reduction and prevention; (d) sustainable resource management and use, and sustainable manufacturing and production processes; (e) reduction of greenhouse gases; (f) the use of renewable resources, remanufactured components and recycled content; (g) waste reduction, recyclability and compostability; (h) quality, durability and utility; (i) minimizing adverse impacts throughout a commodity's or technology's life cycle; (j) cost; (k) extended producer liability; and (l) legal and regulatory requirements applicable to the use and procurement of commodities, services and technology. Executive Order #4 also mandates that, to the extent practicable, all paper used by State agencies or authorities shall be made from 100% post-consumer recycled content.

Although Executive Order #4 does not directly control Warren County or any of its municipalities unless they are using State contracts, it provides a good example of initiatives the County could take to reduce the amount of waste it generates. Additionally, it mandates the development of a list of commodities, services and technologies that meet the goals listed above.

This list could be used by the Planning Unit to identify environmentally friendly commodities, services and technologies to be considered when undergoing procurement for such commodities, services and technologies. The list of currently approved "green procurement specifications" can be found on the following link:

Green NY Procurement Specifications

The Planning Unit could further enhance a Green Procurement and Sustainability Program initiative by mandating the following requirements:

- Documents issued by the County and its municipalities must be printed using both the front and back of each leaf, where practicable.
- Responders who answer RFP's or competitive bids issued by the County or its municipalities must use recycled paper and submit proposals and/or bids on double-sided documents.
- Any communication that can be executed electronically, should be done so.

Waste Prevention Education and Outreach

An initiative to reduce the amount of waste generated in the Planning Unit cannot be successful without help from local businesses, residents and institutions. The choices that Planning Unit businesses, residents and institutions make regarding what to buy, how to use it and how to dispose of it have a significant impact on the amount of waste generated within the Planning Unit. Local businesses, residents and institutions can send signals to producers by not purchasing wasteful products or products with wasteful packaging as well as reduce material use and waste by getting maximum use and reuse out of products. However, many local businesses, residents and institutions are not aware of simple steps they could take to reduce the amount of waste they generate. Simple steps such as buying in bulk, refusing catalogues and other unwanted circulars and leaving grass clippings on the lawn instead of placing them at the curb to be picked up for disposal are just a few of the measures that can be taken to reduce waste.

It is the Planning Unit's job to educate local businesses, residents and institutions on how they can reduce the amount of waste that they generate. Education is a simple and cost-effective way for waste generation within the Planning Unit to be reduced. The following waste reduction education opportunities have been identified to assist the Planning Unit reduce the quantity of waste that it generates:

- Create a website that informs local businesses, residents and institutions about waste reduction opportunities.
- Distribute brochures at municipal buildings and local transfer station/recycling centers that educate residents on simple and cost-effective waste reduction opportunities.
- Distribute brochures to local businesses and institutions that provide education on simple and cost-effective waste reduction opportunities.
- Hold seminars for residents to demonstrate ways to reduce waste generation.

Unit Pricing/Pay as You Throw (PAYT)/Variable Rate Pricing

Unit pricing, also known as variable rate pricing or pay-as-you-throw, is defined by the Environmental Protection Agency (EPA) as a system under which residents pay for municipal waste management services per unit of waste collected, rather than through a fixed fee. Unit pricing can help reduce the amount of waste generated in the Planning Unit because waste generators have a monetary incentive to not generate waste. The less waste that a person or business generates, the less it will cost them to dispose of it.

Currently, there are several different variations to unit pricing occurring in the Planning Unit. All the municipal transfer stations that accept waste in the Planning Unit charge the waste generator based on how many bags, cubic yards or pounds of waste they are bringing to the facility. This is a form of unit pricing. Furthermore, residents and businesses which individually contract private haulers to collect and dispose of their waste are participating in a form of unit pricing because the private hauler is typically charging the resident or business based on the amount and size of trash bins the waste generator is using. Private haulers can further enhance their unit pricing waste collection services by offering their customers different sized trash bins for different prices as opposed to just offering one standard trash bin size.

However, there is one municipality in the Planning Unit who collects its residents' MSW with its own municipal vehicles and personnel. Under this type of system, the waste generator has no direct monetary incentive to reduce the amount of waste that it generates. The waste collection and disposal system is paid through taxes and not directly by the waste generator. The municipality in the Planning Unit who is currently engaged in this type of MSW collection and disposal service could reduce the amount of waste generated in its municipality and ultimately save money if it switched to a form of unit pricing system. As later discussed, unit pricing could also be enforced throughout the entire Planning Unit through hauler licensing or waste collection franchising. A more thorough explanation of unit pricing and detailed analysis conducted by the EPA regarding developing, implementing and monitoring a unit pricing system can be found at the following link:

EPA PAYT Link

The website provided above should be provided to policy makers in each member municipality in order to educate them on the potential cost savings and volume reducing advantages which Unit Pricing has to offer. Especially the municipalities which are currently offering waste collection and disposal services not utilizing Unit Pricing.

Summary of Recommendations Regarding Reducing Solid Waste Generation in the Planning Unit:

1. Encourage all municipalities in the Planning Unit to use procurement lists and procurement specifications as developed by the State under Executive Order #4, where practicable.

2. Encourage all municipalities in the Planning Unit to issue all documents in double-sided format, where practicable.
3. Encourage all municipalities in the Planning Unit to require that responders to any municipally issued Request for Proposals or Competitive Bids be submitted in double-sided format.
4. Encourage all municipal employees to communicate via electronic mail as opposed to regular mail.
5. Create a website that informs local businesses, residents and institutions about waste reduction opportunities.
6. Distribute brochures at municipal buildings and local transfer station/recycling centers that educate residents on simple and cost-effective waste reduction opportunities.
7. Distribute brochures to local businesses and institutions that provide education on simple and cost-effective waste reduction opportunities.
8. Hold seminars for residents to demonstrate ways to reduce waste generation.
9. Encourage unit pricing to be used throughout the Planning Unit, where practicable.

VII. REUSING MATERIAL IN THE PLANNING UNIT

The NYSDEC does not distinguish between reuse and recycling in the second tier of the solid waste management hierarchy. However, to most environmental advocates, reuse is viewed more favorably since it typically offers greater environmental, economic and social benefits than recycling. As defined by the NYSDEC, reuse is the recovery of materials and products for the same or a similar use for which they were originally produced and involves the collection and distribution of useful products, such as household and office furniture, food, building materials, books, sporting equipment and appliances, from those who no longer want or need them to those who can put them to use. Reuse offers environmental benefits by maintaining the integrity of the original product, thus retaining the embedded energy and value of materials used to make the original product. Additionally, reuse can have significant economic benefits due to the jobs the remanufacturing and refurbishing of the original products create. More importantly, reuse provides a social value by providing computers and supplies to children, office furniture to startup companies and nonprofits, and furniture, clothing and food to those in need.

A good example of reuse in the Planning Unit is the Reuse Center established by the Town of Chester at its transfer station. The Town allows residents to drop off reusable items such as clothing, furniture, books and toys for free at a designated location at the Town-owned and -operated transfer station. Residents in need are allowed to look over these materials and take home anything that they feel they can put to good use. Although it is not clear the exact volume of waste this program diverts from disposal, the volume of traffic the Reuse Center attracts is a clear sign of its success. Other examples of reuse in the Planning Unit include a Salvation Army located in the City of Glens Falls and "The World's Largest Garage Sale" located in the Town of Warrensburg.

The following material reuse opportunities have been identified to assist the Planning Unit increase the quantity of waste diverted from disposal:

Develop Reuse Centers at Local Transfer Station/Recycling Centers

As evidenced by the success of the Town of Chester's Reuse Center located at the Town transfer station, developing Reuse Centers at municipally owned transfer stations is a good opportunity for the Planning Unit to reduce the amount of waste it sends for disposal. Developing Reuse Centers at municipally owned transfer stations can be a low-cost, low-effort waste management strategy since municipalities already have a site to locate a Reuse Center and residents are already dropping off waste and recyclables at the local transfer station.

Food Banks

According to the NYSDEC, in 2008, more than 1 million tons of usable food was disposed of by New Yorkers. The NYSDEC goes on to estimate that approximately 21 million Americans depend on food donations. Generators of excess food typically include colleges, restaurants and grocery stores. According to the Adirondack Chamber of Commerce website, there are at least 16 food pantries and soup kitchens located in the Planning Unit. By educating local excess food

generators about local food pantries and soup kitchens willing to take their excess food, the Planning Unit would be able to reduce the amount of waste sent for disposal. The Planning Unit could accomplish this by creating a website that would provide a platform for excess food generators to communicate with local food pantries and soup kitchens in need of food.

Summary of Recommendations Regarding Reusing Material in the Planning Unit:

1. Develop Reuse Centers at municipally owned transfer stations in the Planning Unit.
2. Create a website that would provide a platform for excess food generators to communicate with local food pantries and soup kitchens in need of food.

VIII. RECYCLING SOLID WASTE IN THE PLANNING UNIT

As defined by the NYSDEC, recycling involves the recovery, processing, sale and use of materials that otherwise would be destined for disposal. As previously mentioned, recycling is located on the second tier of the solid waste management hierarchy along with reuse. The NYSDEC places recycling on the second tier of the solid waste management hierarchy because it conserves natural resources by keeping valuable materials in circulation which reduces the volume of waste destined for disposal. Like reusing, recycling avoids the environmental impacts of mining, extracting, transporting and use of virgin materials. Additionally, like reuse, recycling can have significant economic benefits due to the jobs it creates as well as the savings that companies who replace virgin feedstock with recycled materials incur.

Although a significant amount of recycling is currently taking place in the Planning Unit, it is believed that more material generated in the Planning Unit could be recycled than what is currently being recycled. The following solid waste recycling opportunities have been identified to assist the Planning Unit in increasing the quantity of waste diverted from disposal:

Composting

Composting, aerobic biological decomposition of organic material, is a practical and convenient way to handle yard wastes such as fallen leaves, grass clippings, woody yard wastes and weeds, as well as kitchen scraps. Composting is easy to do and keeps useful materials from being disposed of in waste-to-energy facilities or landfills, saves money on disposal fees and provides free nutrient-rich soil additives. Using data provided in TABLE 4.2, it is estimated that in 2019 approximately 30% of the waste generated in the Planning Unit was compostable including 12,082 tons of food scraps, 4,596 tons of yard trimmings and 5,388 tons of other compostable paper.

Although some municipalities within the Planning Unit are currently composting yard waste at their respective transfer stations, this represents only a small portion of the compostable waste being generated in the Planning Unit. It is also believed that many Planning Unit residents are composting some types of yard waste in their backyards. However, it is believed that backyard composting only accounts for a small portion of the compostable waste generated in the Planning Unit. Educating local businesses, residents and institutions on composting is a simple and cost-effective way for the Planning Unit to increase waste diversion. The following opportunities have been identified to assist the Planning Unit increase the amount of waste composted:

- Create a website that informs local businesses, residents and institutions about composting opportunities.
- Distribute brochures at municipal buildings and local transfer station/recycling centers that educate residents on simple and cost-effective backyard composting opportunities (An example of literature the NYSDEC provides can be found in ATTACHMENT C).
- Distribute brochures to local businesses and institutions that provide education on simple and cost-effective ways in which they can compost their food scraps and yard trimmings.

Household Hazardous Waste Collection

Most municipalities located within the Planning Unit do not handle Household Hazardous Waste (HHW) for their residents or do, but on a very limited basis. HHW generated within the Planning Unit is typically disposed of along with regular non-hazardous MSW or stored in households for long periods of time. As indicated in TABLE 4.2, we have estimated that approximately 203 tons of HHW was generated in the Planning Unit in 2019. The EPA also estimates that a household can accumulate as much as 100 pounds of HHW before the resident moves or does an extensive cleanout. An opportunity for the Planning Unit to decrease the amount of HHW from entering regular MSW landfills or being burned in waste-to-energy facilities is for it to offer Hazardous Waste Collection events.

Not only do HHW collection days ensure that hazardous wastes are being handled correctly, they also reduce the amount of waste destined for disposal since much of the HHW generated within the Planning Unit is recyclable. In fact, lead in lead-acid batteries can be reclaimed at smelters, mercury can be reclaimed at retort facilities and reused in commercial applications, solvents can be blended into fuel mixtures used at facilities such as cement kilns, and used motor oil can be re-refined into lubricating products or reused as fuel for ships, cement kilns or furnaces. Fulton County, NY currently accepts used motor oil at its landfill and transfer stations and uses it to heat buildings located on its landfill site via five, used motor oil furnaces. Used motor oil furnaces currently cost approximately $6,000. The State of New York is currently funding eligible HHW collection programs for up to 50% of the cost.

Since the initial Draft LSWMP was submitted to the NYSDEC for comments, the County has implemented an annual HHW collection day event for all County residents. The County hires an independent third party to operate an HHW collection event and to ultimately transport and recycle/dispose of the collected material. In 2018, 77 different households participated in the event and 1,150 gallons and 2,150 pounds of material were collected. However, since the County's annual HHW collection event only accepted 1.08 tons and it is estimated that the County produces 203 tons of HHW on an annual basis, it is clear that more HHW volume could be collected and recycled. The County could increase the volume of HHW recycled if it offered additional HHW collection events.

Public Space Recycling

Although most municipalities in the Planning Unit do not provide roadside public garbage cans, it would be beneficial to the Planning Unit to develop public space recycling programs where public waste collection receptacles are currently located such as parks and streets. It has been noted that all the NYSDEC-run campgrounds located in the Planning Unit provide multiple stream recycling receptacles along with waste collection receptacles.

Additionally, public space recycling could also be feasible to conduct during public events such as the Adirondack Balloon Festival and Americade.

Institutional Recycling

Due to the direct control that municipalities have over waste generated at their municipal buildings, an easy and efficient way for the Planning Unit to increase its recycling rate would be to develop and/or enhance recycling programs located within municipal buildings. In addition to developing recycling programs at municipal buildings, the Planning Unit could encourage the same type of recycling programs to be developed in schools located within the Planning Unit. By developing recycling programs in schools located within the Planning Unit, the Planning Unit can use the recycling program as a focus on environmental education. Participating schools can develop recycling education curriculum with the hope that the participating students will apply what they learned in school at home.

Commercial Recycling

There are many different types of commercial recycling programs which could be developed within the Planning Unit. Typically, it is up to the commercial entity to institute the type of recycling program that it desires, if any. It is often difficult for a planning unit to develop and enforce a commercial recycling program due to the typically large volume and types of commercial entities located within the planning unit as well as the lack of resources that the planning unit may have to develop and administer commercial recycling programs. As previously discussed, it is estimated that 44% of the MSW generated in the Planning Unit is from the commercial/institutional sector. Therefore, it is estimated that approximately 32,500 tons of the waste generated in 2019 was from the commercial/institutional sector.

Although Warren County adopted Local Law #2 of 1991, which requires all businesses located in the County to source separate and segregate recyclable or reusable materials from solid waste, it has not effectively enforced Local Law #2. As later discussed, it would be more efficient for the County to enforce recycling through the private haulers who operate in the County as opposed to enforcing the numerous waste generating entities on an individual basis.

In addition to enforcing Local Law #2 of 1991, the County could also educate businesses located within the Planning Unit on recycling opportunities available to specific industries that are most prevalent in the Planning Unit, such as the food service and accommodation sector as well as retail sector. As previously discussed, these sectors are large in the Planning Unit due to the tourists and day visitors that the area attracts. As detailed in TABLE 4.2, it is estimated that in 2019, tourists and day visitors in the region generated approximately 13,938 tons of MSW. By targeting hotels, motels, retail stores and food service businesses in the Planning Unit that cater to a high volume of tourists and day visitors, the Planning Unit can efficiently educate businesses responsible for a large portion of waste generated in the region. The following opportunities have been identified to assist the Planning Unit in educating local businesses on the benefits and necessities of recycling programs:

- Create a website that informs local businesses on helpful recycling program ideas for various types of entities.

- Hold seminars for local businesses to educate them on current and feasible recycling activities.

Recycling Enforcement

The greatest opportunity available for the Planning Unit to increase the amount of waste it recycles is to actively enforce Local Law #2 of 1991. As previously discussed, The Planning Unit delegated each town, city, or village within the County responsibility for the adoption, implementation and enforcement of local laws, rules and regulations relating to the source, separation and segregation of recyclables or reusable material from solid waste. However, currently no municipalities located within the Planning Unit are actively enforcing any of their local, adopted recycling laws. In fact, in some cases, municipalities located in the Planning Unit were not even aware that such local recycling laws existed. Recycling enforcement could be implemented through a variety of ways in the Planning Unit. The following three ways, whereby the County could enforce recycling, are listed in ascending order of administration and commitment required by the County or its member municipalities.

Hauler Licensing

One way the Planning Unit could effectively develop and administer a centralized recycling enforcement program is through the licensing of private haulers. By licensing private haulers who operate within the Planning Unit, the County could control what type of recycling services the haulers offer to businesses and residents located within the Planning Unit. If the County does not feel that the recycling services are adequate, it could penalize, or ultimately revoke, the private haulers license, effectively keeping the hauler from doing business in the Planning Unit until they offer acceptable recycling services. Not only would the County be able to control what type of recyclables private haulers servicing the area collect, but it could also control what type of recycling service the private hauler offers. For example, the County could mandate that haulers operating in the Planning Unit offer single-stream recycling. Single-stream recycling is a recycling system in which all containers and paper fibers are mixed together by the source or resident instead of being sorted into separate commodities such as plastic, glass, newspaper and cardboard. The benefits of single-stream recycling include increased participation, which translates to higher recycling rates and lower disposal fees as well as reduced collection costs since haulers can make fewer collection trips and use single compartment collection vehicles. Disadvantages of single-stream recycling include decreased value of collected recyclable material due to contamination and higher material recycling facility capital and operating costs. However, these disadvantages would not directly affect the Planning Unit since a private hauler would take ownership of the secondary material and most likely process it at their Material Recycling Facility (MRF). The privately-operated Hiram Hollow transfer station located in Saratoga County has been retrofitted to accept recyclables collected through single-stream recycling. Additionally, County Waste built an $11 million single-stream recycling facility in Albany. In the past year haulers that utilize single-stream recycling have encountered a widely reported, substantial and industry-wide disruption in the market for recyclables due primarily to a recently imposed ban on importing such material by China who had previously represented the lasgest receiving market for US material. This so called “China Sword” policy has resulted in the

net cost of recycling exceeding the net cost of disposal and led several haulers operating in the Planning Unit to recently suspended single stream recycling collection or limiting the frequency at which it is collected from curbside customers.

An additional benefit of licensing private haulers is that the County could require that all private haulers seeking licenses to report all the waste and recyclables that they handle. As previously noted, currently the Planning Unit can only estimate the amount of waste being generated and recycled. With data provided by the licensed private haulers, the County will be able to make better-informed solid waste and recycling planning decisions whenever solid waste and recycling decisions may need to be made in the future. Additionally, the County could charge private haulers a fee to apply for and/or to obtain a hauler license. Fees recovered could be used to help fund the administration of the centralized recycling enforcement program.

Warren County actually already has a provision in Local Law #3 of 1991, "A Local Law Relating to the Collection of and Disposal of Solid Waste in Warren County, NY," which mandates that effective October 1, 1991, no collector, contractor business or municipality shall collect, transport or dispose of solid waste generated, originated or brought within the County of Warren or solid waste which is generated outside of Warren County and transported through and disposed of in Warren County, without first obtaining a permit to be issued by the Superintendent of Public Works of Warren County or his designee. However, the County is currently not administering any type of waste hauler licensing or permitting program currently.

Waste Collection Franchising

Another way in which the County or its municipalities could effectively develop and administer a centralized recycling enforcement program is through the development of waste collection franchises. Waste collection franchising involves municipalities contracting the removal of residents' waste on their behalf as opposed to residents individually contracting for the collection and disposal of their waste. In addition to the financial, environmental and quality of life benefits that waste collection franchising provides as discussed below, waste collection franchising provides the same type of control that the County or its municipalities would have with a hauler licensing program. The County or its municipalities would be able to control what type of recycling services the hauler(s) offer businesses and residents located within the Planning Unit.

The potential cost savings that municipalities could pass onto their residents by contracting the removal of refuse on the residents' behalf have been explored by several reliable reports. In 1999, The Maxwell School of Syracuse University concluded after thorough investigation that it would be cheaper for Onandaga County to contract the removal of waste for its residents as opposed to letting them individually contract the removal of their waste. Also, the New York State Office of the State Comptroller has conducted similar studies and expounded the same results for other municipalities.

Waste collection franchising offers the possibility of cost savings for many reasons. Perhaps the greatest savings that waste collection franchising provides is due to the increased efficiency of waste removal when one hauler is doing it, as opposed to numerous haulers contracted by

individual residents. Collection efficiencies increase as a larger number of customers are serviced in a more defined area. The increased efficiency of waste removal cannot happen when individual consumers contract their own waste haulers because several different waste haulers are picking up refuse from the same street, as opposed to just one hauler who could service the whole street with very little time and transportation costs. The time and gas savings that the municipally contracted private hauler would save would be indirectly passed on to the residents within the municipality.

Another potential cost savings for the municipally franchised waste collection hauler that would be passed on to the residents of the municipality lies within the billing process. It is historically much cheaper for a municipality to bill its own residents than for a hauler to do it because the municipality can use an already established real property and/or user charge system that it is using for other services that it provides to its residents.

An additional potential savings for a resident within a waste collection franchised municipality relates to the stability of the contract between themselves and the hauler. When residents individually hire refuse haulers they usually engage in a short-term contract and price. This allows the refuse haulers to be able to raise their prices whenever they want, to whatever level the market will bear. However, when a municipality enters into a contract it is generally long-term and at least a year. Therefore, the hauler would not be able to raise the collection rates within this time period, allowing for more stable prices.

The concept of waste collection franchising also puts the residents in a unique situation of creating a natural customer monopoly. The private refuse hauler that the municipality will hire will be chosen by the bid price at which it estimates it can do the job for. If a hauler bids too high then it is in danger of not getting the contract. Under normal circumstances this would not bother the hauler that much if they only lost one customer. However, the hauler either gets all the residents' business or none of it. Therefore, municipally contracted waste collection haulers are under pressure to keep their collection service rates low and fair for the residents if they want to continue operating.

The State of New York Office of the State Comptroller estimated that the monetary benefits of waste collection franchising could save each household $140 dollars on average per year in selected governments in the Glens Falls area in 2005. This savings was calculated by taking the average cost for the collection service of refuse when contracted individually by residents, which was $270 dollars per year. Municipalities similar to Warren County's which are currently contracting the collection of garbage for its residents are spending only $130 dollars per household. The results were consistent with previous studies and estimated an average savings of $140 dollars per household.

Waste collection franchising also provides non-monetary benefits for both the residents and the municipalities. Municipalities are often concerned with control of their garbage (waste flow control). That is, where exactly their garbage is being sent and who has the authority to designate the disposal location. Some municipalities prefer to export their waste while others prefer to send their garbage to their local landfill or waste-to-energy facility in order to keep it running at

maximum capacity. Whichever the case, waste collection franchising can be structured to allow the municipality to directly control where they send their garbage.

Other advantages of waste collection franchising for municipalities are that it reduces illegal dumping and the use of burn barrels because residents are having their garbage picked up at half the price that they normally would if they were contracting haulers by themselves. Also, waste collection franchising allows the life of municipally maintained roads to be extended due to a decrease in truck traffic. The reduced truck traffic also benefits the residents of the municipality. Residents benefit from the reduced truck traffic by enjoying a better quality of life with less noise and air pollution, a decrease in the consumption of gas which is a non-renewable resource, and the luxury of only dealing with one garbage pickup day in their neighborhood as opposed to the possibility of having several pickup days in the neighborhood when different private haulers are contracted by individuals.

Municipal Collection

The County or its municipalities could also enforce Local Law #2 of 1991 by collecting waste generated in the Planning Unit with municipal equipment and personnel. Under this type of program, if the municipality is not satisfied with the degree to which the waste generator separates their recyclables from the rest of the waste destined for disposal, the municipality can refuse to pick up the waste until it is properly sorted into recyclable and non-recyclable waste streams. This type of recycling enforcement requires the most resources and administration out of the three identified types of programs.

Create Markets for Recyclable Material

Although the recycling industry has encountered some strong market conditions due to a high demand for secondary materials from developing nations since the 1993 LSWMP was written, it still remains a volatile industry. According to a November 2008 edition of *BioCycle Magazine*, corrugated cardboard in the Northeast dropped from $120 per ton to $30 per ton and residential mixed paper dropped from $50 per ton to $5 per ton in one week in October 2008. Values of other secondary material such as metals and plastics dropped during this period as well. Additionally, the current problem that waste collection companies are experiencing with selling their single-stream recyclables into international markets is creating a need for a domestic recyclable material outlet.

Individual municipalities located within the Planning Unit can avoid the volatility of the secondary materials market by engaging in long-term contracts with processors. Once a municipality is engaged in a long-term contract with a secondary material processor, the processor must purchase the secondary material for a set price, regardless of market demand for the product. Municipalities that are not engaged in long-term contracts and sell their recyclables on the spot market are vulnerable to drops in value of secondary material, and in some cases are stuck with the collected material with no real options to get rid of it except for paying someone to take it or ultimately throw it away with non-recyclable solid waste. Although long-term contracting will hinder a municipality's chances of taking advantage of an upswing in the

secondary materials market, it provides stability for municipal planning and budgeting and ensures that the municipally collected recyclable material will have an end-user.

Another reason why some municipalities within the Planning Unit are having a difficult time finding secondary materials processors to pay for their collected recyclables is that the volume of recyclables collected by the individual municipalities is not great enough to generate any real interest. This problem can be handled in two different ways. The first way would be for the individual municipalities to increase their recyclable storage capacity at their existing transfer stations. By doing so, the municipality can store more recyclables on-site and will have a larger volume to negotiate with once it comes time to sell the material. This is unnecessary if a municipality is already engaged in a long-term contract.

A second option, which could be executed in conjunction with municipalities increasing their recyclables storage capacity, is for several municipalities that handle recyclables to consolidate their recyclables and collectively procure the sale of them. Although the County Purchasing Department currently manages the collective procurement of recyclables transportation services on behalf of municipalities with transfer stations who choose to be part of a County-administered procurement, municipalities are not getting the full cost savings benefit associated with collective procurement because the contracted private hauler is servicing multiple locations. For example, Washington County currently centralizes all of the recyclables collected at its County-owned and -operated transfer stations into a large warehouse and typically sells the large volume of municipally collected material at above market prices. Washington County has expressed interest in accepting Warren County recyclables in the past at its municipally owned transfer stations. Centralization of both Warren and Washington County recyclables could provide an excellent opportunity for both parties to create more attractive markets for potential end-users.

Regardless of whether recyclables are being sold by individual municipalities within the Planning Unit, by the Planning Unit on behalf of the individual municipalities, sold through long-term contracts or on-the-spot market, it is important, when recyclables are being sold, that whoever is selling them is fully informed as to all of the potential end users that are available. The Empire State Development (ESD) manages a Recycling Market Database which provides information about intermediate and end-use markets for recyclable material. The intent of this interactive, on-line database is to help users locate outlets for materials that can be reused, recycled or composted. The database also provides exposure to recycling and reuse businesses and helps end-markets for recovered materials, in and around New York State, access the raw materials they need for production. The Planning Unit should provide the following link on their website, or any updated relevant link during the Term of this Planning Period, to make sure that Planning Unit municipalities and businesses are fully informed about all of the intermediate and end-use markets for recyclable material that are available to them. In addition to the following link, ATTACHMENT D also provides a list of different intermediate and end-use markets for recyclable material who currently participate in the local market.

https://appcenter1.esd.ny.gov/IESDRecyclingMarkets/frmMain.aspx

Summary of Recommendations Regarding Recycling Solid Waste in the Planning Unit:

1. Create a website that informs local businesses, residents and institutions about composting opportunities.
2. Distribute brochures at municipal buildings and local transfer station/recycling centers that educate residents on simple and cost-effective backyard composting opportunities.
3. Distribute brochures to local businesses and institutions that provide education on simple and cost-effective ways in which they can compost their food scraps and yard trimmings.
4. Continue Offering a County-run HHW collection program.
5. Provide public space recycling receptacles at public events.
6. Develop and/or enhance recycling programs located within municipal buildings.
7. Develop recycling programs and education in schools located within the Planning Unit.
8. Create a website that informs local businesses on helpful recycling program ideas for various types of entities.
9. Hold seminars for local businesses to educate them on current and feasible recycling activities.
10. Evaluate a need for, and if required, select a recycling enforcement mechanism (Hauler Licensing, Waste Collection Franchising, Municipal Collection) on a municipality-by-municipality basis.
11. Encourage municipalities located within the Planning Unit to collectively procure long-term contracts for the sales of their recyclables.
12. Provide a link on the newly created waste reduction, reuse and recycling webpage to The Empire State Development (ESD) Recycling Market Database which provides information about intermediate and end-use markets for recyclable material.

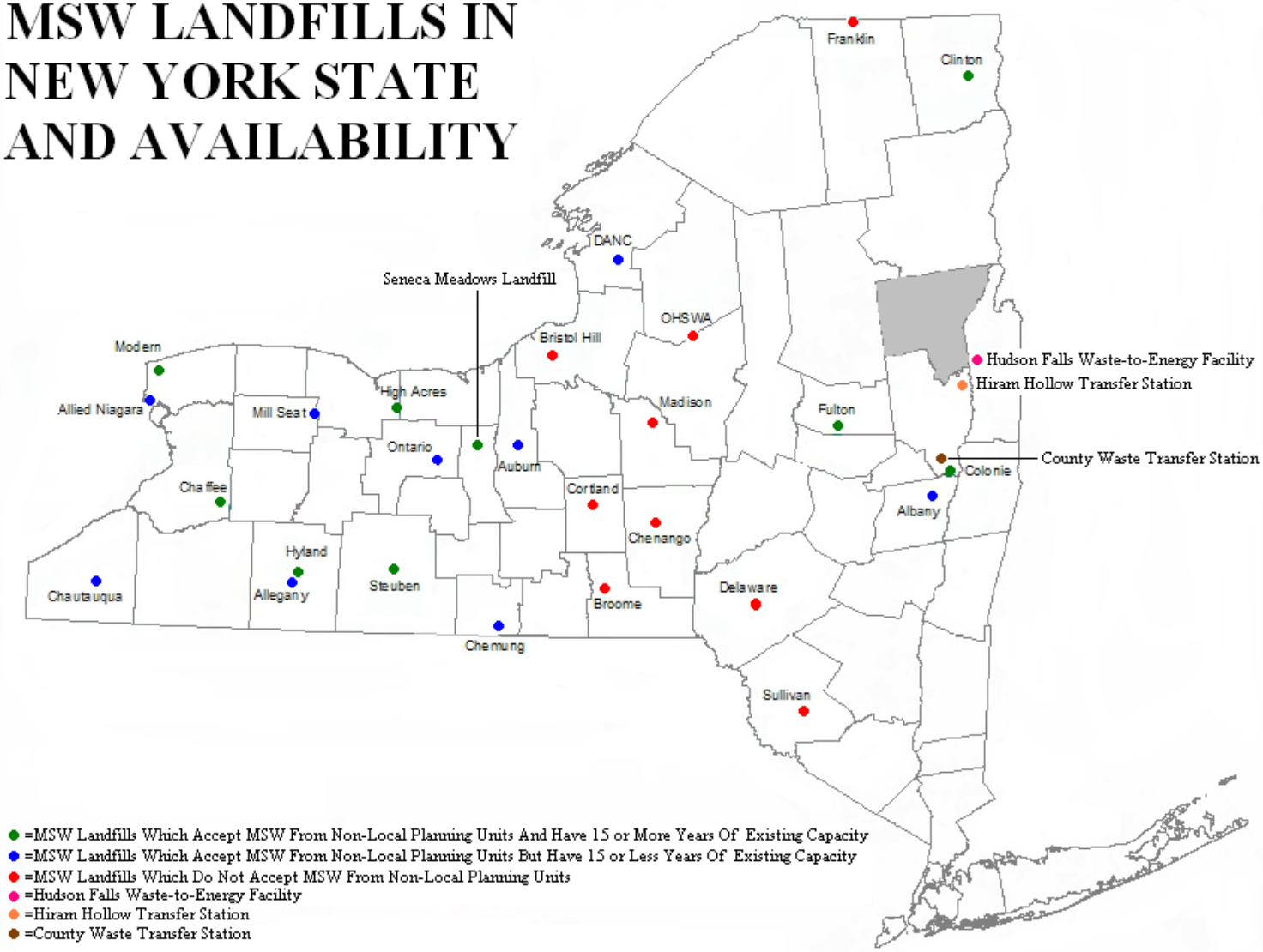
IX. DISPOSING OF RESIDUAL SOLID WASTE OPTIONS

Although this LSWMP details opportunities available to the Planning Unit to decrease the amount of waste it generates and to increase reuse and recycling of the waste it generates, there will still be residual solid waste generated within the Planning Unit that requires disposal.

Most of the municipally handled MSW generated in the Planning Unit is currently sent to the HFWTEF, which is owned by Wheelabrator. A goal of this LSWMP is to identify and evaluate the different disposal options available to the County. It is prudent for the County to periodically explore alternative disposal options for more economically advantageous terms. The analysis conducted throughout this section was performed in 2010, when the Draft LSWMP was submitted to the NYSDEC for comments. Due to budgetary and time constraints this analysis has not been updated since then. However, the methodology used to analyze the Planning Unit's solid waste disposal options provided in this Section can be utilized to analyze solid waste disposal options in the future.

The following map represents all the active MSW landfills currently operating in New York. The map characterizes each landfill as either currently accepting MSW from non-local planning units with 15 or more years of capacity, currently accepting MSW from non-local planning units with fewer than 15 more years of capacity or landfills that do not accept any MSW from non-local planning units. Additionally, the map also indicates the location of the HFWTEF as well as two large privately-operated transfer stations located in Saratoga County.

MSW LANDFILLS IN NEW YORK STATE AND AVAILABILITY



As previously discussed, part of the goal of this LSWMP is to help the Planning Unit identify its MSW disposal options and the associated costs of the most feasible options.

In order to evaluate the most advantageous MSW disposal options available to the Planning Unit we have identified six different MSW delivery points and three different modes of transportation currently available to the Planning Unit. The following six delivery points have been identified for this analysis due to their proximity to Warren County and their existing capacities. It is important to note that the Tip Fees utilized in our analysis of the cost of the different disposal options available to the Planning Unit are indicative and have been provided by the owners and/or operators of the selected delivery points. However, we believe it is quite likely that if the County Purchasing Department were to manage a collective procurement on behalf of its individual municipalities, more aggressive (lower) Tip Fees at one or more of the selected delivery points may be offered. Therefore, we recommend that the County manage a collective procurement on behalf of its individual municipalities:

Clinton County Landfill

The Clinton County landfill is located in the Town of Schuyler Falls, NY. The Clinton County landfill recently completed an expansion and in 2008 it was estimated that the landfill had an existing capacity of over 7,600,000 tons. Preliminary discussions with Casella Waste Systems, the private operator of the Clinton County landfill, have indicated that they would be willing to take all municipally controlled MSW and C&D generated in Warren County for approximately $60/ton.

Fulton County Landfill

The Fulton County landfill is located in the Town of Johnstown, NY. It encompasses 500 acres of land, 25 of which are currently active. Additionally, there is currently a 13.5-acre expansion under construction. A total of 105 acres are available for land filling. Preliminary discussions with the Fulton County Department of Solid Waste have indicated that they would be willing to take all municipally controlled MSW and C&D generated in Warren County once their landfill expansion is completed for approximately $44/ton. Additionally, they could potentially be interested in accepting municipally controlled recyclables for a fee as well. Fulton County indicated that it would be interested in engaging in a five-year contract with the County.

Colonie Landfill

The Town of Colonie landfill is located in the City of Cohoes, NY. It is estimated that in 2012 the landfill will have over 15 years of remaining constructed capacity. The landfill is currently permitted to accept 170,500 tons of solid waste on an annual basis. It is estimated that the landfill is currently accepting approximately 131,000 tons on an annual basis. Preliminary discussions with the Town of Colonie Department of Solid Waste have indicated that they would be willing to take all municipally controlled MSW and C&D generated in Warren County. The Town indicated that it would accept 5,000 tons

of MSW annually for approximately $53/ton and 15,000 tons of MSW or more annually for approximately $50/ton. Additionally, it indicated that it would also accept any quantity of C&D material for approximately $55/ton. The Town typically engages in five-year-term disposal contracts with options to renew for an additional five years.

County Waste Transfer Station

County Waste operates a transfer station located in Clifton Park, NY. Originally, the transfer station was only allowed to take C&D debris and recyclables. However, in 2008, the NYSDEC granted County Waste permission to accept MSW at the facility after they built an enclosed building specifically for handling MSW. Material received at the County Waste transfer station is loaded into tractor trailers and shipped to the disposal facility with the lowest transportation and disposal cost to County Waste. Most of the waste received at the County Waste transfer station is typically shipped to either the Seneca Meadows landfill or to the HFWTEF. The transfer station is permitted to receive up to 1,000 tons per day. Additionally, the transfer station is equipped to accept single-stream recycling. Preliminary discussions with County Waste have indicated that they would be willing to take all municipally controlled MSW and C&D generated in Warren County for approximately $59/ton.

Hiram Hollow Transfer Station

The Hiram Hollow transfer station is located in the Town of Wilton, NY. Preliminary discussions with the transfer station operator have indicated that they would be willing to take all municipally controlled MSW and C&D generated in the Planning Unit for approximately $70/ton. Material received at the Hiram Hollow transfer station will ultimately be loaded into tractor trailers and shipped to the final disposal facility with the lowest transportation and disposal cost to Casella. Currently most of the waste collected at the Hiram Hollow transfer station is being sent to the Clinton County landfill. Additionally, the transfer station is equipped to accept single-stream recycling.

Hudson Falls Waste-to-Energy Facility

In November, 2011, Wheelabrator Hudson Falls, L.L.C (WHF), the private company who operated the facility for the WWIDA, exercised its purchase option and purchased the facility. Annual throughputs have ranged from 144,923 tons to 173,253 tons from 2001-2009. Preliminary discussions with WHF indicate that they are very much interested in accepting any municipally controlled MSW generated within the Planning Unit at an approximate Tipping Fee of $55 per ton depending on the quantity of waste delivered and the length of the contract.

Residual MSW generated within the Planning Unit can be transported to the six identified delivery points listed above using the following three modes of transportation:

Packer Trucks

For purposes of this report, we will define packer trucks as MSW collection vehicles that are loaded with the collected MSW material and compacted by a large blade called a "packer blade." Packer trucks are typically used to collect and transport waste for short distances. When waste collected by a packer truck is destined for a disposal facility remotely located, typically the truck operator will take the collected waste to a transfer station where the waste can be further compacted and transferred into a roll-off container or tractor trailer which can typically carry a greater amount of waste. Although most municipalities in the Planning Unit use a roll-off container system, we have analyzed the economics of utilizing packer trucks for municipalities that currently municipally-collect MSW and deliver the collected MSW directly to a destination facility or for those that may wish to do so in the future. For purposes of analyzing the estimated transportation costs for transporting waste to each of the six selected disposal points listed above, we have used an industry-standard assumption of $0.86/ton mile.

Roll-Off Trucks

A roll-off truck carries a roll-off container on a tilting ramp attached to the truck frame. Currently, most of the municipal transfer stations located within the Planning Unit use a roll-off container process where all the MSW, C&D and often recyclables are loaded into 20-42 cubic yard roll-off containers provided by the County. Once the roll-off containers are full of the designated material, municipalities either contract a private hauler or transport the containers themselves using a roll-off truck to the designated facility. Roll-off trucks are utilized to transport material which has already been received at a transfer station. Roll-off trucks are not used to collect waste. We have assumed a transfer station waste handling cost of $5/ton in order to account for all costs associated with a roll-off container system including maintenance and replacement costs for the roll-off containers. For purposes of analyzing the estimated costs for transporting waste to each of the six selected disposal points listed above, we have utilized an industry-standard transportation cost assumption of $75/hour of total roundtrip travel time, including wait-time. Travel time was estimated using MapQuest, a free online web mapping service owned by American Online, Incorporated. We have assumed a transfer station wait-time of 15 minutes and a landfill and waste-to-energy facility wait-time of 30 minutes. In order to estimate the total transportation cost per ton for each of the 18 disposal options, the total estimated roundtrip travel time for each disposal option was divided by 8.6 tons, the average amount of waste that is typically loaded into a 40 yard roll-off container at a Planning Unit municipal transfer station before it is transported to a waste disposal facility.

Tractor Trailers

Tractor trailers are used to transport waste that has already been centralized at a transfer station. Tractor trailers are not used to collect waste. As previously discussed, tractor trailers are typically used to haul waste to remote delivery points since they can carry a greater amount of waste than both packer and roll-off trucks. Tractor trailers are typically loaded via two different methods. The first method requires a transfer station with a pit into which a tractor trailer can drive and be top loaded using some sort of loader, which is positioned above the tractor trailer pit. The second method does not require a pit for the tractor trailer to drive into but does require a track hoe loading machine which can collect waste from a tipping floor and lift it up over the top of the tractor trailer for top loading. Currently none of the municipally owned transfer stations located in the Planning Unit are equipped to load tractor trailers using either method. Since none of the municipal transfer stations located in the Planning Unit are currently equipped to load tractor trailers and would either need to retrofit their transfer station and/or purchase additional loading equipment to load a tractor trailer, we have assumed a transfer station waste handling cost of $110/ton in order to account for all costs associated with a tractor trailer system. This estimated waste handling cost includes the amortization of an estimated $1,000,000 in capital costs required to retrofit a municipal transfer station to a tractor trailer system over a 10-year period. It is considerably high on a per ton basis due to the low volume of waste currently handled by each municipal transfer station. In 2008, the average tonnage of waste handled by municipalities with transfer stations that accept MSW was approximately 921 tons. If municipally handled waste generated in the Planning Unit was centralized to one or two transfer stations or if flow control were implemented, the per-ton waste handling cost would substantially decrease. For purposes of analyzing the estimated costs for transporting waste to each of the six selected disposal points listed above, we have used an industry-standard assumption of $17.78 per ton. This rate was calculated assuming that it would cost $400 per half day to contract a private hauler to transport the MSW to the selected delivery point and that each load contained 22.5 tons. We have assumed that the contracted private hauler would only be making one trip per day since none of the transfer stations are currently accepting enough waste where multiple trips would be necessary. For purposes of estimating the per ton transportation costs we have assumed that the roundtrip travel times to each disposal facility from each municipally owned transfer station would be approximately four hours or less. However, the roundtrip travel time from certain municipally owned transfer station to certain disposal facilities may take up to 30 additional minutes.

Considering the six identified MSW delivery points and three different modes of transportation, TABLE 9.1 identifies the 18 disposal options which are available to each municipality-located within the Planning Unit.

TABLE 9.1			
	Packer Truck	**Roll-Off Truck**	**Tractor Trailer**
Clinton County LF	Option 1	Option 2	Option 3
Fulton County LF	Option 4	Option 5	Option 6
Colonie LF	Option 7	Option 8	Option 9
County Waste TS	Option 10	Option 11	Option 12
Hiram Hollow TS	Option 13	Option 14	Option 15
HFWTEF	Option 16	Option 17	Option 18

The estimated cost of each of the selected disposal options including waste handling, transportation and Tip Fees for each municipality located in the Planning Unit with a transfer station have been provided below. It should be noted that the Tipping Fees used in our analysis are indicative and have been provided by the owners and/or operators of the selected delivery points. However, we believe it is quite likely that if the County Purchasing Department were to manage a collective procurement on behalf of its individual municipalities, more aggressive (lower) Tip Fees at one or more of the selected delivery points may be offered. Additionally, the Tipping Fee at each facility also depends greatly on the quantity of waste delivered. The more waste contractually committed, the lower the Tip Fee will be. In 2008, over 10,000 tons of residual MSW generated in the Planning Unit was municipally controlled and discarded. For the purposes of this analysis we have used Tip Fees assuming that municipalities located in the Planning Unit would join forces and collectively procure a capacity of at least 5,000 tons at each destination facility. MSW tipping fees will ultimately be decided based on quantity of waste promised as well as market rates available for waste disposal at time of procurement. The amount of municipally handled waste generated in the Planning Unit could dramatically increase if waste flow control was widely implemented through waste collection franchising. However, it is important to note that flow control could be met with legal opposition. Additionally, there have been no complaints regarding mishandling of MSW in the Planning Unit by private haulers. Therefore, it is recommended that the County continue to let private haulers collecting MSW within its borders to dispose of Planning Unit MSW at whichever facility offers them the best Tipping Fee.

Another opportunity available to the Planning Unit would be for it to join forces with Washington County and collectively procure capacity at a selected waste disposal facility. In 2009, the Washington County DPW accepted over 6,000 tons of MSW at its five County-owned transfer stations.

WARREN COUNTY, NY

Solid Waste Management Plan
Estimated Future MSW Disposal Options
Summary of Options $/Ton
5/13/2010
Prepared By: R.S. Lynch & Company, Inc.

Summary of Disposal Options: Total Cost/Ton (2012)

	Clinton County LF			Fulton County LF			Colonie LF			County Waste TS			Hiram Hollow TS			Hudson Falls WTEF		
	PT	RT	TT	PT	RT	TT	PT	RT	TT	PT	RT	TT	PT	RT	TT	PT	RT	TT
MSW Generator	Option 1	Option 2	Option 3	Option 4	Option 5	Option 6	Option 7	Option 8	Option 9	Option 10	Option 11	Option 12	Option 13	Option 14	Option 15	Option 16	Option 17	Option 18
Town of Bolton	$ 231.14	$ 97.88	$ 187.78	$ 159.24	$ 79.78	$ 171.78	$ 148.46	$ 81.55	$ 180.78	$ 141.56	$ 83.36	$ 186.78	$ 113.86	$ 88.26	$ 197.78	$ 91.98	$ 74.83	$ 182.78
Town of Chester	$ 206.20	$ 94.91	$ 187.78	$ 185.90	$ 81.27	$ 171.78	$ 173.40	$ 83.55	$ 180.78	$ 166.50	$ 84.76	$ 186.78	$ 138.80	$ 89.65	$ 197.78	$ 116.92	$ 76.83	$ 182.78
City of Glens Falls	$ 256.94	$ 102.24	$ 187.78	$ 130.86	$ 71.67	$ 171.78	$ 118.36	$ 74.31	$ 180.78	$ 111.46	$ 75.16	$ 186.78	$ 83.76	$ 80.06	$ 197.78	$ 62.74	$ 67.85	$ 182.78
Town of Hague	$ 199.32	$ 99.27	$ 187.78	$ 209.12	$ 86.50	$ 171.78	$ 196.62	$ 88.78	$ 180.78	$ 188.86	$ 89.99	$ 186.78	$ 161.16	$ 94.62	$ 197.78	$ 140.14	$ 82.06	$ 182.78
Town of Horicon	$ 209.64	$ 94.91	$ 187.78	$ 178.16	$ 79.52	$ 171.78	$ 164.80	$ 82.16	$ 180.78	$ 157.90	$ 83.01	$ 186.78	$ 130.20	$ 87.91	$ 197.78	$ 109.18	$ 75.44	$ 182.78
Town of Johnsburg	$ 222.54	$ 100.15	$ 187.78	$ 154.08	$ 76.65	$ 171.78	$ 176.84	$ 86.52	$ 180.78	$ 169.94	$ 87.72	$ 186.78	$ 142.24	$ 92.27	$ 197.78	$ 120.36	$ 80.67	$ 182.78
Town/Village of Lake George	$ 244.04	$ 100.15	$ 187.78	$ 145.48	$ 74.03	$ 171.78	$ 132.12	$ 76.58	$ 180.78	$ 125.22	$ 77.52	$ 186.78	$ 97.52	$ 82.41	$ 197.78	$ 78.22	$ 70.73	$ 182.78
Town of Lake Luzerne	$ 257.80	$ 103.98	$ 187.78	$ 123.98	$ 73.42	$ 171.78	$ 128.68	$ 79.80	$ 180.78	$ 121.78	$ 80.74	$ 186.78	$ 112.14	$ 85.90	$ 197.78	$ 91.98	$ 74.22	$ 182.78
Town of Queensbury	$ 258.66	$ 103.37	$ 187.78	$ 141.18	$ 74.29	$ 171.78	$ 128.68	$ 76.92	$ 180.78	$ 121.78	$ 77.78	$ 186.78	$ 94.08	$ 82.67	$ 197.78	$ 62.74	$ 66.72	$ 182.78
Town of Stony Creek	$ 250.06	$ 103.37	$ 187.78	$ 137.74	$ 76.03	$ 171.78	$ 142.44	$ 82.42	$ 180.78	$ 135.54	$ 83.36	$ 186.78	$ 130.20	$ 89.39	$ 197.78	$ 108.32	$ 76.83	$ 182.78
Town of Thurman	$ 241.46	$ 101.63	$ 187.78	$ 160.96	$ 73.16	$ 171.78	$ 162.22	$ 83.55	$ 180.78	$ 155.32	$ 84.76	$ 186.78	$ 127.62	$ 89.65	$ 197.78	$ 105.74	$ 76.83	$ 182.78
Town of Warrensburg	$ 232.86	$ 98.75	$ 187.78	$ 156.66	$ 76.30	$ 171.78	$ 144.16	$ 78.93	$ 180.78	$ 137.26	$ 79.87	$ 186.78	$ 109.56	$ 82.67	$ 197.78	$ 87.68	$ 72.21	$ 182.78

= Lowest Cost Disposal Option

= Second Lowest Cost Disposal Option

= Third Lowest Cost Disposal Option

Construction and Demolition Material (C&D):

Most of the municipalities located in the Planning Unit contract private haulers to transport and dispose of C&D material that they handle at their municipally owned transfer stations. The only municipalities located in the Planning Unit that dispose of their own C&D material are the Town of Thurman and the Town of Lake George, who each own and operate their own municipal C&D landfill. Neither municipality is currently accepting C&D generated from other municipalities located in the Planning Unit. Private haulers typically bring C&D collected from within the Planning Unit to the Green Ridge Landfill, Hiram Hollow transfer station located in Wilton or the Colonie Landfill. Additionally, Fulton County expressed interest in accepting C&D waste from the Planning Unit at its landfill. It is assumed that most of these disposal options will continue to be available as destination facilities for C&D generated within the Planning Unit for at least an additional 10 years. It is recommended that the County continue to let private haulers that collect C&D material within its borders to bring the collected C&D to any permitted facility they choose.

As previously mentioned in SECTION IX, Planning Unit municipalities have an opportunity to potentially reduce the amount of money they spend on Tipping Fees for municipally handled C&D if they were to collectively procure capacity at a facility that receives C&D waste. The more municipally handled C&D material that can collectively be procured, the lower the Tip Fee would be for the residual C&D material. Additionally, it is not uncommon for municipalities to collectively procure disposal of both MSW and C&D material, which could potentially further decrease Tip Fees providing that the destination facility is permitted to accept both types of material.

Industrial Waste:

No municipalities located within the Planning Unit handle any type of industrial waste. As previously reported, the main type of industrial waste being generated in the Planning Unit in large volumes is paper sludge. The Green Ridge RDF landfill, located in Saratoga County adjacent to the Warren County border, is indisputably the closest industrial landfill. It is assumed that this facility takes most of Warren County's industrial waste. There have been no reports regarding mishandling of industrial waste in the Planning Unit.

Regulated Medical Waste

The State of New York has adopted a comprehensive regulatory framework covering all aspects of regulated medical waste (RMW) including handling, storage, treatment and disposal. New York State's RMW program is jointly administered by the New York State Department of Health (DOH) and the NYSDEC which oversees all RMW generated within the Planning Unit from facilities such as the Glens Falls Hospital or any other medical facilities located in the Planning Unit such as doctors' offices, clinics or veterinarians. RMW is not handled by the Planning Unit or any of its municipalities. RMW generators in the Planning Unit directly handle their own RMW or contract private haulers to collect, process, transport and recycle/dispose of the material using their own facilities and resources. There have been no reports of improper handling of

RMW in the County. Therefore, the County should continue to let private industries handle or arrange for the collection and subsequent disposal of their own RMW.

Biosolids and Septage

As detailed in SECTION III, biosolids and septage generated in the Planning Unit are currently being handled in a responsible manner. They are currently being incinerated and used as alternate daily cover material at landfills or an ingredient in concrete manufactured at a local concrete company. Biosolids and septage generated in the Planning Unit are also currently being composted or are used as fertilizer on farms for non-human consumable foods. It is estimated that the City of Glens Falls wastewater treatment facility is currently only operating at 60% of its physical capacity and therefore has the physical capacity to accept any additional waste being generated in the Planning Unit. Therefore, if a municipality finds that its biosolids or septage are not being handled in a responsible matter, the City of Glens Falls wastewater treatment facility has capacity to accept it.

Summary of Recommendations Regarding Disposal of Residual Solid Waste Generated in the Planning Unit:

1. Individual municipalities located in the Planning Unit should collectively procure transportation and disposal services for municipally handled MSW and C&D. The collective procurement should include at the very least the six delivery points identified herein and should be flexible to allow different groups of municipalities to use different delivery points if economically advantageous, possibly including Washington County, NY.
2. Continue to allow residents and private industries independently arrange for the collection and subsequent disposal of residual waste material generated in the Planning Unit which is not municipally handled.

X. SUMMARY AND RECOMMENDATIONS

SECTION VI through SECTION VIII of this LSWMP have provided the Planning Unit with recommendations on how it could effectively reduce the amount of waste generated in the Planning Unit, increase reuse in the Planning Unit and increase the quantity of waste recycled in the Planning Unit with a goal of diverting waste from disposal. Additionally, SECTION IX of this LSWMP has outlined the different disposal options available to the Planning Unit for residual waste it generates that it is not able to reuse or recycle. All the recommendations provided in this LSWMP can be governed and implemented in a variety of different ways.

The recommendations referenced herein could either be centrally implemented and governed by the County or implemented and governed on a municipality-by-municipality basis. The following table identifies all the recommendations provided in this LSWMP as well as the recommended implementation and governance structure:

Improve Solid Waste and Recycling Program Data Recommendations	**County Implemented**	**Implemented by Each Municipality Individually**
1. During the preparation of this LSWMP, it has been discovered that the County does not currently collect enough solid waste disposal and recycling data for the waste generated within its borders. Furthermore, the data that is collected is occasionally incomplete and inconsistent. One of the main goals for the County during this Planning Period will be to evaluate future options for improving the amount and accuracy of the data which the County receives in order to make more informed future solid waste planning decisions. **Required Resources:** Current staff **Milestones/Desired Outcome:** Establish a reporting protocol which requires individual member municipalities to provide the Warren County DPW designee with bi-annual solid waste and recycling data collected by each municipality. This data should include a breakdown of each recycling component handled, its associated volume, associated revenue or disposal expense, source of material and ultimate destination for the material. It should also include the volume of all waste handled for disposal, the source of waste and ultimate disposal location. This includes any type of material that is handled by the member municipalities such as MSW, C&D and Biosolids. **Start Date:** 2020 **Completion Date:** 2021 **Administrative/Technical Impact:** -Waste Stream Impact- No immediate waste stream impact. However, once the County has a more granular view of Planning Unit waste generation and disposal, it will be easier to identify recycling and waste reduction opportunities. -Cost & Lifecycle Analysis- Increase in staff workload. **Jurisdictional Impact:** -Participation by neighboring Planning Units is not applicable.	X	
2. During the preparation of this LSWMP, it has been discovered that the County does not currently collect enough data regarding the financial structure for the solid waste management facilities and programs operated or administrated by the Planning Unit and/or its member municipalities. Furthermore, the data that is collected is often incomplete and inconsistent. One of the main goals for the County during this Planning Period will be to evaluate future options for improving the amount and accuracy of the data which the County receives in order to make more informed future solid waste planning decisions. This data is also required by the NYSDEC to be included in the LSWMP. **Required Resources:** Current staff		

Improve Solid Waste and Recycling Program Data Recommendations	County Implemented	Implemented by Each Municipality Individually
Milestones/Desired Outcome: Establish a reporting protocol which requires individual member municipalities to provide the Warren County DPW designee with a breakdown of the annual costs, revenues and funding mechanisms of solid waste facility and programs. Requested costs should include capital investments, insurance, operation, maintenance, closure and post-closure costs, administration and financing, Revenues should include fees, fines, recyclable revenues, general fund contributions and/or special district charges. This data is also required by the NYSDEC to be included in the LSWMP. **Start Date:** 2020 **Completion Date:** 2021 **Administrative/Technical Impact:** -Waste Stream Impact- No waste stream impact. -Cost & Lifecycle Analysis- Increase in staff workload. **Jurisdictional Impact:** -Participation by neighboring Planning Units is not applicable.	X	

Reduce Waste Generation in the PU Recommendations	County Implemented	Implemented by Each Municipality Individually
1. Encourage all municipalities in the Planning Unit to use procurement lists and procurement specifications as developed by the State under Executive Order #4, where practicable. **Required Resources:** Current staff **Milestones/Desired Outcome:** Issue RFPs using environmentally friendly procurement lists. Reduce the amount of waste generated in the Planning Unit as well as identify environmentally friendly commodities, services and technologies to be considered when undergoing procurement for such commodities, services and technologies. **Start Date:** 2021 **Completion Date:** Ongoing **Administrative/Technical Impact:** -Waste Stream Impact- Marginally minimize volume and toxicity of waste <1%. -Cost & Lifecycle Analysis- No cost impact. **Jurisdictional Impact:** -Participation by neighboring Planning Units is not applicable.	X	X
2. Encourage all municipalities in the Planning Unit to issue all documents in double-sided format, where practicable. **Required Resources:** Current staff **Milestones/Desired Outcome:** Increase the number of municipal documents and reports printed in double-sided format. Reduce the amount of waste generated in the Planning Unit. **Start Date:** 2021 **Completion Date:** Ongoing **Administrative/Technical Impact:** -Waste Stream Impact- Marginally minimize volume of waste <1%. -Cost & Lifecycle Analysis- Decrease in office supply expenses. **Jurisdictional Impact:** -Participation by neighboring Planning Units is not applicable.	X	X
3. Encourage all municipalities in the Planning Unit to require that responders to any municipally issued request for proposals or bids be submitted in double-sided format. **Required Resources:** Current staff		

Reduce Waste Generation in the PU Recommendations	County Implemented	Implemented by Each Municipality Individually
Milestones/Desired Outcome: Reduce the amount of waste generated in the Planning Unit. **Start Date:** 2021 **Completion Date:** Ongoing **Administrative/Technical Impact:** -Waste Stream Impact- Marginally minimize volume of waste <1%. -Cost & Lifecycle Analysis- Marginally reduce disposal and recyclable handling expenses. **Jurisdictional Impact:** -Participation by neighboring Planning Units is not applicable.	X	X
4. Encourage all municipal employees to communicate via electronic mail as opposed to regular mail. **Required Resources:** Current staff **Milestones/Desired Outcome:** Reduce the amount of waste generated in the Planning Unit. **Start Date:** 2021 **Completion Date:** Ongoing **Administrative/Technical Impact:** -Waste Stream Impact- Marginally minimize volume of waste <1%. -Cost & Lifecycle Analysis- Marginally reduce disposal and recyclable handling expenses. Marginally reduce office expenses. **Jurisdictional Impact:** -Participation by neighboring Planning Units is not applicable.	X	X
5. Create a website that informs local businesses, residents and institutions about waste reduction opportunities. **Required Resources:** Current staff **Milestones/Desired Outcome:** Develop a County Reduce, Reuse and Recycle website. Educate residents, businesses and institutions on how to effectively reduce the amount of waste generated in the Planning Unit. **Start Date:** 2021 **Completion Date:** Ongoing **Administrative/Technical Impact:** -Waste Stream Impact- Minimize volume of waste generated <5%. -Cost & Lifecycle Analysis- Reduce disposal and recyclable handling expenses. Marginally increase staff workload. There is currently a grant offered by the NYSDEC which would reimburse the County for 50% of the qualifying expenses. **Jurisdictional Impact:** -Participation by neighboring Planning Units is not applicable.	X	
6. Distribute brochures at municipal buildings and local transfer station/recycling centers that educate residents on simple and cost-effective waste reduction opportunities. **Required Resources:** Current staff **Milestones/Desired Outcome:** Educate residents on how to effectively reduce the amount of waste that they generate. **Start Date:** 2021 **Completion Date:** Ongoing **Administrative/Technical Impact:** -Waste Stream Impact- Marginally minimize volume of waste <1%. -Cost & Lifecycle Analysis- Marginally reduce disposal and recyclable handling expenses. Marginally increase expenses for educational material. There is currently a grant offered by the DEC which would reimburse the County for 50% of the qualifying expenses. **Jurisdictional Impact:** -Participation by neighboring Planning Units is not applicable.	X	X
7. Distribute brochures to local businesses and institutions that provide education on simple and cost-effective waste reduction opportunities.		

Reduce Waste Generation in the PU Recommendations	County Implemented	Implemented by Each Municipality Individually
Required Resources: Current staff **Milestones/Desired Outcome:** Educate local businesses and institutions on how to effectively reduce the amount of waste that they generate. **Start Date:** 2021 **Completion Date:** Ongoing **Administrative/Technical Impact:** -Waste Stream Impact- Marginally minimize volume of waste <1%. -Cost & Lifecycle Analysis- Marginally reduce disposal and recyclable handling expenses. Marginally increase expenses for educational material. There is currently a grant offered by the NYSDEC which would reimburse the County for 50% of the qualifying expenses. **Jurisdictional Impact:** -Participation by neighboring Planning Units is not applicable.	X	
8. Hold seminars for residents to demonstrate ways to reduce waste generation. **Required Resources:** Current staff **Milestones/Desired Outcome:** Reduce the amount of waste generated in the Planning Unit. **Start Date:** 2021 **Completion Date:** Ongoing **Administrative/Technical Impact:** -Waste Stream Impact- Marginally minimize volume of waste <1%. -Cost & Lifecycle Analysis- Marginally reduce disposal and recyclable handling expenses. Marginally increase expenses for educational material and staff hours. There is currently a grant offered by the NYSDEC which would reimburse the County for 50% of the qualifying expenses. **Jurisdictional Impact:** -Participation by neighboring Planning Units is not applicable.	X	
9. Encourage unit-based pricing to be used throughout the Planning Unit, where practicable. **Required Resources:** Current staff **Milestones/Desired Outcome:** Provide member municipalities with educational material regarding Unit Pricing. Reduce the amount of waste generated in the Planning Unit. **Start Date:** 2021 **Completion Date:** Ongoing **Administrative/Technical Impact:** -Waste Stream Impact- Marginally minimize volume of waste <1%. -Cost & Lifecycle Analysis- Marginally reduce disposal and recyclable handling expenses. **Jurisdictional Impact:** -Participation by neighboring Planning Units is not applicable.	X	

Reuse Waste Generated in the PU Recommendations	County Implemented	Implemented by Each Municipality Individually
1. Develop Reuse Centers at municipally owned transfer stations with adequate capacity in the Planning Unit. **Required Resources:** Current staff **Milestones/Desired Outcome:** Increase the amount of Reuse Centers at municipally owned recycling centers. Reduce the amount of waste generated in the Planning Unit. **Start Date:** 2021 **Completion Date:** Ongoing **Administrative/Technical Impact:**		X

Reuse Waste Generated in the PU Recommendations	County Implemented	Implemented by Each Municipality Individually
-Waste Stream Impact- Marginally minimize volume of waste <2%. -Cost & Lifecycle Analysis- Marginally reduce disposal and recyclable handling expenses. It is anticipated that some qualifying expenses could be reimbursed through NYSDEC grant programs. This program would provide aide to residents that cannot afford to buy new products. **Jurisdictional Impact:** -Participation by neighboring Planning Units is not applicable.		
2. Create a website that would provide a platform for excess food generators to communicate with local food pantries and soup kitchens in need of food. **Required Resources:** Current staff **Milestones/Desired Outcome:** Develop a County Reduce, Reuse and Recycle website. Reduce the amount of waste generated in the Planning Unit by matching excess food generators to those in need of food. **Start Date:** 2021 **Completion Date:** Ongoing **Administrative/Technical Impact:** -Waste Stream Impact- Minimize volume of waste generated <2%. -Cost & Lifecycle Analysis- Marginally reduce disposal and recyclable handling expenses. Marginally increase staff workload. There is currently a grant offered by the NYSDEC which would reimburse the County for 50% of the qualifying expenses. **Jurisdictional Impact:** -Participation by neighboring Planning Units is not applicable.	X	

Recycle Waste Generated in the PU Recommendations	County Implemented	Implemented by Each Municipality Individually
1. Create a website that informs local businesses, residents and institutions about composting opportunities. **Required Resources:** Current staff **Milestones/Desired Outcome:** Develop a County Reduce, Reuse and Recycle website. Educate local businesses, residents and institutions on how to effectively reduce the amount of waste generated in the Planning Unit designated for disposal. **Start Date:** 2021 **Completion Date:** Ongoing **Administrative/Technical Impact:** -Waste Stream Impact- Minimize volume of waste generated <1%. -Cost & Lifecycle Analysis- Marginally reduce disposal and recyclable handling expenses. Marginally increase staff workload. There is currently a grant offered by the NYSDEC which would reimburse the County for 50% of the qualifying expenses. **Jurisdictional Impact:** -Participation by neighboring Planning Units is not applicable.	X	
2. Distribute brochures at municipal buildings and local transfer station/recycling centers that educate residents on simple and cost-effective backyard composting opportunities. **Required Resources:** Current staff **Milestones/Desired Outcome:** Reduce the amount of waste generated in the Planning Unit. **Start Date:** 2021 **Completion Date:** Ongoing **Administrative/Technical Impact:** -Waste Stream Impact- Marginally minimize volume of waste <1%.	X	X

Recycle Waste Generated in the PU Recommendations	County Implemented	Implemented by Each Municipality Individually
-Cost & Lifecycle Analysis- Marginally reduce disposal and handling expenses. Marginally increase expenses for educational material. There is currently a grant offered by the DEC which would reimburse the County for 50% of the qualifying expenses. **Jurisdictional Impact:** -Participation by neighboring Planning Units is not applicable.		
3. Distribute brochures to local businesses and institutions that provide education on simple and cost-effective ways in which they can compost their food scraps and yard trimmings. **Required Resources:** Current staff **Milestones/Desired Outcome:** Reduce the amount of waste generated in the Planning Unit. **Start Date:** 2021 **Completion Date:** Ongoing **Administrative/Technical Impact:** -Waste Stream Impact- Marginally minimize volume of waste <1%. -Cost & Lifecycle Analysis- Marginally reduce disposal and handling expenses. Marginally increase expenses for educational material. There is currently a grant offered by the NYSDEC which would reimburse the County for 80% of the qualifying expenses. **Jurisdictional Impact:** -Participation by neighboring Planning Units is not applicable.	X	
4. Continue offering a County-run household hazardous waste recycling program. Consider offering a second HHW collection event. **Required Resources:** Current staff **Milestones/Desired Outcome:** Reduce the toxicity and amount of waste ultimately disposed of. **Start Date:** 2018 **Completion Date:** Ongoing **Administrative/Technical Impact:** -Waste Stream Impact- Marginally minimize volume of waste <1%. -Cost & Lifecycle Analysis- Marginally reduce disposal and handling expenses. The NYSDEC is currently offering municipalities grants to help fund HHW programs. **Jurisdictional Impact:** -Participation by neighboring Planning Units is not anticipated.	X	
5. Provide public space recycling receptacles at public events. **Required Resources:** Current staff **Milestones/Desired Outcome:** County purchases mobile recycling containers. Allow member municipalities to utilize and implement recycling containers into public events. Reduce the amount of waste disposed of in the Planning Unit. **Start Date:** 2021 **Completion Date:** Ongoing **Administrative/Technical Impact:** -Waste Stream Impact- Marginally minimize volume of waste sent for disposal <1%. -Cost & Lifecycle Analysis- Marginally reduce disposal expenses. Marginally increase expenses for increased staff workload and purchase of recycling containers. There is currently a grant offered by the NYSDEC which would reimburse the County for 50% of the qualifying expenses. **Jurisdictional Impact:** -Participation by neighboring Planning Units is not anticipated.	X	X
6. Develop and/or enhance recycling programs located within municipal buildings. **Required Resources:** Current staff **Milestones/Desired Outcome:** Create convenient spaces for employees to recycle waste fibers and containers typically found in office buildings. If such locations already exist, enforce participation. Reduce the amount of waste disposed of in the Planning Unit. **Start Date:** 2021		X

Recycle Waste Generated in the PU Recommendations	County Implemented	Implemented by Each Municipality Individually
Completion Date: Ongoing **Administrative/Technical Impact:** -Waste Stream Impact- Marginally minimize volume of waste sent for disposal <1%. -Cost & Lifecycle Analysis- Marginally reduce disposal expenses. Marginally increase expenses for purchase of recycling containers. **Jurisdictional Impact:** -Participation by neighboring Planning Units is not applicable.		
7. Develop recycling programs and education in schools located within the Planning Unit. **Required Resources:** Current staff **Milestones/Desired Outcome:** Create convenient spaces for employees to recycle waste fibers and containers typically found in schools. If such locations already exist, enforce participation. Reduce the amount of waste disposed of in the Planning Unit. By developing recycling programs in schools located within the Planning Unit, the Planning Unit can use the recycling program as a focus on environmental education. Participating schools can develop recycling education curriculum with the hope that the participating students will apply what they learned in school at home. **Start Date:** 2021 **Completion Date:** Ongoing **Administrative/Technical Impact:** -Waste Stream Impact- Marginally minimize volume of waste sent for disposal <1%. -Cost & Lifecycle Analysis- Marginally reduce disposal expenses. Marginally increase expenses for purchase of recycling containers. There is currently a grant offered by the NYSDEC which would reimburse the County for 50% of the qualifying expenses. **Jurisdictional Impact:** -Participation by neighboring Planning Units is not applicable.		X
8. Create a website that informs local businesses on helpful recycling program ideas for various types of entities. **Required Resources:** Current staff **Milestones/Desired Outcome:** Develop a County Reduce, Reuse and Recycle website. Educate local businesses on how to effectively reduce the amount of waste generated in the Planning Unit designated for disposal. **Start Date:** 2021 **Completion Date:** Ongoing **Administrative/Technical Impact:** -Waste Stream Impact- Minimize volume of waste generated <1%. -Cost & Lifecycle Analysis- Marginally reduce disposal expenses. Marginally increase staff workload. There is currently a grant offered by the NYSDEC which would reimburse the County for 50% of the qualifying expenses. **Jurisdictional Impact:** -Participation by neighboring Planning Units is not anticipated.	X	
9. Hold seminars for local businesses to educate them on current and feasible recycling activities. **Required Resources:** Current staff/Third party volunteer **Milestones/Desired Outcome:** Educate residents on how to effectively reduce the amount of waste destined for disposal in the Planning Unit. **Start Date:** 2021 **Completion Date:** Ongoing **Administrative/Technical Impact:** -Waste Stream Impact- Minimize volume of waste generated <1%. -Cost & Lifecycle Analysis- Marginally reduce disposal expenses. Marginally increase staff workload. There is currently a grant offered by the NYSDEC which would reimburse the County for 50% of the qualifying expenses. **Jurisdictional Impact:** -Participation by neighboring Planning Units is not anticipated.	X	

Recycle Waste Generated in the PU Recommendations	County Implemented	Implemented by Each Municipality Individually
10. Evaluate a need for, and if required, select a recycling enforcement mechanism (Hauler Licensing, Waste Collection Franchising, Municipal Collection). **Required Resources:** Current staff **Milestones/Desired Outcome:** If the Planning Unit determines that it is not recycling enough solid waste, recycling enforcement mechanisms should be evaluated. The desired outcome would be to decrease the amount of waste generated in the Planning Unit destined for disposal by increasing the amount of waste recycled. By actively enforcing a recycling mechanism that fits their specific solid waste and recycling program, each individual member municipality can substantially increase their recycling rate. Most member municipalities are not currently enforcing any type of recycling mechanism. **Start Date:** 2022 **Completion Date:** Ongoing **Administrative/Technical Impact:** -Waste Stream Impact- Minimize volume of waste generated <5%. -Cost & Lifecycle Analysis- Program expenses and administrative duties vary greatly depending on which recycling enforcement mechanism is chosen, if any. **Jurisdictional Impact:** -Participation by neighboring Planning Units is not applicable.		X
11. Collectively procure long-term contracts for the sale of recyclables. **Required Resources:** Current County staff **Milestones/Desired Outcome:** Create a market for recyclables handled by member municipalities by increasing the volume of recyclables offered for sale through collective procurement and provide stability for municipal planning and budgeting by engaging in long term contracting. **Start Date:** 2019 **Completion Date:** Ongoing **Administrative/Technical Impact:** -Waste Stream Impact- No impact -Cost & Lifecycle Analysis- Increase recycling revenue and vender reliability. **Jurisdictional Impact:** -Participation by neighboring Planning Units is not applicable.	RFP administered on the County level with individual member municipalities given option to participate.	
12. Provide a link on the newly created waste reduction, reuse and recycling webpage to The Empire State Development (ESD) Recycling Market Database, which provides information about intermediate and end-use markets for recyclable material. **Required Resources:** Current staff **Milestones/Desired Outcome:** Develop a County Reduce, Reuse and Recycle website. Educate Planning Unit municipalities, residents and local businesses on end-use markets. **Start Date:** 2021 **Completion Date:** Ongoing **Administrative/Technical Impact:** -Waste Stream Impact- Minimize volume of waste destined for disposal <1%. -Cost & Lifecycle Analysis- Marginally increase recycling revenue and stability. **Jurisdictional Impact:** -Participation by neighboring Planning Units is not anticipated.	X	

Disposal of Residual Waste Generated in the PU Recommendations	County Implemented	Implemented by Each Municipality Individually
1. Individual municipalities located in the Planning Unit should discuss and evaluate collectively procuring transportation and disposal services for municipally handled MSW and C&D. The collective procurement should include at the very least the six delivery points identified herein and should be flexible to allow different groups of municipalities to use different delivery points if economically advantageous, possibly including Washington County, NY. **Required Resources:** Current staff **Milestones/Desired Outcome:** If it is determined that multiple individual municipalities are interested in participating in a collective procurement, develop a County issued RFP for individual member municipalities. Member municipalities can capitalize on the opportunity to explore alternative disposal options for economically advantageous terms. This procurement should occur approximately every 3-5 years. **Start Date:** 2021 **Completion Date:** Ongoing, every 3-5 years **Administrative/Technical Impact:** -Waste Stream Impact- No impact -Cost & Lifecycle Analysis- Marginally decrease disposal costs and increase stability. **Jurisdictional Impact:** -Participation by neighboring Planning Units is not anticipated. However, neighboring Planning Units could be included to add to the economies of scale.	RFP administered on the County level with individual member municipalities given option to participate.	
2. Continue to allow residents and private industries to independently arrange for the collection and subsequent disposal of residual waste material generated in the Planning Unit which is not municipally handled. **Required Resources:** None **Milestones/Desired Outcome:** Give residents the ability to choose their own services. **Start Date:** 2019 **Completion Date:** Ongoing **Administrative/Technical Impact:** -Waste Stream Impact- No impact -Cost & Lifecycle Analysis- No impact **Jurisdictional Impact:** -Participation by neighboring Planning Units is not applicable.	X	

XI. IMPLEMENTATION SCHEDULE AND RECOVERY GOALS

Timeframe	Recommendation/Action	Responsible Party	Tasks
2019	Collectively procure contracts for the sale of municipally handled recyclables.	RFP administered on the County level with individual member municipalities given option to participate	• Issue an RFP for the sale of municipally collected recyclables on a bi-annual basis. • Determine individual member municipality participation on a bi-annual basis.
2019-2020	Respond to the June 6, 2018 NYSDEC comments issued on the Draft LSWMP submitted to the NYSDEC in January 2011.	Warren County DPW	• Contract third party to respond to NYSDEC comments. • Gather additional data requested by NYSDEC. • Provide the revised Draft LSWMP addressing NYSDEC comments to the Public for a 45-day Public Comment Period. • Issue a Notice of Public Hearing in wide circulation for 15 days. • Hold one Public Hearing to present public overview of plan and receive comments. • Write a Responsiveness Summary for all verbal and written comments received and attach to the LSWMP. • Issue revised Draft LSWMP with Responsiveness Summary to the NYSDEC for Final approval.
Annually (2019-2028)	Offer a County-run HHW collection program. Consider offering a second HHW collection event to increase recycled/diverted HHW material.	Warren County DPW	• Issue an RFP for a private vender to operate an HHW collection program on an annual basis. • Keep records of the volume and type of items collected for future Solid Waste Management Planning.
Annually (2019-2028)	For any Member Municipalities with a Regulated NYSDEC transfer station and/or C&D landfill, continue to submit any NYSDEC required annual reports.	Each Member Municipality with a Regulated NYSDEC Facility	• For Member Municipalities with a Registered transfer station, continue to submit the NYSDEC Registered Transfer Facility Annual Report. • For Member Municipalities with a Permitted C&D landfill, continue to submit the NYSDEC Active C&D Debris Landfill Annual Report.
2019 Year End Waste Disposal Goal (Per Capita Pounds/Day): *Assumes 0% Reduction from Current Estimated Waste Disposal Rate			3.45

Timeframe	Recommendation/Action	Responsible Party	Tasks
2020, 2022, 2024, 2026,2028	Collectively procure long-term contracts for the sale of recyclables. We have assumed two-year-term engagements.	RFP administered on the County level with individual member municipalities given option to participate.	• Issue an RFP for the sale of municipally collected recyclables on a bi-annual basis. • Determine individual member municipality participation on a bi-annual basis.
Annually (2020-2028)	Encourage all municipalities in the Planning Unit to use procurement lists and procurement specifications as developed by the State under Executive Order #4, where practicable.	Warren County Purchasing Department	• Provide each member municipality with procurement lists and procurement specifications as developed by the State.
Annually (2020-2028)	Encourage all municipalities in the Planning Unit to issue all documents in double-sided format, where practicable.	Warren County DPW	• Evaluate ways to educate each member municipality leader on potential waste reduction and costs savings associated with double-sided printing.
Annually (2020-2028)	Encourage all municipalities in the Planning Unit to require that responders to any municipally issued RFPs or bids be submitted in double-sided format.	Warren County DPW	• Evaluate ways to educate each member municipality leader on potential waste reduction opportunities associated with double-sided printing. • Award extra points to RFP responders that submit responses in double-sided format.
Annually (2020-2028)	Encourage all municipal employees to communicate via electronic mail as opposed to regular mail.	Warren County DPW	• Evaluate ways to educate each member municipality leader on potential waste reduction and costs savings associated with electronic mail.
Annually (2020-2028)	Distribute brochures at municipal buildings and local transfer station/recycling centers that educate residents on simple and cost-effective waste reduction opportunities.	Warren County DPW	• Develop brochures that educate residents on simple and cost-effective waste reduction opportunities using this report and the NYSDEC website. • Distribute brochures to municipal buildings and transfer stations located within the Planning Unit. • Instruct building managers and operators to distribute brochures at their location.

Timeframe	Recommendation/Action	Responsible Party	Tasks
Annually (2020-2028)	Distribute brochures to local businesses and institutions that provide education on simple and cost-effective waste reduction opportunities.	Warren County DPW	• Identify local businesses and institutions that generate large volumes of waste. • Develop brochures that educate local businesses and institutions on simple and cost-effective waste reduction opportunities using this report and the NYSDEC website. • Distribute brochures to municipal buildings and institutions located within the Planning Unit that generate large volumes of waste. • Ask building managers and operators to distribute brochures at their location.
Annually (2020-2028)	Hold seminars for residents to demonstrate ways to reduce waste generation.	Warren County DPW or Contracted Third Party	• Identify third party volunteers that teach waste reduction activities and practices. • Engage third party volunteers to hold waste reduction seminars for residents.
Annually (2020-2028)	Encourage unit-based pricing.	Each Member Municipality	• Implement unit-based pricing at municipally operated transfer stations and for municipally contracted/operated collection services.
Annually (2020-2028)	Distribute brochures at municipal buildings and local transfer station/recycling centers that educate residents on simple and cost-effective backyard composting opportunities.	Warren County DPW	• Develop brochures that educate local residents on simple and cost-effective backyard composting opportunities using this report and the NYSDEC website. • Distribute brochures to municipal buildings and transfer stations located within the Planning Unit. • Instruct building managers and operators to distribute brochures at their location.
Annually (2020-2028)	Distribute brochures to local businesses and institutions that provide education on simple and cost-effective ways in which they can compost their food scraps and yard trimmings.	Warren County DPW	• Identify local businesses and institutions that generate large volumes of food scraps and yard trimmings. • Develop brochures that educate local businesses and institutions on simple and cost-effective food scrap and yard trimming composting opportunities using this report and the NYSDEC website. • Distribute brochures to municipal buildings and institutions located within the Planning Unit that generate large volumes of food scraps and yard trimmings. • Ask building managers and operators to distribute brochures at their location.

Timeframe	Recommendation/Action	Responsible Party	Tasks
Annually (2020-2028)	Provide public space recycling receptacles at public events.	Warren County DPW	• Purchase mobile recyclable handling containers. • Identify public events to locate public waste recycling receptacles. • Provide receptacles to member municipalities for public events. • Remove receptacles from public events and bring recyclables to member municipality transfer station.
Annually (2020-2028)	Develop and/or enhance recycling programs located within municipal buildings.	Each Member Municipality	• Identify current recycling program barriers and inefficiencies. • Identify additional recycling program opportunities or program enhancements. • If applicable, implement recycling program opportunities and enhancements.
Annually (2020-2028)	Hold seminars for local businesses to educate them on current and feasible recycling activities.	Warren County DPW or Contracted Third Party	• Identify third party volunteers that teach recycling activities and practices. • Engage third party volunteers to hold recycling seminars for local residents.
Annually 2020-2028	Establish a reporting protocol which requires individual member municipalities to provide the Warren County DPW designee with bi-annual solid waste and recycling data collected by each municipality. This data should include a breakdown of each recycling component handled, its associated volume, associated revenue or disposal expense, source of material and ultimate destination for the material. It should also include the volume of all waste handled for disposal, the source of waste and ultimate disposal location. This includes any type of material that is handled by the member municipalities such as MSW, C&D and Biosolids.	Warren County DPW	• Evaluate convenient ways to collect solid waste and recycling data from member municipalities. • Once a reporting protocol is established, continuously collect data from member municipalities on a bi-annual basis. • Store all data collected for future solid waste and recycling data evaluation and for the completion of future LSWMPs and NYSDEC bi-annual reports.
Annually 2020-2028	Establish a reporting protocol which requires individual member municipalities to provide the Warren County DPW designee with a breakdown of the annual costs, revenues and funding mechanisms of solid waste facility and programs. Requested costs should include capital investments, insurance, operation, maintenance, closure and post-closure costs, administration and financing, Revenues should include fees, fines, recyclable revenues, general fund contributions and/or special district charges.	Warren County DPW	• Evaluate convenient ways to collect solid waste and recycling data from member municipalities. • Once a reporting protocol is established, continuously collect data from member municipalities on a bi-annual basis. • Store all data collected for future solid waste and recycling data evaluation and for the completion of future LSWMPs.

Timeframe	Recommendation/Action	Responsible Party	Tasks
2020 Year End Waste Disposal Goal (Per Capita Pounds/Day): *Assumes 0% Reduction from Current Estimated Waste Disposal Rate			3.45
2021	Create a website that would provide a platform for excess food generators to communicate with local food pantries and soup kitchens in need of food.	Warren County IT Department	• Identify local food pantries and soup kitchens and provide website information. • Identify local excess food generators and provide website information. • Create website or link on current County website.
2021	Create a website that informs local businesses, residents and institutions about composting opportunities.	Warren County IT Department	• Create a website that informs local businesses, residents and institutions about composting opportunities.
2021	Create a website that informs local businesses on helpful recycling program ideas for various types of entities.	Warren County IT Department	• Create a website that informs local businesses on helpful recycling program ideas for various types of entities.
2021	Provide a link on the newly created waste Reduction, Reuse and Recycling webpage to The Empire State Development (ESD) Recycling Market Database, which provides information about intermediate and end-use markets for recyclable material.	Warren County IT Department	• Provide a link on the newly created waste Reduction, Reuse and Recycling webpage to The Empire State Development (ESD) Recycling Market Database.
2021	Develop Reuse Centers at municipally owned transfer stations in the Planning Unit.	Each Member Municipality	• Evaluate whether there is enough space and staff to accommodate a Reuse center. • Visit the Town of Chester Reuse center for an example of a successful program. • If possible, develop a Reuse center at municipal transfer station.
2021	Develop recycling programs and education in schools located within the Planning Unit.	Each Member Municipality School District	• Develop a recycling education curriculum. • If no program currently exists, develop a recycling program for types of waste generated in high volume such as corrugated cardboard and office paper.
2021	Evaluate and select a recycling enforcement mechanism (Hauler Licensing, Waste Collection Franchising, Municipal Collection).	Each Member Municipality	• Evaluate the need for a recycling enforcement mechanism. • If determined necessary, select a recycling enforcement mechanism identified in this report.
2021	Renew C&D landfill permit. Must be renewed every five years.	Village of Lake George	Keep the Village's C&D landfill operating under NYSDEC regulations.
2021 Year End Waste Disposal Goal (Per Capita Pounds/Day): *Assumes 4% Reduction from Estimated 2020 Waste Disposal Rate Goal			3.31
2022	Renew C&D landfill permit. Must be renewed every five years.	Town of Thurman	Keep the Town's C&D landfill operating under NYSDEC regulations.

Timeframe	Recommendation/Action	Responsible Party	Tasks
	2022 Year End Waste Disposal Goal (Per Capita Pounds/Day): *Assumes 3% Reduction from Estimated 2021 Waste Disposal Rate Goal		3.21
	2023 Year End Waste Disposal Goal (Per Capita Pounds/Day): *Assumes 2% Reduction from Estimated 2022 Waste Disposal Rate Goal		3.15
	2024 Year End Waste Disposal Goal (Per Capita Pounds/Day): *Assumes 2% Reduction from Estimated 2023 Waste Disposal Rate Goal		3.08
	2025 Year End Waste Disposal Goal (Per Capita Pounds/Day): *Assumes 2% Reduction from Estimated 2024 Waste Disposal Rate Goal		3.02
2026	Renew C&D landfill permit. Must be renewed every five years.	Village of Lake George	Keep the Village's C&D landfill operating under NYSDEC regulations.
	2026 Year End Waste Disposal Goal (Per Capita Pounds/Day): *Assumes 1% Reduction from Estimated 2025 Waste Disposal Rate Goal		2.99
2027	Renew C&D landfill permit. Must be renewed every five years.	Town of Thurman	Keep the Town's C&D landfill operating under NYSDEC regulations.
2027	Draft new Local Solid Waste Management Plan.	Warren County DPW or Contracted Third Party	Start the data collection and review of current solid waste practices in the Planning Unit.
	2027 Year End Waste Disposal Goal (Per Capita Pounds/Day): *Assumes 1% Reduction from Estimated 2026 Waste Disposal Rate Goal		2.96
2028	Finalize new Local Solid Waste Management Plan.	Warren County DPW or Contracted Third Party	Finalize the new LSWMP before the existing one expires.
	2028 Year End Waste Disposal Goal (Per Capita Pounds/Day): *Assumes 1% Reduction from Estimated 2027 Waste Disposal Rate Goal		2.93

The following summary estimates the total MSW generated in the Planning Unit over the next 10 years which will be destined for disposal if the recommendations/actions listed above are implemented compared to what would be destined for disposal if the County maintains its current waste handling practices:

Status Quo	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	10 YR Total
Waste Disposed: Status Quo (Tons)	54,876	54,876	54,876	54,876	54,876	54,876	54,876	54,876	54,876	54,876	**548,755**
Current Estimated Local Waste Disposal Rate (Lbs/Person/Day)(1):	3.45	3.45	3.45	3.45	3.45	3.45	3.45	3.45	3.45	3.45	
With LSWMP Recommendations/Actions	**2019**	**2020**	**2021**	**2022**	**2023**	**2024**	**2025**	**2026**	**2027**	**2028**	**10 YR Total**
Estimated Waste Generation Reduction with LSWMP Waste Reduction, Reuse and Recycling Initiatives Implemented:	0%	0%	4%	3%	2%	2%	2%	1%	1%	1%	
Estimated Waste Disposed with LSWMP Recommendations/Actions Implemented (Tons):	54,876	54,876	52,681	51,100	50,078	49,077	48,095	47,614	47,138	46,667	**502,200**
Estimated Waste Disposed with LSWMP Recommendations/Actions Implemented (Lbs/Person/Day)(1):	3.45	3.45	3.31	3.21	3.15	3.08	3.02	2.99	2.96	2.93	
(1) Includes Tourist/Visitor population											

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WARREN COUNTY, NY
Local Solid Waste Management Plan
Estimated Future MSW Generation Rates
Attachment A
Summary of MSW Generators
6/17/2020
Prepared By: R.S. Lynch & Company, Inc.

MSW Generator	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2019-2028 Total
Tourist/Visitor	13,938	13,938	13,938	13,938	13,938	13,938	13,938	13,938	13,938	13,938	**139,381**
Town of Bolton	2,123	2,123	2,123	2,123	2,123	2,123	2,123	2,123	2,123	2,123	**21,232**
Town of Chester	3,069	3,069	3,069	3,069	3,069	3,069	3,069	3,069	3,069	3,069	**30,687**
City of Glens Falls	13,485	13,485	13,485	13,485	13,485	13,485	13,485	13,485	13,485	13,485	**134,853**
Town of Hague	638	638	638	638	638	638	638	638	638	638	**6,382**
Town of Horicon	1,268	1,268	1,268	1,268	1,268	1,268	1,268	1,268	1,268	1,268	**12,679**
Town of Johnsburg	2,172	2,172	2,172	2,172	2,172	2,172	2,172	2,172	2,172	2,172	**21,721**
Town of Lake George(1)	2,382	2,382	2,382	2,382	2,382	2,382	2,382	2,382	2,382	2,382	**23,816**
Village of Lake George	826	826	826	826	826	826	826	826	826	826	**8,262**
Town of Lake Luzerne	3,063	3,063	3,063	3,063	3,063	3,063	3,063	3,063	3,063	3,063	**30,631**
Town of Queensbury	25,819	25,819	25,819	25,819	25,819	25,819	25,819	25,819	25,819	25,819	**258,193**
Town of Stony Creek	698	698	698	698	698	698	698	698	698	698	**6,983**
Town of Thurman	1,116	1,116	1,116	1,116	1,116	1,116	1,116	1,116	1,116	1,116	**11,156**
Town of Warrensburg	3,742	3,742	3,742	3,742	3,742	3,742	3,742	3,742	3,742	3,742	**37,416**
TOTAL:	**74,339**	**74,339**	**74,339**	**74,339**	**74,339**	**74,339**	**74,339**	**74,339**	**74,339**	**74,339**	**743,392**
COMPOSITION OF WASTE GENERATED											
Newspaper	3,095	3,095	3,095	3,095	3,095	3,095	3,095	3,095	3,095	3,095	**30,952**
Corrugated Cardboard	7,008	7,008	7,008	7,008	7,008	7,008	7,008	7,008	7,008	7,008	**70,080**
Paperboard	1,878	1,878	1,878	1,878	1,878	1,878	1,878	1,878	1,878	1,878	**18,775**
Office Paper	1,373	1,373	1,373	1,373	1,373	1,373	1,373	1,373	1,373	1,373	**13,727**
Junk Mail	1,246	1,246	1,246	1,246	1,246	1,246	1,246	1,246	1,246	1,246	**12,462**
Other Commercial Printing	1,689	1,689	1,689	1,689	1,689	1,689	1,689	1,689	1,689	1,689	**16,893**
Magazines	788	788	788	788	788	788	788	788	788	788	**7,877**
Books	250	250	250	250	250	250	250	250	250	250	**2,497**
Paper Bags	304	304	304	304	304	304	304	304	304	304	**3,036**
Phone Books	181	181	181	181	181	181	181	181	181	181	**1,812**
Poly Coated	179	179	179	179	179	179	179	179	179	179	**1,785**
Other Compostable Paper	5,388	5,388	5,388	5,388	5,388	5,388	5,388	5,388	5,388	5,388	**53,881**
Ferrous Containers	937	937	937	937	937	937	937	937	937	937	**9,369**
Aluminum Containers	408	408	408	408	408	408	408	408	408	408	**4,077**
Other Aluminum	199	199	199	199	199	199	199	199	199	199	**1,989**
Automotive Batteries	365	365	365	365	365	365	365	365	365	365	**3,646**
Other Non-Aluminum	297	297	297	297	297	297	297	297	297	297	**2,968**
Other Ferrous Metals	3,690	3,690	3,690	3,690	3,690	3,690	3,690	3,690	3,690	3,690	**36,905**
PET Containers	758	758	758	758	758	758	758	758	758	758	**7,577**
HDPE Containers	689	689	689	689	689	689	689	689	689	689	**6,889**
Plastic Containers (#3-#7)	154	154	154	154	154	154	154	154	154	154	**1,537**
Film Plastic	4,676	4,676	4,676	4,676	4,676	4,676	4,676	4,676	4,676	4,676	**46,757**
Durables	1,877	1,877	1,877	1,877	1,877	1,877	1,877	1,877	1,877	1,877	**18,765**
Non-Durables	1,401	1,401	1,401	1,401	1,401	1,401	1,401	1,401	1,401	1,401	**14,007**
Packaging	1,047	1,047	1,047	1,047	1,047	1,047	1,047	1,047	1,047	1,047	**10,475**
Glass Containers	3,206	3,206	3,206	3,206	3,206	3,206	3,206	3,206	3,206	3,206	**32,064**
Other Glass	318	318	318	318	318	318	318	318	318	318	**3,179**
Food Scraps	12,082	12,082	12,082	12,082	12,082	12,082	12,082	12,082	12,082	12,082	**120,820**
Yard Trimmings	4,596	4,596	4,596	4,596	4,596	4,596	4,596	4,596	4,596	4,596	**45,956**
Clothing, Footwear, Towels & Sheets	3,161	3,161	3,161	3,161	3,161	3,161	3,161	3,161	3,161	3,161	**31,613**
Carpet	906	906	906	906	906	906	906	906	906	906	**9,057**
Wood	2,621	2,621	2,621	2,621	2,621	2,621	2,621	2,621	2,621	2,621	**26,211**
C&D Material	2,911	2,911	2,911	2,911	2,911	2,911	2,911	2,911	2,911	2,911	**29,115**
Other Durables	991	991	991	991	991	991	991	991	991	991	**9,909**
Diapers	1,359	1,359	1,359	1,359	1,359	1,359	1,359	1,359	1,359	1,359	**13,591**
Electronics	934	934	934	934	934	934	934	934	934	934	**9,338**
Tires	995	995	995	995	995	995	995	995	995	995	**9,949**
HHW	203	203	203	203	203	203	203	203	203	203	**2,034**
Fines	182	182	182	182	182	182	182	182	182	182	**1,818**
TOTAL WASTE GENERATED:	**74,339**	**74,339**	**74,339**	**74,339**	**74,339**	**74,339**	**74,339**	**74,339**	**74,339**	**74,339**	**743,392**
TOTAL WASTE DISPOSED(2):	**54,876**	**54,876**	**54,876**	**54,876**	**54,876**	**54,876**	**54,876**	**54,876**	**54,876**	**54,876**	**548,755**

(1) Does not include Village of Lake George population in order to avoid double counting**.**
(2) Estimated assuming each individual municipality's recycling rate, or in some instances, an average of the available member municipality recycling rates.

WARREN COUNTY, NY
Local Solid Waste Management Plan
Estimated Future MSW Generation Rates
Attachment A
6/17/2020
Prepared By: R.S. Lynch & Company, Inc.

Tourist/Visitor		2019	2020	2021	2022	2023	2024	2025	2026	2027	2028
Total Tourist/Visitor Population Days (1)	**8,379,677**										
NYS DEC MSW Generation Rate (Lbs/Person/Day) (2)	**5.15**										
Assumed Tourist/Visitor Recycling Rate	**21.15%**										
Estimated Tourist/Visitor Population Days with Consistent Tourist/Visitor Population		**8,379,677**	**8,379,677**	**8,379,677**	**8,379,677**	**8,379,677**	**8,379,677**	**8,379,677**	**8,379,677**	**8,379,677**	**8,379,677**
COMPOSITION OF TOURIST/VISITOR WASTE GENERATED											
	(3)										
Newspaper	**4.07%**	878	878	878	878	878	878	878	878	878	878
Corrugated Cardboard	**5.00%**	1,079	1,079	1,079	1,079	1,079	1,079	1,079	1,079	1,079	1,079
Paperboard	**2.30%**	496	496	496	496	496	496	496	496	496	496
Office Paper	**0.00%**	0	0	0	0	0	0	0	0	0	0
Junk Mail	**0.00%**	0	0	0	0	0	0	0	0	0	0
Other Commercial Printing	**2.24%**	483	483	483	483	483	483	483	483	483	483
Magazines	**1.00%**	216	216	216	216	216	216	216	216	216	216
Books	**0.00%**	0	0	0	0	0	0	0	0	0	0
Paper Bags	**0.39%**	84	84	84	84	84	84	84	84	84	84
Phone Books	**0.00%**	0	0	0	0	0	0	0	0	0	0
Poly Coated	**0.23%**	50	50	50	50	50	50	50	50	50	50
Other Compostable Paper	**6.68%**	1,441	1,441	1,441	1,441	1,441	1,441	1,441	1,441	1,441	1,441
Ferrous Containers	**1.11%**	240	240	240	240	240	240	240	240	240	240
Aluminum Containers	**0.48%**	104	104	104	104	104	104	104	104	104	104
Other Aluminum	**0.25%**	54	54	54	54	54	54	54	54	54	54
Automotive Batteries	**0.00%**	0	0	0	0	0	0	0	0	0	0
Other Non-Aluminum	**0.33%**	71	71	71	71	71	71	71	71	71	71
Other Ferrous Metals	**2.17%**	467	467	467	467	467	467	467	467	467	467
PET Containers	**1.01%**	218	218	218	218	218	218	218	218	218	218
HDPE Containers	**0.85%**	183	183	183	183	183	183	183	183	183	183
Plastic Containers (#3-#7)	**0.19%**	41	41	41	41	41	41	41	41	41	41
Film Plastic	**5.75%**	1,241	1,241	1,241	1,241	1,241	1,241	1,241	1,241	1,241	1,241
Durables	**0.00%**	0	0	0	0	0	0	0	0	0	0
Non-Durables	**1.77%**	382	382	382	382	382	382	382	382	382	382
Packaging	**1.29%**	278	278	278	278	278	278	278	278	278	278
Glass Containers	**3.97%**	857	857	857	857	857	857	857	857	857	857
Other Glass	**0.39%**	84	84	84	84	84	84	84	84	84	84
Food Scraps	**17.66%**	3,811	3,811	3,811	3,811	3,811	3,811	3,811	3,811	3,811	3,811
Yard Trimmings	**0.00%**	0	0	0	0	0	0	0	0	0	0
Clothing, Footwear, Towels & Sheets	**3.78%**	816	816	816	816	816	816	816	816	816	816
Carpet	**0.00%**	0	0	0	0	0	0	0	0	0	0
Wood	**0.00%**	0	0	0	0	0	0	0	0	0	0
C&D Material	**0.00%**	0	0	0	0	0	0	0	0	0	0
Other Durables	**0.00%**	0	0	0	0	0	0	0	0	0	0
Diapers	**1.69%**	365	365	365	365	365	365	365	365	365	365
Electronics	**0.00%**	0	0	0	0	0	0	0	0	0	0
Tires	**0.00%**	0	0	0	0	0	0	0	0	0	0
HHW	**0.00%**	0	0	0	0	0	0	0	0	0	0
Fines	**0.00%**	0	0	0	0	0	0	0	0	0	0
ESTIMATED TOTAL WASTE GENERATED:	**64.60%**	**13,938**	**13,938**	**13,938**	**13,938**	**13,938**	**13,938**	**13,938**	**13,938**	**13,938**	**13,938**
ESTIMATED TOTAL WASTE DISPOSED (4):		**10,990**	**10,990**	**10,990**	**10,990**	**10,990**	**10,990**	**10,990**	**10,990**	**10,990**	**10,990**

(1) Assumptions and data provided by the Warren County, NY Planning and Tourism Departments. There has been an average of 8,379,677 tourist/visitor days in Warren County (1994-2008) and we have projected this number through the 10 year Planning Term.

(2) As reported by the NYS DEC in the New York State Solid Waste Management Plan.

(3) Waste Composition numbers determined using data provided by the NYS DEC regarding percentage of waste composition for the entire State of New York and excluding components not typically generated by Tourist/Visitors.

(4) Estimated assuming an average of the participating Planning Unit municipalities' recycling rates.

WARREN COUNTY, NY
Local Solid Waste Management Plan
Estimated Future MSW Generation Rates
Attachment A
6/17/2020
Prepared By: R.S. Lynch & Company, Inc.

Town of Bolton		2019	2020	2021	2022	2023	2024	2025	2026	2027	2028
Estimated Population (2018) (1)	**2,259**										
NYS DEC MSW Generation Rate (Lbs/Person/Day) (2)	**5.15**										
Assumed Town Recycling Rate (3)	**23.34%**										
Estimated Future Waste Disposal Volume with Status Quo Reduce, Reuse and Recycle Efforts (Lbs/Person/Day)	**3.95**										
Estimated Future Population with 0% Growth		2,259	2,259	2,259	2,259	2,259	2,259	2,259	2,259	2,259	2,259
Estimated Future Waste Generated with 0% Population Growth and Current DEC Waste Generation Assumption (Tons)		**2,123**	**2,123**	**2,123**	**2,123**	**2,123**	**2,123**	**2,123**	**2,123**	**2,123**	**2,123**
Estimated Future Waste Disposal with 0% Population Growth and Current Estimated Disposal Rate Assumption (Tons)		**1,628**	**1,628**	**1,628**	**1,628**	**1,628**	**1,628**	**1,628**	**1,628**	**1,628**	**1,628**
COMPOSITION OF RURAL WASTE GENERATED											
Newspaper	**3.81%**	81	81	81	81	81	81	81	81	81	81
Corrugated Cardboard	**9.67%**	205	205	205	205	205	205	205	205	205	205
Paperboard	**2.32%**	49	49	49	49	49	49	49	49	49	49
Office Paper	**2.06%**	44	44	44	44	44	44	44	44	44	44
Junk Mail	**2.03%**	43	43	43	43	43	43	43	43	43	43
Other Commercial Printing	**1.95%**	41	41	41	41	41	41	41	41	41	41
Magazines	**1.02%**	22	22	22	22	22	22	22	22	22	22
Books	**0.42%**	9	9	9	9	9	9	9	9	9	9
Paper Bags	**0.37%**	8	8	8	8	8	8	8	8	8	8
Phone Books	**0.30%**	6	6	6	6	6	6	6	6	6	6
Poly Coated	**0.24%**	5	5	5	5	5	5	5	5	5	5
Other Compostable Paper	**6.80%**	144	144	144	144	144	144	144	144	144	144
Ferrous Containers	**1.52%**	32	32	32	32	32	32	32	32	32	32
Aluminum Containers	**0.57%**	12	12	12	12	12	12	12	12	12	12
Other Aluminum	**0.24%**	5	5	5	5	5	5	5	5	5	5
Automotive Batteries	**0.67%**	14	14	14	14	14	14	14	14	14	14
Other Non-Aluminum	**0.42%**	9	9	9	9	9	9	9	9	9	9
Other Ferrous Metals	**5.29%**	112	112	112	112	112	112	112	112	112	112
PET Containers	**0.98%**	21	21	21	21	21	21	21	21	21	21
HDPE Containers	**0.89%**	19	19	19	19	19	19	19	19	19	19
Plastic Containers (#3-#7)	**0.16%**	3	3	3	3	3	3	3	3	3	3
Film Plastic	**5.78%**	123	123	123	123	123	123	123	123	123	123
Durables	**3.14%**	67	67	67	67	67	67	67	67	67	67
Non-Durables	**1.68%**	36	36	36	36	36	36	36	36	36	36
Packaging	**1.28%**	27	27	27	27	27	27	27	27	27	27
Glass Containers	**3.97%**	84	84	84	84	84	84	84	84	84	84
Other Glass	**0.46%**	10	10	10	10	10	10	10	10	10	10
Food Scraps	**12.95%**	275	275	275	275	275	275	275	275	275	275
Yard Trimmings	**2.26%**	48	48	48	48	48	48	48	48	48	48
Clothing, Footwear, Towels & Sheets	**3.93%**	83	83	83	83	83	83	83	83	83	83
Carpet	**1.36%**	29	29	29	29	29	29	29	29	29	29
Wood	**6.16%**	131	131	131	131	131	131	131	131	131	131
C&D Material	**7.83%**	166	166	166	166	166	166	166	166	166	166
Other Durables	**1.82%**	39	39	39	39	39	39	39	39	39	39
Diapers	**1.56%**	33	33	33	33	33	33	33	33	33	33
Electronics	**1.34%**	28	28	28	28	28	28	28	28	28	28
Tires	**1.80%**	38	38	38	38	38	38	38	38	38	38
HHW	**0.35%**	7	7	7	7	7	7	7	7	7	7
Fines	**0.60%**	13	13	13	13	13	13	13	13	13	13
TOTAL:	**100.00%**	**2,123**	**2,123**	**2,123**	**2,123**	**2,123**	**2,123**	**2,123**	**2,123**	**2,123**	**2,123**

(1) As reported by the U.S. Census Bureau.

(2) As reported by the NYS DEC in the New York State Solid Waste Management Plan.

(3) Estimated assuming a municipal-wide recycling rate as realized by the Town at its municipal transfer station.

WARREN COUNTY, NY
Local Solid Waste Management Plan
Estimated Future MSW Generation Rates
Attachment A
6/17/2020
Prepared By: R.S. Lynch & Company, Inc.

Town of Chester		2019	2020	2021	2022	2023	2024	2025	2026	2027	2028
Estimated Population (2018) (1)	**3,265**										
NYS DEC MSW Generation Rate (Lbs/Person/Day) (2)	**5.15**										
Assumed Town Recycling Rate (3)	**20.91%**										
Estimated Future Waste Disposal Volume with Status Quo Reduce, Reuse and Recycle Efforts (Lbs/Person/Day)	**4.07**										
Estimated Future Population with 0% Growth		3,265	3,265	3,265	3,265	3,265	3,265	3,265	3,265	3,265	3,265
Estimated Future Waste Generated with 0% Population Growth and Current DEC Waste Generation Assumption (Tons)		**3,069**	**3,069**	**3,069**	**3,069**	**3,069**	**3,069**	**3,069**	**3,069**	**3,069**	**3,069**
Estimated Future Waste Disposal with 0% Population Growth and Current Estimated Disposal Rate Assumption (Tons)		**2,427**	**2,427**	**2,427**	**2,427**	**2,427**	**2,427**	**2,427**	**2,427**	**2,427**	**2,427**
COMPOSITION OF RURAL WASTE GENERATED											
Newspaper	**3.81%**	117	117	117	117	117	117	117	117	117	117
Corrugated Cardboard	**9.67%**	297	297	297	297	297	297	297	297	297	297
Paperboard	**2.32%**	71	71	71	71	71	71	71	71	71	71
Office Paper	**2.06%**	63	63	63	63	63	63	63	63	63	63
Junk Mail	**2.03%**	62	62	62	62	62	62	62	62	62	62
Other Commercial Printing	**1.95%**	60	60	60	60	60	60	60	60	60	60
Magazines	**1.02%**	31	31	31	31	31	31	31	31	31	31
Books	**0.42%**	13	13	13	13	13	13	13	13	13	13
Paper Bags	**0.37%**	11	11	11	11	11	11	11	11	11	11
Phone Books	**0.30%**	9	9	9	9	9	9	9	9	9	9
Poly Coated	**0.24%**	7	7	7	7	7	7	7	7	7	7
Other Compostable Paper	**6.80%**	209	209	209	209	209	209	209	209	209	209
Ferrous Containers	**1.52%**	47	47	47	47	47	47	47	47	47	47
Aluminum Containers	**0.57%**	17	17	17	17	17	17	17	17	17	17
Other Aluminum	**0.24%**	7	7	7	7	7	7	7	7	7	7
Automotive Batteries	**0.67%**	21	21	21	21	21	21	21	21	21	21
Other Non-Aluminum	**0.42%**	13	13	13	13	13	13	13	13	13	13
Other Ferrous Metals	**5.29%**	162	162	162	162	162	162	162	162	162	162
PET Containers	**0.98%**	30	30	30	30	30	30	30	30	30	30
HDPE Containers	**0.89%**	27	27	27	27	27	27	27	27	27	27
Plastic Containers (#3-#7)	**0.16%**	5	5	5	5	5	5	5	5	5	5
Film Plastic	**5.78%**	177	177	177	177	177	177	177	177	177	177
Durables	**3.14%**	96	96	96	96	96	96	96	96	96	96
Non-Durables	**1.68%**	52	52	52	52	52	52	52	52	52	52
Packaging	**1.28%**	39	39	39	39	39	39	39	39	39	39
Glass Containers	**3.97%**	122	122	122	122	122	122	122	122	122	122
Other Glass	**0.46%**	14	14	14	14	14	14	14	14	14	14
Food Scraps	**12.95%**	397	397	397	397	397	397	397	397	397	397
Yard Trimmings	**2.26%**	69	69	69	69	69	69	69	69	69	69
Clothing, Footwear, Towels & Sheets	**3.93%**	121	121	121	121	121	121	121	121	121	121
Carpet	**1.36%**	42	42	42	42	42	42	42	42	42	42
Wood	**6.16%**	189	189	189	189	189	189	189	189	189	189
C&D Material	**7.83%**	240	240	240	240	240	240	240	240	240	240
Other Durables	**1.82%**	56	56	56	56	56	56	56	56	56	56
Diapers	**1.56%**	48	48	48	48	48	48	48	48	48	48
Electronics	**1.34%**	41	41	41	41	41	41	41	41	41	41
Tires	**1.80%**	55	55	55	55	55	55	55	55	55	55
HHW	**0.35%**	11	11	11	11	11	11	11	11	11	11
Fines	**0.60%**	18	18	18	18	18	18	18	18	18	18
TOTAL:	**100.00%**	**3,069**	**3,069**	**3,069**	**3,069**	**3,069**	**3,069**	**3,069**	**3,069**	**3,069**	**3,069**

(1) As reported by the U.S. Census Bureau.

(2) As reported by the NYS DEC in the New York State Solid Waste Management Plan.

(3) Estimated assuming a municipal-wide recycling rate as realized by the Town at its municipal transfer station.

WARREN COUNTY, NY
Local Solid Waste Management Plan
Estimated Future MSW Generation Rates
Attachment A
6/17/2020
Prepared By: R.S. Lynch & Company, Inc.

City of Glens Falls		2019	2020	2021	2022	2023	2024	2025	2026	2027	2028
Estimated Population (2018) (1)	**14,348**										
NYS DEC MSW Generation Rate (Lbs/Person/Day) (2)	**5.15**										
Assumed City Recycling Rate (3)	**30.73%**										
Estimated Future Waste Disposal Volume with Status Quo Reduce, Reuse and Recycle Efforts (Lbs/Person/Day)	**3.57**										
Estimated Future Population with 0% Growth		14,348	14,348	14,348	14,348	14,348	14,348	14,348	14,348	14,348	14,348
Estimated Future Waste Generated with 0% Population Growth and Current DEC Waste Generation Assumption (Tons)		**13,485**	**13,485**	**13,485**	**13,485**	**13,485**	**13,485**	**13,485**	**13,485**	**13,485**	**13,485**
Estimated Future Waste Disposal with 0% Population Growth and Current Estimated Disposal Rate Assumption (Tons)		**9,341**	**9,341**	**9,341**	**9,341**	**9,341**	**9,341**	**9,341**	**9,341**	**9,341**	**9,341**
COMPOSITION OF SUBURBAN WASTE GENERATED											
Newspaper	**3.60%**	485	485	485	485	485	485	485	485	485	485
Corrugated Cardboard	**9.89%**	1,334	1,334	1,334	1,334	1,334	1,334	1,334	1,334	1,334	1,334
Paperboard	**2.27%**	306	306	306	306	306	306	306	306	306	306
Office Paper	**2.38%**	321	321	321	321	321	321	321	321	321	321
Junk Mail	**2.08%**	280	280	280	280	280	280	280	280	280	280
Other Commercial Printing	**2.02%**	272	272	272	272	272	272	272	272	272	272
Magazines	**0.91%**	123	123	123	123	123	123	123	123	123	123
Books	**0.41%**	55	55	55	55	55	55	55	55	55	55
Paper Bags	**0.36%**	49	49	49	49	49	49	49	49	49	49
Phone Books	**0.30%**	40	40	40	40	40	40	40	40	40	40
Poly Coated	**0.20%**	27	27	27	27	27	27	27	27	27	27
Other Compostable Paper	**6.40%**	863	863	863	863	863	863	863	863	863	863
Ferrous Containers	**0.97%**	131	131	131	131	131	131	131	131	131	131
Aluminum Containers	**0.47%**	63	63	63	63	63	63	63	63	63	63
Other Aluminum	**0.24%**	32	32	32	32	32	32	32	32	32	32
Automotive Batteries	**0.57%**	77	77	77	77	77	77	77	77	77	77
Other Non-Aluminum	**0.35%**	47	47	47	47	47	47	47	47	47	47
Other Ferrous Metals	**5.36%**	723	723	723	723	723	723	723	723	723	723
PET Containers	**0.85%**	115	115	115	115	115	115	115	115	115	115
HDPE Containers	**0.81%**	109	109	109	109	109	109	109	109	109	109
Plastic Containers (#3-#7)	**0.20%**	27	27	27	27	27	27	27	27	27	27
Film Plastic	**5.64%**	761	761	761	761	761	761	761	761	761	761
Durables	**3.09%**	417	417	417	417	417	417	417	417	417	417
Non-Durables	**1.69%**	228	228	228	228	228	228	228	228	228	228
Packaging	**1.27%**	171	171	171	171	171	171	171	171	171	171
Glass Containers	**3.85%**	519	519	519	519	519	519	519	519	519	519
Other Glass	**0.35%**	47	47	47	47	47	47	47	47	47	47
Food Scraps	**14.07%**	1,897	1,897	1,897	1,897	1,897	1,897	1,897	1,897	1,897	1,897
Yard Trimmings	**10.31%**	1,390	1,390	1,390	1,390	1,390	1,390	1,390	1,390	1,390	1,390
Clothing, Footwear, Towels & Sheets	**3.86%**	521	521	521	521	521	521	521	521	521	521
Carpet	**1.57%**	212	212	212	212	212	212	212	212	212	212
Wood	**3.42%**	461	461	461	461	461	461	461	461	461	461
C&D Material	**3.30%**	445	445	445	445	445	445	445	445	445	445
Other Durables	**1.55%**	209	209	209	209	209	209	209	209	209	209
Diapers	**1.69%**	228	228	228	228	228	228	228	228	228	228
Electronics	**1.65%**	223	223	223	223	223	223	223	223	223	223
Tires	**1.57%**	212	212	212	212	212	212	212	212	212	212
HHW	**0.33%**	45	45	45	45	45	45	45	45	45	45
Fines	**0.15%**	20	20	20	20	20	20	20	20	20	20
TOTAL:	**100.00%**	**13,485**	**13,485**	**13,485**	**13,485**	**13,485**	**13,485**	**13,485**	**13,485**	**13,485**	**13,485**

(1) As reported by the U.S. Census Bureau**.**

(2) As reported by the NYS DEC in the New York State Solid Waste Management Plan**.**

(3) Estimated assuming a municipal-wide recycling rate as realized by the Town of Queensbury at its two municipally-operated transfer stations.

WARREN COUNTY, NY
Local Solid Waste Management Plan
Estimated Future MSW Generation Rates
Attachment A
6/17/2020
Prepared By: R.S. Lynch & Company, Inc.

Town of Hague		2019	2020	2021	2022	2023	2024	2025	2026	2027	2028
Estimated Population (2018) (1)	**679**										
NYS DEC MSW Generation Rate (Lbs/Person/Day) (2)	**5.15**										
Assumed Town Recycling Rate (3)	**13.31%**										
Estimated Future Waste Disposal Volume with Status Quo Reduce, Reuse and Recycle Efforts (Lbs/Person/Day)	**4.46**										
Estimated Future Population with 0% Growth		679	679	679	679	679	679	679	679	679	679
Estimated Future Waste Generated with 0% Population Growth and Current DEC Waste Generation Assumption (Tons)		**638**	**638**	**638**	**638**	**638**	**638**	**638**	**638**	**638**	**638**
Estimated Future Waste Disposal with 0% Population Growth and Current Estimated Disposal Rate Assumption (Tons)		**553**	**553**	**553**	**553**	**553**	**553**	**553**	**553**	**553**	**553**

COMPOSITION OF RURAL WASTE GENERATED

Newspaper	**3.81%**	24	24	24	24	24	24	24	24	24	24
Corrugated Cardboard	**9.67%**	62	62	62	62	62	62	62	62	62	62
Paperboard	**2.32%**	15	15	15	15	15	15	15	15	15	15
Office Paper	**2.06%**	13	13	13	13	13	13	13	13	13	13
Junk Mail	**2.03%**	13	13	13	13	13	13	13	13	13	13
Other Commercial Printing	**1.95%**	12	12	12	12	12	12	12	12	12	12
Magazines	**1.02%**	7	7	7	7	7	7	7	7	7	7
Books	**0.42%**	3	3	3	3	3	3	3	3	3	3
Paper Bags	**0.37%**	2	2	2	2	2	2	2	2	2	2
Phone Books	**0.30%**	2	2	2	2	2	2	2	2	2	2
Poly Coated	**0.24%**	2	2	2	2	2	2	2	2	2	2
Other Compostable Paper	**6.80%**	43	43	43	43	43	43	43	43	43	43
Ferrous Containers	**1.52%**	10	10	10	10	10	10	10	10	10	10
Aluminum Containers	**0.57%**	4	4	4	4	4	4	4	4	4	4
Other Aluminum	**0.24%**	2	2	2	2	2	2	2	2	2	2
Automotive Batteries	**0.67%**	4	4	4	4	4	4	4	4	4	4
Other Non-Aluminum	**0.42%**	3	3	3	3	3	3	3	3	3	3
Other Ferrous Metals	**5.29%**	34	34	34	34	34	34	34	34	34	34
PET Containers	**0.98%**	6	6	6	6	6	6	6	6	6	6
HDPE Containers	**0.89%**	6	6	6	6	6	6	6	6	6	6
Plastic Containers (#3-#7)	**0.16%**	1	1	1	1	1	1	1	1	1	1
Film Plastic	**5.78%**	37	37	37	37	37	37	37	37	37	37
Durables	**3.14%**	20	20	20	20	20	20	20	20	20	20
Non-Durables	**1.68%**	11	11	11	11	11	11	11	11	11	11
Packaging	**1.28%**	8	8	8	8	8	8	8	8	8	8
Glass Containers	**3.97%**	25	25	25	25	25	25	25	25	25	25
Other Glass	**0.46%**	3	3	3	3	3	3	3	3	3	3
Food Scraps	**12.95%**	83	83	83	83	83	83	83	83	83	83
Yard Trimmings	**2.26%**	14	14	14	14	14	14	14	14	14	14
Clothing, Footwear, Towels & Sheets	**3.93%**	25	25	25	25	25	25	25	25	25	25
Carpet	**1.36%**	9	9	9	9	9	9	9	9	9	9
Wood	**6.16%**	39	39	39	39	39	39	39	39	39	39
C&D Material	**7.83%**	50	50	50	50	50	50	50	50	50	50
Other Durables	**1.82%**	12	12	12	12	12	12	12	12	12	12
Diapers	**1.56%**	10	10	10	10	10	10	10	10	10	10
Electronics	**1.34%**	9	9	9	9	9	9	9	9	9	9
Tires	**1.80%**	11	11	11	11	11	11	11	11	11	11
HHW	**0.35%**	2	2	2	2	2	2	2	2	2	2
Fines	**0.60%**	4	4	4	4	4	4	4	4	4	4
TOTAL:	**100.00%**	**638**	**638**	**638**	**638**	**638**	**638**	**638**	**638**	**638**	**638**

(1) As reported by the U.S. Census Bureau**.**

(2) As reported by the NYS DEC in the New York State Solid Waste Management Plan**.**

(3) Estimated assuming a municipal-wide recycling rate as realized by the Town at its municipal transfer station.

WARREN COUNTY, NY
Local Solid Waste Management Plan
Estimated Future MSW Generation Rates
Attachment A
6/17/2020
Prepared By: R.S. Lynch & Company, Inc.

Town of Horicon		2019	2020	2021	2022	2023	2024	2025	2026	2027	2028
Estimated Population (2018) (1)	**1,349**										
NYS DEC MSW Generation Rate (Lbs/Person/Day) (2)	**5.15**										
Assumed Town Recycling Rate (3)	**17.40%**										
Estimated Future Waste Disposal Volume with Status Quo Reduce, Reuse and Recycle Efforts (Lbs/Person/Day)	**4.25**										
Estimated Future Population with 0% Growth		1,349	1,349	1,349	1,349	1,349	1,349	1,349	1,349	1,349	1,349
Estimated Future Waste Generated with 0% Population Growth and Current DEC Waste Generation Assumption (Tons)		**1,268**	**1,268**	**1,268**	**1,268**	**1,268**	**1,268**	**1,268**	**1,268**	**1,268**	**1,268**
Estimated Future Waste Disposal with 0% Population Growth and Current Estimated Disposal Rate Assumption (Tons)		**1,047**	**1,047**	**1,047**	**1,047**	**1,047**	**1,047**	**1,047**	**1,047**	**1,047**	**1,047**
COMPOSITION OF RURAL WASTE GENERATED											
Newspaper	**3.81%**	48	48	48	48	48	48	48	48	48	48
Corrugated Cardboard	**9.67%**	123	123	123	123	123	123	123	123	123	123
Paperboard	**2.32%**	29	29	29	29	29	29	29	29	29	29
Office Paper	**2.06%**	26	26	26	26	26	26	26	26	26	26
Junk Mail	**2.03%**	26	26	26	26	26	26	26	26	26	26
Other Commercial Printing	**1.95%**	25	25	25	25	25	25	25	25	25	25
Magazines	**1.02%**	13	13	13	13	13	13	13	13	13	13
Books	**0.42%**	5	5	5	5	5	5	5	5	5	5
Paper Bags	**0.37%**	5	5	5	5	5	5	5	5	5	5
Phone Books	**0.30%**	4	4	4	4	4	4	4	4	4	4
Poly Coated	**0.24%**	3	3	3	3	3	3	3	3	3	3
Other Compostable Paper	**6.80%**	86	86	86	86	86	86	86	86	86	86
Ferrous Containers	**1.52%**	19	19	19	19	19	19	19	19	19	19
Aluminum Containers	**0.57%**	7	7	7	7	7	7	7	7	7	7
Other Aluminum	**0.24%**	3	3	3	3	3	3	3	3	3	3
Automotive Batteries	**0.67%**	8	8	8	8	8	8	8	8	8	8
Other Non-Aluminum	**0.42%**	5	5	5	5	5	5	5	5	5	5
Other Ferrous Metals	**5.29%**	67	67	67	67	67	67	67	67	67	67
PET Containers	**0.98%**	12	12	12	12	12	12	12	12	12	12
HDPE Containers	**0.89%**	11	11	11	11	11	11	11	11	11	11
Plastic Containers (#3-#7)	**0.16%**	2	2	2	2	2	2	2	2	2	2
Film Plastic	**5.78%**	73	73	73	73	73	73	73	73	73	73
Durables	**3.14%**	40	40	40	40	40	40	40	40	40	40
Non-Durables	**1.68%**	21	21	21	21	21	21	21	21	21	21
Packaging	**1.28%**	16	16	16	16	16	16	16	16	16	16
Glass Containers	**3.97%**	50	50	50	50	50	50	50	50	50	50
Other Glass	**0.46%**	6	6	6	6	6	6	6	6	6	6
Food Scraps	**12.95%**	164	164	164	164	164	164	164	164	164	164
Yard Trimmings	**2.26%**	29	29	29	29	29	29	29	29	29	29
Clothing, Footwear, Towels & Sheets	**3.93%**	50	50	50	50	50	50	50	50	50	50
Carpet	**1.36%**	17	17	17	17	17	17	17	17	17	17
Wood	**6.16%**	78	78	78	78	78	78	78	78	78	78
C&D Material	**7.83%**	99	99	99	99	99	99	99	99	99	99
Other Durables	**1.82%**	23	23	23	23	23	23	23	23	23	23
Diapers	**1.56%**	20	20	20	20	20	20	20	20	20	20
Electronics	**1.34%**	17	17	17	17	17	17	17	17	17	17
Tires	**1.80%**	23	23	23	23	23	23	23	23	23	23
HHW	**0.35%**	4	4	4	4	4	4	4	4	4	4
Fines	**0.60%**	8	8	8	8	8	8	8	8	8	8
TOTAL:	**100.00%**	**1,268**	**1,268**	**1,268**	**1,268**	**1,268**	**1,268**	**1,268**	**1,268**	**1,268**	**1,268**

(1) As reported by the U.S. Census Bureau.

(2) As reported by the NYS DEC in the New York State Solid Waste Management Plan.

(3) Estimated assuming a municipal-wide recycling rate as realized by the Town at its municipal transfer station.

WARREN COUNTY, NY
Local Solid Waste Management Plan
Estimated Future MSW Generation Rates
Attachment A
6/17/2020
Prepared By: R.S. Lynch & Company, Inc.

Town of Johnsburg		2019	2020	2021	2022	2023	2024	2025	2026	2027	2028
Estimated Population (2018) (1)	**2,311**										
NYS DEC MSW Generation Rate (Lbs/Person/Day) (2)	**5.15**										
Assumed Town Recycling Rate (3)	**10.70%**										
Estimated Future Waste Disposal Volume with Status Quo Reduce, Reuse and Recycle Efforts (Lbs/Person/Day)	**4.60**										
Estimated Future Population with 0% Growth		2,311	2,311	2,311	2,311	2,311	2,311	2,311	2,311	2,311	2,311
Estimated Future Waste Generated with 0% Population Growth and Current DEC Waste Generation Assumption (Tons)		**2,172**	**2,172**	**2,172**	**2,172**	**2,172**	**2,172**	**2,172**	**2,172**	**2,172**	**2,172**
Estimated Future Waste Disposal with 0% Population Growth and Current Estimated Disposal Rate Assumption (Tons)		**1,940**	**1,940**	**1,940**	**1,940**	**1,940**	**1,940**	**1,940**	**1,940**	**1,940**	**1,940**
COMPOSITION OF RURAL WASTE GENERATED											
Newspaper	**3.81%**	83	83	83	83	83	83	83	83	83	83
Corrugated Cardboard	**9.67%**	210	210	210	210	210	210	210	210	210	210
Paperboard	**2.32%**	50	50	50	50	50	50	50	50	50	50
Office Paper	**2.06%**	45	45	45	45	45	45	45	45	45	45
Junk Mail	**2.03%**	44	44	44	44	44	44	44	44	44	44
Other Commercial Printing	**1.95%**	42	42	42	42	42	42	42	42	42	42
Magazines	**1.02%**	22	22	22	22	22	22	22	22	22	22
Books	**0.42%**	9	9	9	9	9	9	9	9	9	9
Paper Bags	**0.37%**	8	8	8	8	8	8	8	8	8	8
Phone Books	**0.30%**	7	7	7	7	7	7	7	7	7	7
Poly Coated	**0.24%**	5	5	5	5	5	5	5	5	5	5
Other Compostable Paper	**6.80%**	148	148	148	148	148	148	148	148	148	148
Ferrous Containers	**1.52%**	33	33	33	33	33	33	33	33	33	33
Aluminum Containers	**0.57%**	12	12	12	12	12	12	12	12	12	12
Other Aluminum	**0.24%**	5	5	5	5	5	5	5	5	5	5
Automotive Batteries	**0.67%**	15	15	15	15	15	15	15	15	15	15
Other Non-Aluminum	**0.42%**	9	9	9	9	9	9	9	9	9	9
Other Ferrous Metals	**5.29%**	115	115	115	115	115	115	115	115	115	115
PET Containers	**0.98%**	21	21	21	21	21	21	21	21	21	21
HDPE Containers	**0.89%**	19	19	19	19	19	19	19	19	19	19
Plastic Containers (#3-#7)	**0.16%**	3	3	3	3	3	3	3	3	3	3
Film Plastic	**5.78%**	126	126	126	126	126	126	126	126	126	126
Durables	**3.14%**	68	68	68	68	68	68	68	68	68	68
Non-Durables	**1.68%**	36	36	36	36	36	36	36	36	36	36
Packaging	**1.28%**	28	28	28	28	28	28	28	28	28	28
Glass Containers	**3.97%**	86	86	86	86	86	86	86	86	86	86
Other Glass	**0.46%**	10	10	10	10	10	10	10	10	10	10
Food Scraps	**12.95%**	281	281	281	281	281	281	281	281	281	281
Yard Trimmings	**2.26%**	49	49	49	49	49	49	49	49	49	49
Clothing, Footwear, Towels & Sheets	**3.93%**	85	85	85	85	85	85	85	85	85	85
Carpet	**1.36%**	30	30	30	30	30	30	30	30	30	30
Wood	**6.16%**	134	134	134	134	134	134	134	134	134	134
C&D Material	**7.83%**	170	170	170	170	170	170	170	170	170	170
Other Durables	**1.82%**	40	40	40	40	40	40	40	40	40	40
Diapers	**1.56%**	34	34	34	34	34	34	34	34	34	34
Electronics	**1.34%**	29	29	29	29	29	29	29	29	29	29
Tires	**1.80%**	39	39	39	39	39	39	39	39	39	39
HHW	**0.35%**	8	8	8	8	8	8	8	8	8	8
Fines	**0.60%**	13	13	13	13	13	13	13	13	13	13
TOTAL:	**100.00%**	**2,172**	**2,172**	**2,172**	**2,172**	**2,172**	**2,172**	**2,172**	**2,172**	**2,172**	**2,172**

(1) As reported by the U.S. Census Bureau.

(2) As reported by the NYS DEC in the New York State Solid Waste Management Plan.

(3) Estimated assuming a municipal-wide recycling rate as realized by the Town at its municipal transfer station.

WARREN COUNTY, NY
Local Solid Waste Management Plan
Estimated Future MSW Generation Rates
Attachment A
6/17/2020
Prepared By: R.S. Lynch & Company, Inc.

Town of Lake George		2019	2020	2021	2022	2023	2024	2025	2026	2027	2028
Estimated Population (2018) (1)	**2,534**										
NYS DEC MSW Generation Rate (Lbs/Person/Day) (2)	**5.15**										
Assumed Town Recycling Rate (3)	**32.27%**										
Estimated Future Waste Disposal Volume with Status Quo Reduce, Reuse and Recycle Efforts (Lbs/Person/Day)	**3.49**										
Estimated Future Population with 0% Growth		2,534	2,534	2,534	2,534	2,534	2,534	2,534	2,534	2,534	2,534
Estimated Future Waste Generated with 0% Population Growth and Current DEC Waste Generation Assumption (Tons)		**2,382**	**2,382**	**2,382**	**2,382**	**2,382**	**2,382**	**2,382**	**2,382**	**2,382**	**2,382**
Estimated Future Waste Disposal with 0% Population Growth and Current Estimated Disposal Rate Assumption (Tons)		**1,613**	**1,613**	**1,613**	**1,613**	**1,613**	**1,613**	**1,613**	**1,613**	**1,613**	**1,613**
COMPOSITION OF RURAL WASTE GENERATED											
Newspaper	**3.81%**	91	91	91	91	91	91	91	91	91	91
Corrugated Cardboard	**9.67%**	230	230	230	230	230	230	230	230	230	230
Paperboard	**2.32%**	55	55	55	55	55	55	55	55	55	55
Office Paper	**2.06%**	49	49	49	49	49	49	49	49	49	49
Junk Mail	**2.03%**	48	48	48	48	48	48	48	48	48	48
Other Commercial Printing	**1.95%**	46	46	46	46	46	46	46	46	46	46
Magazines	**1.02%**	24	24	24	24	24	24	24	24	24	24
Books	**0.42%**	10	10	10	10	10	10	10	10	10	10
Paper Bags	**0.37%**	9	9	9	9	9	9	9	9	9	9
Phone Books	**0.30%**	7	7	7	7	7	7	7	7	7	7
Poly Coated	**0.24%**	6	6	6	6	6	6	6	6	6	6
Other Compostable Paper	**6.80%**	162	162	162	162	162	162	162	162	162	162
Ferrous Containers	**1.52%**	36	36	36	36	36	36	36	36	36	36
Aluminum Containers	**0.57%**	14	14	14	14	14	14	14	14	14	14
Other Aluminum	**0.24%**	6	6	6	6	6	6	6	6	6	6
Automotive Batteries	**0.67%**	16	16	16	16	16	16	16	16	16	16
Other Non-Aluminum	**0.42%**	10	10	10	10	10	10	10	10	10	10
Other Ferrous Metals	**5.29%**	126	126	126	126	126	126	126	126	126	126
PET Containers	**0.98%**	23	23	23	23	23	23	23	23	23	23
HDPE Containers	**0.89%**	21	21	21	21	21	21	21	21	21	21
Plastic Containers (#3-#7)	**0.16%**	4	4	4	4	4	4	4	4	4	4
Film Plastic	**5.78%**	138	138	138	138	138	138	138	138	138	138
Durables	**3.14%**	75	75	75	75	75	75	75	75	75	75
Non-Durables	**1.68%**	40	40	40	40	40	40	40	40	40	40
Packaging	**1.28%**	30	30	30	30	30	30	30	30	30	30
Glass Containers	**3.97%**	95	95	95	95	95	95	95	95	95	95
Other Glass	**0.46%**	11	11	11	11	11	11	11	11	11	11
Food Scraps	**12.95%**	308	308	308	308	308	308	308	308	308	308
Yard Trimmings	**2.26%**	54	54	54	54	54	54	54	54	54	54
Clothing, Footwear, Towels & Sheets	**3.93%**	94	94	94	94	94	94	94	94	94	94
Carpet	**1.36%**	32	32	32	32	32	32	32	32	32	32
Wood	**6.16%**	147	147	147	147	147	147	147	147	147	147
C&D Material	**7.83%**	186	186	186	186	186	186	186	186	186	186
Other Durables	**1.82%**	43	43	43	43	43	43	43	43	43	43
Diapers	**1.56%**	37	37	37	37	37	37	37	37	37	37
Electronics	**1.34%**	32	32	32	32	32	32	32	32	32	32
Tires	**1.80%**	43	43	43	43	43	43	43	43	43	43
HHW	**0.35%**	8	8	8	8	8	8	8	8	8	8
Fines	**0.60%**	14	14	14	14	14	14	14	14	14	14
TOTAL:	**100.00%**	**2,382**	**2,382**	**2,382**	**2,382**	**2,382**	**2,382**	**2,382**	**2,382**	**2,382**	**2,382**

(1) As reported by the U.S. Census Bureau excluding Village of Lake George population in order to avoid double counting.

(2) As reported by the NYS DEC in the New York State Solid Waste Management Plan.

(3) Estimated assuming a municipal-wide recycling rate as realized by the Town at the Village's municipal transfer station.

WARREN COUNTY, NY
Local Solid Waste Management Plan
Estimated Future MSW Generation Rates
Attachment A
6/17/2020
Prepared By: R.S. Lynch & Company, Inc.

Village of Lake George		2019	2020	2021	2022	2023	2024	2025	2026	2027	2028
Estimated Population (2018) (1)	**879**										
NYS DEC MSW Generation Rate (Lbs/Person/Day) (2)	**5.15**										
Assumed Village Recycling Rate (3)	**32.27%**										
Estimated Future Waste Disposal Volume with Status Quo Reduce, Reuse and Recycle Efforts (Lbs/Person/Day)	**3.49**										
Estimated Future Population with 0% Growth		879	879	879	879	879	879	879	879	879	879
Estimated Future Waste Generated with 0% Population Growth and Current DEC Waste Generation Assumption (Tons)		**826**	**826**	**826**	**826**	**826**	**826**	**826**	**826**	**826**	**826**
Estimated Future Waste Disposal with 0% Population Growth and Current Estimated Disposal Rate Assumption (Tons)		**560**	**560**	**560**	**560**	**560**	**560**	**560**	**560**	**560**	**560**
COMPOSITION OF SUBURBAN WASTE GENERATED											
Newspaper	**3.60%**	30	30	30	30	30	30	30	30	30	30
Corrugated Cardboard	**9.89%**	82	82	82	82	82	82	82	82	82	82
Paperboard	**2.27%**	19	19	19	19	19	19	19	19	19	19
Office Paper	**2.38%**	20	20	20	20	20	20	20	20	20	20
Junk Mail	**2.08%**	17	17	17	17	17	17	17	17	17	17
Other Commercial Printing	**2.02%**	17	17	17	17	17	17	17	17	17	17
Magazines	**0.91%**	8	8	8	8	8	8	8	8	8	8
Books	**0.41%**	3	3	3	3	3	3	3	3	3	3
Paper Bags	**0.36%**	3	3	3	3	3	3	3	3	3	3
Phone Books	**0.30%**	2	2	2	2	2	2	2	2	2	2
Poly Coated	**0.20%**	2	2	2	2	2	2	2	2	2	2
Other Compostable Paper	**6.40%**	53	53	53	53	53	53	53	53	53	53
Ferrous Containers	**0.97%**	8	8	8	8	8	8	8	8	8	8
Aluminum Containers	**0.47%**	4	4	4	4	4	4	4	4	4	4
Other Aluminum	**0.24%**	2	2	2	2	2	2	2	2	2	2
Automotive Batteries	**0.57%**	5	5	5	5	5	5	5	5	5	5
Other Non-Aluminum	**0.35%**	3	3	3	3	3	3	3	3	3	3
Other Ferrous Metals	**5.36%**	44	44	44	44	44	44	44	44	44	44
PET Containers	**0.85%**	7	7	7	7	7	7	7	7	7	7
HDPE Containers	**0.81%**	7	7	7	7	7	7	7	7	7	7
Plastic Containers (#3-#7)	**0.20%**	2	2	2	2	2	2	2	2	2	2
Film Plastic	**5.64%**	47	47	47	47	47	47	47	47	47	47
Durables	**3.09%**	26	26	26	26	26	26	26	26	26	26
Non-Durables	**1.69%**	14	14	14	14	14	14	14	14	14	14
Packaging	**1.27%**	10	10	10	10	10	10	10	10	10	10
Glass Containers	**3.85%**	32	32	32	32	32	32	32	32	32	32
Other Glass	**0.35%**	3	3	3	3	3	3	3	3	3	3
Food Scraps	**14.07%**	116	116	116	116	116	116	116	116	116	116
Yard Trimmings	**10.31%**	85	85	85	85	85	85	85	85	85	85
Clothing, Footwear, Towels & Sheets	**3.86%**	32	32	32	32	32	32	32	32	32	32
Carpet	**1.57%**	13	13	13	13	13	13	13	13	13	13
Wood	**3.42%**	28	28	28	28	28	28	28	28	28	28
C&D Material	**3.30%**	27	27	27	27	27	27	27	27	27	27
Other Durables	**1.55%**	13	13	13	13	13	13	13	13	13	13
Diapers	**1.69%**	14	14	14	14	14	14	14	14	14	14
Electronics	**1.65%**	14	14	14	14	14	14	14	14	14	14
Tires	**1.57%**	13	13	13	13	13	13	13	13	13	13
HHW	**0.33%**	3	3	3	3	3	3	3	3	3	3
Fines	**0.15%**	1	1	1	1	1	1	1	1	1	1
TOTAL:	**100.00%**	**826**	**826**	**826**	**826**	**826**	**826**	**826**	**826**	**826**	**826**

(1) As reported by the U.S. Census Bureau.

(2) As reported by the NYS DEC in the New York State Solid Waste Management Plan.

(3) Estimated assuming a municipal-wide recycling rate as realized by the Town at the Village's municipal transfer station.

WARREN COUNTY, NY
Local Solid Waste Management Plan
Estimated Future MSW Generation Rates
Attachment A
6/17/2020
Prepared By: R.S. Lynch & Company, Inc.

Town of Lake Luzerne		2019	2020	2021	2022	2023	2024	2025	2026	2027	2028
Estimated Population (2018) (1)	**3,259**										
NYS DEC MSW Generation Rate (Lbs/Person/Day) (2)	**5.15**										
Assumed Town Recycling Rate (3)	**21.15%**										
Estimated Future Waste Disposal Volume with Status Quo Reduce, Reuse and Recycle Efforts (Lbs/Person/Day)	**4.06**										
Estimated Future Population with 0% Growth		3,259	3,259	3,259	3,259	3,259	3,259	3,259	3,259	3,259	3,259
Estimated Future Waste Generated with 0% Population Growth and Current DEC Waste Generation Assumption (Tons)		**3,063**	**3,063**	**3,063**	**3,063**	**3,063**	**3,063**	**3,063**	**3,063**	**3,063**	**3,063**
Estimated Future Waste Disposal with 0% Population Growth and Current Estimated Disposal Rate Assumption (Tons)		**2,415**	**2,415**	**2,415**	**2,415**	**2,415**	**2,415**	**2,415**	**2,415**	**2,415**	**2,415**
COMPOSITION OF RURAL WASTE GENERATED											
Newspaper	**3.81%**	117	117	117	117	117	117	117	117	117	117
Corrugated Cardboard	**9.67%**	296	296	296	296	296	296	296	296	296	296
Paperboard	**2.32%**	71	71	71	71	71	71	71	71	71	71
Office Paper	**2.06%**	63	63	63	63	63	63	63	63	63	63
Junk Mail	**2.03%**	62	62	62	62	62	62	62	62	62	62
Other Commercial Printing	**1.95%**	60	60	60	60	60	60	60	60	60	60
Magazines	**1.02%**	31	31	31	31	31	31	31	31	31	31
Books	**0.42%**	13	13	13	13	13	13	13	13	13	13
Paper Bags	**0.37%**	11	11	11	11	11	11	11	11	11	11
Phone Books	**0.30%**	9	9	9	9	9	9	9	9	9	9
Poly Coated	**0.24%**	7	7	7	7	7	7	7	7	7	7
Other Compostable Paper	**6.80%**	208	208	208	208	208	208	208	208	208	208
Ferrous Containers	**1.52%**	47	47	47	47	47	47	47	47	47	47
Aluminum Containers	**0.57%**	17	17	17	17	17	17	17	17	17	17
Other Aluminum	**0.24%**	7	7	7	7	7	7	7	7	7	7
Automotive Batteries	**0.67%**	21	21	21	21	21	21	21	21	21	21
Other Non-Aluminum	**0.42%**	13	13	13	13	13	13	13	13	13	13
Other Ferrous Metals	**5.29%**	162	162	162	162	162	162	162	162	162	162
PET Containers	**0.98%**	30	30	30	30	30	30	30	30	30	30
HDPE Containers	**0.89%**	27	27	27	27	27	27	27	27	27	27
Plastic Containers (#3-#7)	**0.16%**	5	5	5	5	5	5	5	5	5	5
Film Plastic	**5.78%**	177	177	177	177	177	177	177	177	177	177
Durables	**3.14%**	96	96	96	96	96	96	96	96	96	96
Non-Durables	**1.68%**	51	51	51	51	51	51	51	51	51	51
Packaging	**1.28%**	39	39	39	39	39	39	39	39	39	39
Glass Containers	**3.97%**	122	122	122	122	122	122	122	122	122	122
Other Glass	**0.46%**	14	14	14	14	14	14	14	14	14	14
Food Scraps	**12.95%**	397	397	397	397	397	397	397	397	397	397
Yard Trimmings	**2.26%**	69	69	69	69	69	69	69	69	69	69
Clothing, Footwear, Towels & Sheets	**3.93%**	120	120	120	120	120	120	120	120	120	120
Carpet	**1.36%**	42	42	42	42	42	42	42	42	42	42
Wood	**6.16%**	189	189	189	189	189	189	189	189	189	189
C&D Material	**7.83%**	240	240	240	240	240	240	240	240	240	240
Other Durables	**1.82%**	56	56	56	56	56	56	56	56	56	56
Diapers	**1.56%**	48	48	48	48	48	48	48	48	48	48
Electronics	**1.34%**	41	41	41	41	41	41	41	41	41	41
Tires	**1.80%**	55	55	55	55	55	55	55	55	55	55
HHW	**0.35%**	11	11	11	11	11	11	11	11	11	11
Fines	**0.60%**	18	18	18	18	18	18	18	18	18	18
TOTAL:	**100.00%**	**3,063**	**3,063**	**3,063**	**3,063**	**3,063**	**3,063**	**3,063**	**3,063**	**3,063**	**3,063**

(1) As reported by the U.S. Census Bureau.

(2) As reported by the NYS DEC in the New York State Solid Waste Management Plan.

(3) Estimated assuming an average of the participating Planning Unit municipalities' recycling rates.

WARREN COUNTY, NY
Local Solid Waste Management Plan
Estimated Future MSW Generation Rates
Attachment A
6/17/2020
Prepared By: R.S. Lynch & Company, Inc.

Town of Queensbury		2019	2020	2021	2022	2023	2024	2025	2026	2027	2028
Estimated Population (2018) (1)	**27,471**										
NYS DEC MSW Generation Rate (Lbs/Person/Day) (2)	**5.15**										
Assumed Town Recycling Rate (3)	**30.73%**										
Estimated Future Waste Disposal Volume with Status Quo Reduce, Reuse and Recycle Efforts (Lbs/Person/Day)	**3.57**										
Estimated Future Population with 0% Growth		27,471	27,471	27,471	27,471	27,471	27,471	27,471	27,471	27,471	27,471
Estimated Future Waste Generated with 0% Population Growth and Current DEC Waste Generation Assumption (Tons)		**25,819**	**25,819**	**25,819**	**25,819**	**25,819**	**25,819**	**25,819**	**25,819**	**25,819**	**25,819**
Estimated Future Waste Disposal with 0% Population Growth and Current Estimated Disposal Rate Assumption (Tons)		**17,885**	**17,885**	**17,885**	**17,885**	**17,885**	**17,885**	**17,885**	**17,885**	**17,885**	**17,885**
COMPOSITION OF SUBURBAN WASTE GENERATED											
Newspaper	**3.60%**	929	929	929	929	929	929	929	929	929	929
Corrugated Cardboard	**9.89%**	2,554	2,554	2,554	2,554	2,554	2,554	2,554	2,554	2,554	2,554
Paperboard	**2.27%**	586	586	586	586	586	586	586	586	586	586
Office Paper	**2.38%**	614	614	614	614	614	614	614	614	614	614
Junk Mail	**2.08%**	537	537	537	537	537	537	537	537	537	537
Other Commercial Printing	**2.02%**	522	522	522	522	522	522	522	522	522	522
Magazines	**0.91%**	235	235	235	235	235	235	235	235	235	235
Books	**0.41%**	106	106	106	106	106	106	106	106	106	106
Paper Bags	**0.36%**	93	93	93	93	93	93	93	93	93	93
Phone Books	**0.30%**	77	77	77	77	77	77	77	77	77	77
Poly Coated	**0.20%**	52	52	52	52	52	52	52	52	52	52
Other Compostable Paper	**6.40%**	1,652	1,652	1,652	1,652	1,652	1,652	1,652	1,652	1,652	1,652
Ferrous Containers	**0.97%**	250	250	250	250	250	250	250	250	250	250
Aluminum Containers	**0.47%**	121	121	121	121	121	121	121	121	121	121
Other Aluminum	**0.24%**	62	62	62	62	62	62	62	62	62	62
Automotive Batteries	**0.57%**	147	147	147	147	147	147	147	147	147	147
Other Non-Aluminum	**0.35%**	90	90	90	90	90	90	90	90	90	90
Other Ferrous Metals	**5.36%**	1,384	1,384	1,384	1,384	1,384	1,384	1,384	1,384	1,384	1,384
PET Containers	**0.85%**	219	219	219	219	219	219	219	219	219	219
HDPE Containers	**0.81%**	209	209	209	209	209	209	209	209	209	209
Plastic Containers (#3-#7)	**0.20%**	52	52	52	52	52	52	52	52	52	52
Film Plastic	**5.64%**	1,456	1,456	1,456	1,456	1,456	1,456	1,456	1,456	1,456	1,456
Durables	**3.09%**	798	798	798	798	798	798	798	798	798	798
Non-Durables	**1.69%**	436	436	436	436	436	436	436	436	436	436
Packaging	**1.27%**	328	328	328	328	328	328	328	328	328	328
Glass Containers	**3.85%**	994	994	994	994	994	994	994	994	994	994
Other Glass	**0.35%**	90	90	90	90	90	90	90	90	90	90
Food Scraps	**14.07%**	3,633	3,633	3,633	3,633	3,633	3,633	3,633	3,633	3,633	3,633
Yard Trimmings	**10.31%**	2,662	2,662	2,662	2,662	2,662	2,662	2,662	2,662	2,662	2,662
Clothing, Footwear, Towels & Sheets	**3.86%**	997	997	997	997	997	997	997	997	997	997
Carpet	**1.57%**	405	405	405	405	405	405	405	405	405	405
Wood	**3.42%**	883	883	883	883	883	883	883	883	883	883
C&D Material	**3.30%**	852	852	852	852	852	852	852	852	852	852
Other Durables	**1.55%**	400	400	400	400	400	400	400	400	400	400
Diapers	**1.69%**	436	436	436	436	436	436	436	436	436	436
Electronics	**1.65%**	426	426	426	426	426	426	426	426	426	426
Tires	**1.57%**	405	405	405	405	405	405	405	405	405	405
HHW	**0.33%**	85	85	85	85	85	85	85	85	85	85
Fines	**0.15%**	39	39	39	39	39	39	39	39	39	39
TOTAL:	**100.00%**	**25,819**	**25,819**	**25,819**	**25,819**	**25,819**	**25,819**	**25,819**	**25,819**	**25,819**	**25,819**

(1) As reported by the U.S. Census Bureau**.**

(2) As reported by the NYS DEC in the New York State Solid Waste Management Plan**.**

(3) Estimated assuming a municipal-wide recycling rate as realized by the Town of Queensbury at its two municipally-operated transfer stations.

WARREN COUNTY, NY
Local Solid Waste Management Plan
Estimated Future MSW Generation Rates
Attachment A
6/17/2020
Prepared By: R.S. Lynch & Company, Inc.

Town of Stony Creek		2019	2020	2021	2022	2023	2024	2025	2026	2027	2028
Estimated Population (2018) (1)	**743**										
NYS DEC MSW Generation Rate (Lbs/Person/Day) (2)	**5.15**										
Assumed Town Recycling Rate (3)	**23.51%**										
Estimated Future Waste Disposal Volume with Status Quo Reduce, Reuse and Recycle Efforts (Lbs/Person/Day)	**3.94**										
Estimated Future Population with 0% Growth		743	743	743	743	743	743	743	743	743	743
Estimated Future Waste Generated with 0% Population Growth and Current DEC Waste Generation Assumption (Tons)		**698**	**698**	**698**	**698**	**698**	**698**	**698**	**698**	**698**	**698**
Estimated Future Waste Disposal with 0% Population Growth and Current Estimated Disposal Rate Assumption (Tons)		**534**	**534**	**534**	**534**	**534**	**534**	**534**	**534**	**534**	**534**
COMPOSITION OF RURAL WASTE GENERATED											
Newspaper	**3.81%**	27	27	27	27	27	27	27	27	27	27
Corrugated Cardboard	**9.67%**	68	68	68	68	68	68	68	68	68	68
Paperboard	**2.32%**	16	16	16	16	16	16	16	16	16	16
Office Paper	**2.06%**	14	14	14	14	14	14	14	14	14	14
Junk Mail	**2.03%**	14	14	14	14	14	14	14	14	14	14
Other Commercial Printing	**1.95%**	14	14	14	14	14	14	14	14	14	14
Magazines	**1.02%**	7	7	7	7	7	7	7	7	7	7
Books	**0.42%**	3	3	3	3	3	3	3	3	3	3
Paper Bags	**0.37%**	3	3	3	3	3	3	3	3	3	3
Phone Books	**0.30%**	2	2	2	2	2	2	2	2	2	2
Poly Coated	**0.24%**	2	2	2	2	2	2	2	2	2	2
Other Compostable Paper	**6.80%**	47	47	47	47	47	47	47	47	47	47
Ferrous Containers	**1.52%**	11	11	11	11	11	11	11	11	11	11
Aluminum Containers	**0.57%**	4	4	4	4	4	4	4	4	4	4
Other Aluminum	**0.24%**	2	2	2	2	2	2	2	2	2	2
Automotive Batteries	**0.67%**	5	5	5	5	5	5	5	5	5	5
Other Non-Aluminum	**0.42%**	3	3	3	3	3	3	3	3	3	3
Other Ferrous Metals	**5.29%**	37	37	37	37	37	37	37	37	37	37
PET Containers	**0.98%**	7	7	7	7	7	7	7	7	7	7
HDPE Containers	**0.89%**	6	6	6	6	6	6	6	6	6	6
Plastic Containers (#3-#7)	**0.16%**	1	1	1	1	1	1	1	1	1	1
Film Plastic	**5.78%**	40	40	40	40	40	40	40	40	40	40
Durables	**3.14%**	22	22	22	22	22	22	22	22	22	22
Non-Durables	**1.68%**	12	12	12	12	12	12	12	12	12	12
Packaging	**1.28%**	9	9	9	9	9	9	9	9	9	9
Glass Containers	**3.97%**	28	28	28	28	28	28	28	28	28	28
Other Glass	**0.46%**	3	3	3	3	3	3	3	3	3	3
Food Scraps	**12.95%**	90	90	90	90	90	90	90	90	90	90
Yard Trimmings	**2.26%**	16	16	16	16	16	16	16	16	16	16
Clothing, Footwear, Towels & Sheets	**3.93%**	27	27	27	27	27	27	27	27	27	27
Carpet	**1.36%**	9	9	9	9	9	9	9	9	9	9
Wood	**6.16%**	43	43	43	43	43	43	43	43	43	43
C&D Material	**7.83%**	55	55	55	55	55	55	55	55	55	55
Other Durables	**1.82%**	13	13	13	13	13	13	13	13	13	13
Diapers	**1.56%**	11	11	11	11	11	11	11	11	11	11
Electronics	**1.34%**	9	9	9	9	9	9	9	9	9	9
Tires	**1.80%**	13	13	13	13	13	13	13	13	13	13
HHW	**0.35%**	2	2	2	2	2	2	2	2	2	2
Fines	**0.60%**	4	4	4	4	4	4	4	4	4	4
TOTAL:	**100.00%**	**698**	**698**	**698**	**698**	**698**	**698**	**698**	**698**	**698**	**698**

(1) As reported by the U.S. Census Bureau.

(2) As reported by the NYS DEC in the New York State Solid Waste Management Plan.

(3) Estimated assuming a municipal-wide recycling rate as realized by the Town at its municipal transfer station.

WARREN COUNTY, NY
Local Solid Waste Management Plan
Estimated Future MSW Generation Rates
Attachment A
6/17/2020
Prepared By: R.S. Lynch & Company, Inc.

Town of Thurman		2019	2020	2021	2022	2023	2024	2025	2026	2027	2028
Estimated Population (2018) (1)	**1,187**										
NYS DEC MSW Generation Rate (Lbs/Person/Day) (2)	**5.15**										
Assumed Town Recycling Rate (3)	**21.15%**										
Estimated Future Waste Disposal Volume with Status Quo Reduce, Reuse and Recycle Efforts (Lbs/Person/Day)	**4.06**										
Estimated Future Population with 0% Growth		1,187	1,187	1,187	1,187	1,187	1,187	1,187	1,187	1,187	1,187
Estimated Future Waste Generated with 0% Population Growth and Current DEC Waste Generation Assumption (Tons)		**1,116**	**1,116**	**1,116**	**1,116**	**1,116**	**1,116**	**1,116**	**1,116**	**1,116**	**1,116**
Estimated Future Waste Disposal with 0% Population Growth and Current Estimated Disposal Rate Assumption (Tons)		**880**	**880**	**880**	**880**	**880**	**880**	**880**	**880**	**880**	**880**
COMPOSITION OF RURAL WASTE GENERATED											
Newspaper	**3.81%**	43	43	43	43	43	43	43	43	43	43
Corrugated Cardboard	**9.67%**	108	108	108	108	108	108	108	108	108	108
Paperboard	**2.32%**	26	26	26	26	26	26	26	26	26	26
Office Paper	**2.06%**	23	23	23	23	23	23	23	23	23	23
Junk Mail	**2.03%**	23	23	23	23	23	23	23	23	23	23
Other Commercial Printing	**1.95%**	22	22	22	22	22	22	22	22	22	22
Magazines	**1.02%**	11	11	11	11	11	11	11	11	11	11
Books	**0.42%**	5	5	5	5	5	5	5	5	5	5
Paper Bags	**0.37%**	4	4	4	4	4	4	4	4	4	4
Phone Books	**0.30%**	3	3	3	3	3	3	3	3	3	3
Poly Coated	**0.24%**	3	3	3	3	3	3	3	3	3	3
Other Compostable Paper	**6.80%**	76	76	76	76	76	76	76	76	76	76
Ferrous Containers	**1.52%**	17	17	17	17	17	17	17	17	17	17
Aluminum Containers	**0.57%**	6	6	6	6	6	6	6	6	6	6
Other Aluminum	**0.24%**	3	3	3	3	3	3	3	3	3	3
Automotive Batteries	**0.67%**	7	7	7	7	7	7	7	7	7	7
Other Non-Aluminum	**0.42%**	5	5	5	5	5	5	5	5	5	5
Other Ferrous Metals	**5.29%**	59	59	59	59	59	59	59	59	59	59
PET Containers	**0.98%**	11	11	11	11	11	11	11	11	11	11
HDPE Containers	**0.89%**	10	10	10	10	10	10	10	10	10	10
Plastic Containers (#3-#7)	**0.16%**	2	2	2	2	2	2	2	2	2	2
Film Plastic	**5.78%**	64	64	64	64	64	64	64	64	64	64
Durables	**3.14%**	35	35	35	35	35	35	35	35	35	35
Non-Durables	**1.68%**	19	19	19	19	19	19	19	19	19	19
Packaging	**1.28%**	14	14	14	14	14	14	14	14	14	14
Glass Containers	**3.97%**	44	44	44	44	44	44	44	44	44	44
Other Glass	**0.46%**	5	5	5	5	5	5	5	5	5	5
Food Scraps	**12.95%**	144	144	144	144	144	144	144	144	144	144
Yard Trimmings	**2.26%**	25	25	25	25	25	25	25	25	25	25
Clothing, Footwear, Towels & Sheets	**3.93%**	44	44	44	44	44	44	44	44	44	44
Carpet	**1.36%**	15	15	15	15	15	15	15	15	15	15
Wood	**6.16%**	69	69	69	69	69	69	69	69	69	69
C&D Material	**7.83%**	87	87	87	87	87	87	87	87	87	87
Other Durables	**1.82%**	20	20	20	20	20	20	20	20	20	20
Diapers	**1.56%**	17	17	17	17	17	17	17	17	17	17
Electronics	**1.34%**	15	15	15	15	15	15	15	15	15	15
Tires	**1.80%**	20	20	20	20	20	20	20	20	20	20
HHW	**0.35%**	4	4	4	4	4	4	4	4	4	4
Fines	**0.60%**	7	7	7	7	7	7	7	7	7	7
TOTAL:	**100.00%**	**1,116**	**1,116**	**1,116**	**1,116**	**1,116**	**1,116**	**1,116**	**1,116**	**1,116**	**1,116**

(1) As reported by the U.S. Census Bureau.

(2) As reported by the NYS DEC in the New York State Solid Waste Management Plan.

(3) Estimated assuming an average of the participating Planning Unit municipalities' recycling rates.

WARREN COUNTY, NY
Local Solid Waste Management Plan
Estimated Future MSW Generation Rates
Attachment A
6/17/2020
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Town of Warrensburg		2019	2020	2021	2022	2023	2024	2025	2026	2027	2028
Estimated Population (2018) (1)	**3,981**										
NYS DEC MSW Generation Rate (Lbs/Person/Day) (2)	**5.15**										
Assumed Town Recycling Rate (3)	**18.15%**										
Estimated Future Waste Disposal Volume with Status Quo Reduce, Reuse and Recycle Efforts (Lbs/Person/Day)	**4.22**										
Estimated Future Population with 0% Growth		3,981	3,981	3,981	3,981	3,981	3,981	3,981	3,981	3,981	3,981
Estimated Future Waste Generated with 0% Population Growth and Current DEC Waste Generation Assumption (Tons)		**3,742**	**3,742**	**3,742**	**3,742**	**3,742**	**3,742**	**3,742**	**3,742**	**3,742**	**3,742**
Estimated Future Waste Disposal with 0% Population Growth and Current Estimated Disposal Rate Assumption (Tons)		**3,063**	**3,063**	**3,063**	**3,063**	**3,063**	**3,063**	**3,063**	**3,063**	**3,063**	**3,063**
COMPOSITION OF RURAL WASTE GENERATED											
Newspaper	**3.81%**	143	143	143	143	143	143	143	143	143	143
Corrugated Cardboard	**9.67%**	362	362	362	362	362	362	362	362	362	362
Paperboard	**2.32%**	87	87	87	87	87	87	87	87	87	87
Office Paper	**2.06%**	77	77	77	77	77	77	77	77	77	77
Junk Mail	**2.03%**	76	76	76	76	76	76	76	76	76	76
Other Commercial Printing	**1.95%**	73	73	73	73	73	73	73	73	73	73
Magazines	**1.02%**	38	38	38	38	38	38	38	38	38	38
Books	**0.42%**	16	16	16	16	16	16	16	16	16	16
Paper Bags	**0.37%**	14	14	14	14	14	14	14	14	14	14
Phone Books	**0.30%**	11	11	11	11	11	11	11	11	11	11
Poly Coated	**0.24%**	9	9	9	9	9	9	9	9	9	9
Other Compostable Paper	**6.80%**	254	254	254	254	254	254	254	254	254	254
Ferrous Containers	**1.52%**	57	57	57	57	57	57	57	57	57	57
Aluminum Containers	**0.57%**	21	21	21	21	21	21	21	21	21	21
Other Aluminum	**0.24%**	9	9	9	9	9	9	9	9	9	9
Automotive Batteries	**0.67%**	25	25	25	25	25	25	25	25	25	25
Other Non-Aluminum	**0.42%**	16	16	16	16	16	16	16	16	16	16
Other Ferrous Metals	**5.29%**	198	198	198	198	198	198	198	198	198	198
PET Containers	**0.98%**	37	37	37	37	37	37	37	37	37	37
HDPE Containers	**0.89%**	33	33	33	33	33	33	33	33	33	33
Plastic Containers (#3-#7)	**0.16%**	6	6	6	6	6	6	6	6	6	6
Film Plastic	**5.78%**	216	216	216	216	216	216	216	216	216	216
Durables	**3.14%**	117	117	117	117	117	117	117	117	117	117
Non-Durables	**1.68%**	63	63	63	63	63	63	63	63	63	63
Packaging	**1.28%**	48	48	48	48	48	48	48	48	48	48
Glass Containers	**3.97%**	149	149	149	149	149	149	149	149	149	149
Other Glass	**0.46%**	17	17	17	17	17	17	17	17	17	17
Food Scraps	**12.95%**	485	485	485	485	485	485	485	485	485	485
Yard Trimmings	**2.26%**	85	85	85	85	85	85	85	85	85	85
Clothing, Footwear, Towels & Sheets	**3.93%**	147	147	147	147	147	147	147	147	147	147
Carpet	**1.36%**	51	51	51	51	51	51	51	51	51	51
Wood	**6.16%**	230	230	230	230	230	230	230	230	230	230
C&D Material	**7.83%**	293	293	293	293	293	293	293	293	293	293
Other Durables	**1.82%**	68	68	68	68	68	68	68	68	68	68
Diapers	**1.56%**	58	58	58	58	58	58	58	58	58	58
Electronics	**1.34%**	50	50	50	50	50	50	50	50	50	50
Tires	**1.80%**	67	67	67	67	67	67	67	67	67	67
HHW	**0.35%**	13	13	13	13	13	13	13	13	13	13
Fines	**0.60%**	22	22	22	22	22	22	22	22	22	22
TOTAL:	**100.00%**	**3,742**	**3,742**	**3,742**	**3,742**	**3,742**	**3,742**	**3,742**	**3,742**	**3,742**	**3,742**

(1) As reported by the U.S. Census Bureau.

(2) As reported by the NYS DEC in the New York State Solid Waste Management Plan.

(3) Estimated assuming a municipal-wide recycling rate as realized by the Town at its municipal transfer station.

WARREN COUNTY, NY
Local Solid Waste Management Plan
Estimated Future MSW Generation Rates
Attachment A
6/17/2020
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Future Planning Unit MSW Generation and Disposal

MSW Generator	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2019-2028 Total
Tourist/Visitor	13,938	13,938	13,938	13,938	13,938	13,938	13,938	13,938	13,938	13,938	139,381
Town of Bolton	2,123	2,123	2,123	2,123	2,123	2,123	2,123	2,123	2,123	2,123	21,232
Town of Chester	3,069	3,069	3,069	3,069	3,069	3,069	3,069	3,069	3,069	3,069	30,687
City of Glens Falls	13,485	13,485	13,485	13,485	13,485	13,485	13,485	13,485	13,485	13,485	134,853
Town of Hague	638	638	638	638	638	638	638	638	638	638	6,382
Town of Horicon	1,268	1,268	1,268	1,268	1,268	1,268	1,268	1,268	1,268	1,268	12,679
Town of Johnsburg	2,172	2,172	2,172	2,172	2,172	2,172	2,172	2,172	2,172	2,172	21,721
Town of Lake George(1)	2,382	2,382	2,382	2,382	2,382	2,382	2,382	2,382	2,382	2,382	23,816
Village of Lake George	826	826	826	826	826	826	826	826	826	826	8,262
Town of Lake Luzerne	3,063	3,063	3,063	3,063	3,063	3,063	3,063	3,063	3,063	3,063	30,631
Town of Queensbury	25,819	25,819	25,819	25,819	25,819	25,819	25,819	25,819	25,819	25,819	258,193
Town of Stony Creek	698	698	698	698	698	698	698	698	698	698	6,983
Town of Thurman	1,116	1,116	1,116	1,116	1,116	1,116	1,116	1,116	1,116	1,116	11,156
Town of Warrensburg	3,742	3,742	3,742	3,742	3,742	3,742	3,742	3,742	3,742	3,742	37,416
TOTAL:	**74,339**	**74,339**	**74,339**	**74,339**	**74,339**	**74,339**	**74,339**	**74,339**	**74,339**	**74,339**	**743,392**
Total Waste Disposed Status Quo(2):	**54,876**	**54,876**	**54,876**	**54,876**	**54,876**	**54,876**	**54,876**	**54,876**	**54,876**	**54,876**	**548,755**
Current Estimated Local Waste Disposal Rate (Lbs/Person/Day)(3):	3.45	3.45	3.45	3.45	3.45	3.45	3.45	3.45	3.45	3.45	
Estimated Waste Generation Reduction with LSWMP Waste Reduction, Reuse and Recycling Initiatives Implemented:	0%	0%	4%	3%	2%	2%	2%	1%	1%	1%	
Total Estimated Waste Disposed with LSWMP Waste Reduction, Reuse and Recycling Initiatives Implemented:	**54,876**	**54,876**	**52,681**	**51,100**	**50,078**	**49,077**	**48,095**	**47,614**	**47,138**	**46,667**	**502,200**
Estimated Future Local Waste Disposal Rate with LSWMP Waste Reduction, Reuse and Recycling Initiatives Implemented (Lbs/Person/Day)(3):	3.45	3.45	3.31	3.21	3.15	3.08	3.02	2.99	2.96	2.93	

(1) Does not include Village of Lake George population in order to avoid double counting
(2) Estimated assuming each individual municipality's recycling rate, or in some instances, an average of the available recycling rates.
(3) Includes Tourist/Visitor population

WARREN COUNTY, NY
Local Solid Waste Management Plan
Estimated Future MSW Disposal Rates
Attachment A
6/17/2020
Prepared By: R.S. Lynch & Company, Inc.

Status Quo	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	10 YR Total
Waste Disposed: Status Quo (Tons)	54,876	54,876	54,876	54,876	54,876	54,876	54,876	54,876	54,876	54,876	**548,755**
Current Estimated Local Waste Disposal Rate (Lbs/Person/Day)(1):	3.45	3.45	3.45	3.45	3.45	3.45	3.45	3.45	3.45	3.45	

With LSWMP Recommendations/Actions	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	10 YR Total
Estimated Waste Generation Reduction with LSWMP Waste Reduction, Reuse and Recycling Initiatives Implemented:	0%	0%	4%	3%	2%	2%	2%	1%	1%	1%	
Estimated Waste Disposed with LSWMP Recommendations/Actions Implemented (Tons):	54,876	54,876	52,681	51,100	50,078	49,077	48,095	47,614	47,138	46,667	**502,200**
Estimated Waste Disposed with LSWMP Recommendations/Actions Implemented (Lbs/Person/Day)(1):	3.45	3.45	3.31	3.21	3.15	3.08	3.02	2.99	2.96	2.93	

(1) Includes Tourist/Visitor population

	2018 Population	% of County	Land Area (Square Mile)	Population Density (Person/Sq. Mile)	Urban, Suburban or Rural
Town of Bolton	2,259	3.52%	63.4	35.63	R
Town of Chester	3,265	5.08%	84.5	38.64	R
City of Glens Falls	14,348	22.33%	3.8	3,775.79	S
Town of Hague	679	1.06%	64	10.61	R
Town of Horicon	1,349	2.10%	66.1	20.41	R
Town of Johnsburg	2,311	3.60%	204.2	11.32	R
Town of Lake George(1)	2,534	3.94%	30.2	83.91	R
Village of Lake George	879	1.37%	0.6	1,465.00	S
Town of Lake Luzerne	3,259	5.07%	52.6	61.96	R
Town of Queensbury	27,471	42.75%	63.01	435.98	S
Town of Stony Creek	743	1.16%	82.4	9.02	R
Town of Thurman	1,187	1.85%	91.5	12.97	R
Town of Warrensburg	3,981	6.19%	63.7	62.50	R
TOTAL:	**64,265**	100.00%	870.01	73.91794435	

(1) Does not include Village of Lake George population in order to avoid double counting

Warren County Board of Supervisors

RESOLUTION NO. 211 OF 1991

Resolution introduced by Supervisors Olson, E. Baker, Tessier, O'Connor, Robertson, Borgos, Thomas, Grant and O'Neill

TO ENACT LOCAL LAW NO. 2 OF 1991

WHEREAS, a proposed local law was duly presented to the Board of Supervisors and considered by them, said proposed local law being entitled, "A Local Law Requiring the Source Separation and Segregation of Recyclable or Reusable Materials From the Solid Waste Stream in Warren County", and

WHEREAS, the Board of Supervisors adopted Resolution No. 145 on February 15, 1991, authorizing a public hearing to be held by the Board of Supervisors on the 15th day of March, 1991, at the Supervisors' Rooms in the Warren County Municipal Center on the matter of the proposed local law, and notice of such public hearing having been duly published and posted as required by law, and said public hearing having been held and all persons appearing at said public hearing desiring to be heard, having been heard, now, therefore, be it

RESOLVED, that the Board of Supervisors of the County of Warren, New York, on this 15th day of March, 1991, does hereby enact and adopt Local Law No. 2 of 1991 as set forth in Schedule "A" annexed hereto.

005/01/031591

SCHEDULE "A"
COUNTY OF WARREN, NEW YORK
LOCAL LAW NO. 2 OF 1991

A LOCAL LAW REQUIRING THE SOURCE SEPARATION AND SEGREGATION OF RECYCLABLE OR REUSABLE MATERIALS FROM THE SOLID WASTE STREAM IN WARREN COUNTY

BE IT ENACTED, by the Board of Supervisors of the County of Warren, New York, as follows:

SECTION 1. GENERAL STATEMENT

1. **Declaration of Policy.**

The policy of this Local Law is to require the source separation and segregation of recyclable or reusable materials from solid waste and to require that solid waste which has been left for collection or which is delivered by the generator of such solid waste to a solid waste management facility shall be separated into recyclable, reusable or other components for which economic markets for alternative uses exist.

2. Definitions.

a. "Solid Waste" - all materials or substances discarded or rejected as being spent, useless, worthless, or in excess to the owners at the time of such discard or rejection.

b. "Collector" - any individual, association, partnership, firm or corporation in the business of collecting solid waste, other than their own solid waste, within Warren County.

c. "Contractor" - any individual, association, partnership, firm or corporation in any business dealing with construction or collection of junk; and any individual, association,

partnership, firm or corporation which owns a packer truck and is not a collector.

d. "Individual Hauler" - any person that hauls with a car, van or pickup truck, his own solid waste.

e. "Sanitary Landfill" - a facility which includes types of operations in which solid waste is deposited by plan on a specified portion of open land, is compacted by force applied by mechanical equipment, and then is covered by a layer of earth, all in accordance with or intended to be in accordance with Part 360 of the New York State Environmental Conservation Law.

f. "Transfer Station" - a facility where solid waste is transferred by a collector, contractor or individual hauler, to a container for transport to a sanitary landfill, recycling facility or resource recovery facility, material market or construction and debris landfill.

g. "Resource Recovery Facility" - any facility defined in § 27-0701 (2) of the Environmental Conservation Law.

h. "Recyclables" - those materials designated by this Local Law and/or by order of the Warren County Superintendent of Public Works as recyclable, reusable or other components for which economic markets exist for alternative uses.

i. "Components" - paper, glass, metals, plastics, garden and yard waste and such other items as may be designated by the Superintendent.

j. "County" - County of Warren.

k. "Superintendent" - the Warren County Superintendent of Public Works.

SECTION II. ADMINISTRATION

1. The Warren County Superintendent of Public Works is hereby authorized to and shall promulgate, amend and repeal rules and regulations in furtherance of this Local Law and shall enforce the provisions of this Local Law and the rules and regulations authorized by this Local Law.

2. The Superintendent of Public Works shall administer the provisions of this Local Law and the rules and regulations in furtherance thereof.

SECTION III. SOURCE SEPARATION REQUIRED

a. Effective April 1, 1991, source separation and segregation of recyclable or reusable materials from solid waste shall be required by every person and business generating such waste in Warren County.

b. Solid waste which has been left for collection or which is delivered by the generator of such wastes to a solid waste management facility, shall be separated into recyclable, reusable or other components as described and directed by the rules and regulations promulgated by the Superintendent.

c. Each town, city and village within the County shall be responsible for the separation, segregation and storage on site for disposal, the material described in the orders, rules and regulations promulgated by the Superintendent and shall adopt such uniform local laws or ordinances to accomplish the objectives of this Local Law.

d. Each municipality in the County shall be responsible for the operation of a recycling/solid waste transfer station. Any municipality may join with one or more municipalities in establishing and operating a joint recycling/solid waste transfer station.

e. Each municipality shall pay one-half of the cost of all recycling equipment eligible under the rules and regulations of the New York State Grant funds used or required to be used in the operation of its recycling/solid waste transfer station.

f. Each municipality shall have full responsibility for:

i) having all materials segregated and ready for loading in the manner designated by the Superintendent;

ii) maintaining on site equipment such as compactors and total maintenance of the transfer station and landfill area;

iii) receiving applications for and issuing permits required by such municipality for access to any recycling or solid waste transfer station; and

iv) adopting such local laws and ordinances required to implement the source separation, segregation and recycling effort.

SECTION IV. POWERS DELEGATED TO THE SUPERINTENDENT

The Superintendent of the Public Works of Warren County is hereby empowered with such powers and duties required to cooperate with and assist each municipality in the County to implement the separation and segregation of recyclable materials from solid waste generated or existing in Warren County. The Superintendent is empowered to establish rules and procedures

relating to the segregation and separation of recyclables from non-usable solid waste and to designate the sites for transfer stations and recycling centers in cooperation with the town boards in the County.

SECTION V. ENFORCEMENT

Each town, city or village within the County shall be responsible for the adoption, implementation and enforcement of local laws, rules and regulations adopted by such municipality relating to the source separation and segregation of recyclables or reusable material from solid waste.

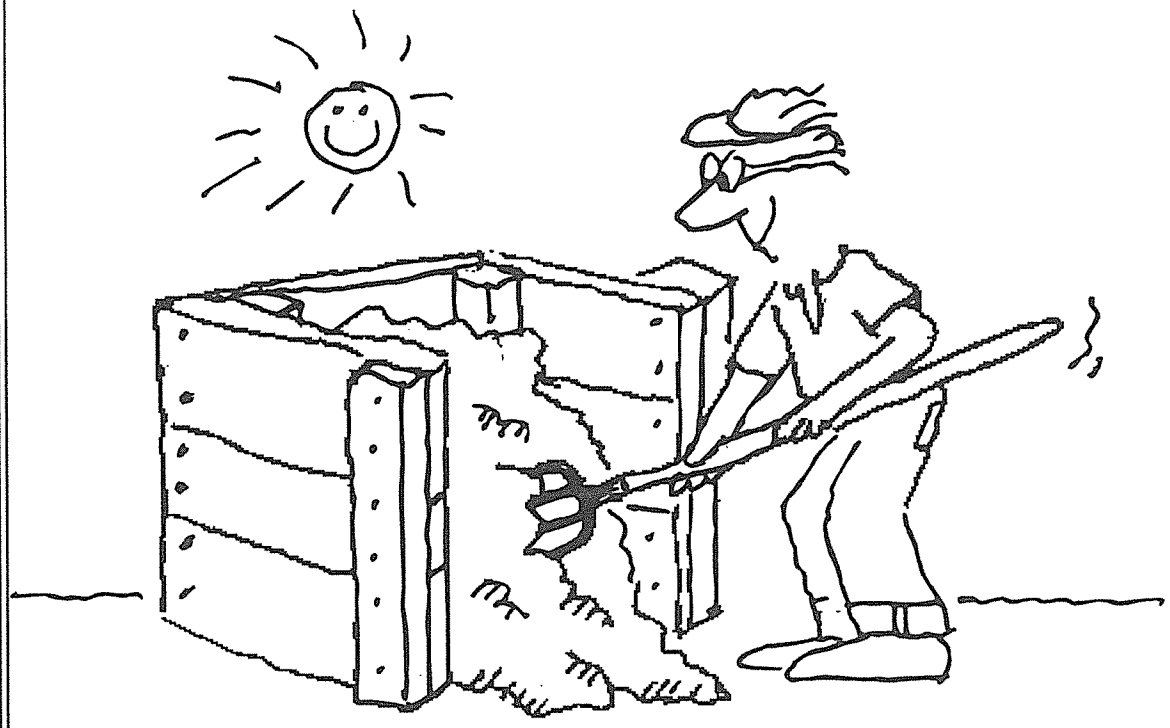
SECTION VI. EFFECTIVE DATE

1. This Local Law shall take effect upon adoption by the Board of Supervisors of Warren County and upon its filing in the Office of the Secretary of State pursuant to Section 27 of the Municipal Home Rule Law.

New York State Department Of Environmental Conservation

EVERYTHING YOU HAVE ALWAYS WANTED TO KNOW ABOUT HOME COMPOSTING

But were afraid to ask!



printed on recycled paper

What Is Compost?

Compost is a dark, crumbly, earthy-smelling mixture that consists mostly of decayed organic matter. Composting is a simple, natural process, nature's way of recycling nutrients and returning them to the soil to be used again. **By taking advantage of this natural recycling process, you can help lighten the load of waste that would otherwise go to a landfill.** Compost is used for fertilizing and conditioning soil. It can be made from materials that most households throw out.

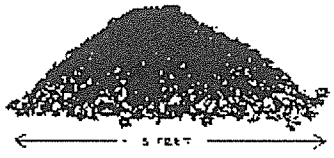
What Can I Compost?

- Yard wastes, such as fallen leaves, grass clippings, weeds and the remains of garden plants.
- Kitchen scraps EXCEPT FOR meat, fish, bones and fatty foods (such as cheese, salad dressing and leftover cooking oil).
- Woody yard wastes, chipped or shredded, can be used as a mulch or for paths, where they will eventually decompose and become compost.

How Do I Build A Compost Pile?

It's easy! Follow these simple steps, and in just a few hours, you'll be in business.

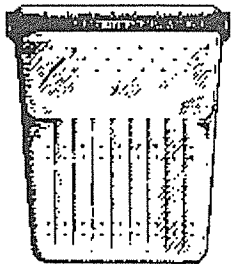
Compost Mound - This is one of the cheapest and easiest ways to compost. Yard wastes can be composted without a bin if you do not mind the appearance of an uncontrolled compost mound in your yard.



What To Do - Find a good location and loosen the soil where your pile will be. Pile your yard waste in a mound about 3 feet by 3 feet by 3 feet. Alternate wet and dry materials. Add wastes as they become available. Remember, if you turn your compost pile it speeds up the process.

What You Need - All you need is a pitchfork or shovel and work gloves.

Compost Can - Another cheap and easy way to compost small amounts of yard and food waste.



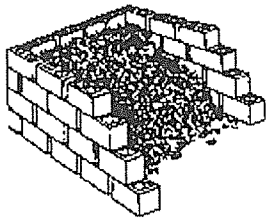
What to Do - Drill holes 4 to 6 inches apart all around your garbage can. You also need to drill holes into the bottom. (This allows for air movement and for excess water to drain off.)

It is best to put 2 to 3 inches of straw or wood chips in the bottom to help it drain.

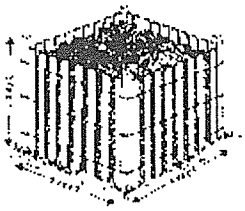
Turn the compost with a shovel or pitch fork. Keep the garbage can cover on, it helps keep out the critters. You may need to add water since it is covered.

What You Need - A garbage can with cover, straw or wood chips and a drill for making the holes.

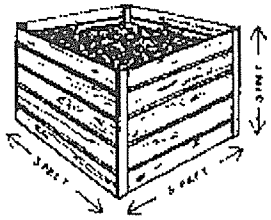
Compost Bins - Can be made out of many types of materials - blocks or bricks, snow fence, used pallets, wire mesh, etc.



Blocks or Bricks - Just lay out the blocks or bricks without mortar. Leave spaces between the blocks or bricks to permit air to circulate. The best size is approximately 5 to 8 feet square and 3 to 4 feet high.

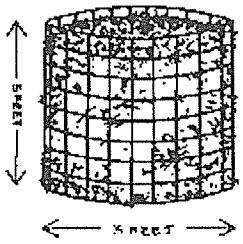


Snow Fence - Used snow fence is a simple way to build a bin. Just drive four corner posts into the ground and attach the snow fence.

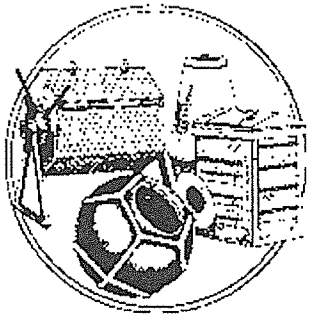


Used Pallets - Find four clean pallets and fasten the corners together, and start filling. You may want to keep one corner loose, so the bin can be opened for turning and removing compost.

Small-Mesh Wire Fencing - Buy or find wire mesh, form into a circle or square and add your compost materials.



Bins do not have to be square, they can be rectangular or a circular structure, it's your choice. Remember, for a typical home garden, a bin 3-to-4 feet in height and 5-to-8 feet square will do. Locate it away from buildings and combustible materials.



Store Bought Bins - There are a variety of commercial bins that can be bought at your local hardware or garden store.

How Do I Start My Compost Pile?

Begin by collecting your yard wastes and throwing them in your pile or bin. You can then add yard and food wastes anytime but it is best to bury the food waste in your pile (it helps keep out the critters). Chopping or mowing your wastes makes the process go faster. Just remember if you want a finished compost, you will need to start a new pile and let the first pile completely compost.

FOR YOUR INFORMATION:

Yard wastes make up approximately 15 - 20% of your waste stream or about 230 pounds per person per year.

Food wastes make up approximately 9% of the waste stream or about 100 pounds per person per year.

That's All There Is To It!

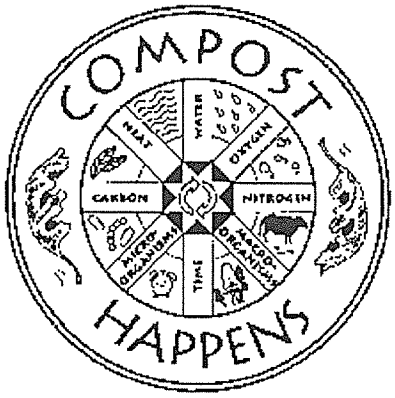
Kitchen scraps (minus meat, fish, bones and fatty foods) should be added to the center of the waste layers where heat will be the greatest. This also reduces unwanted critters coming to your compost pile.

Pile waste material loosely in the bin. Too much compaction inhibits the flow of air through the pile.

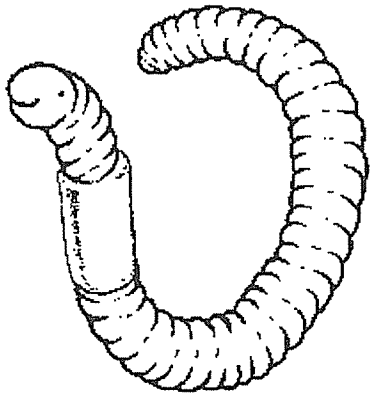
It helps to make the top layer slant toward the center where it will catch rainfall. **Water is the key to successful composting.** A compost pile should be kept damp - but not soggy - especially during dry spells.

Be patient! It will take six months to a year before the compost is ready for use.

How Does Composting Work?



Many organisms are involved in the composting process. They include bacteria, fungi, protozoans and centipedes, millipedes, beetles, ants and the most famous - earthworms!



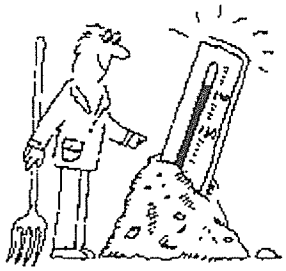
Compostable materials contain carbon and nitrogen. We refer to them as greens and browns. Greens are fruit and vegetable wastes, coffee grounds, grass clippings, manure. Browns are leaves, straw, wood chips, sawdust.

The microorganisms use the carbon in leaves as an energy source. The nitrogen supplies the microbes with proteins to grow and multiply. The decomposing organisms need both carbon and nitrogen to work. This is called the carbon - nitrogen ratio (C:N Ratio). The following is the C:N Ratio for various materials.

Kitchen Wastes	15:1
Grass Clippings	19:1
Leaves	40-50:1
Paper	170:1
Sawdust	500:1

A mix of materials composed of 30 - 50:1 works the best.

Composting is an aerobic process. This means it needs oxygen to work. Also, if you chop or mow your compost materials, the composting process works faster. The more surface area the better.



For optimum composting, the compost temperature should be around 90° to 140°. The pile will be hot initially after adding materials and will then cool down. Here in New York State, unless you have a big pile, composting will shut down for the winter. This is not a problem, because the composting process will start up again when the weather gets warmer.

So, you mix your greens and browns, keep moist and aerated and, low and behold, in 6 to 12 months you have **"Black Gold."**

Why Should I Make Compost?

✔ Composting is an easy, practical way to recycle your organic yard and kitchen waste.

✔ Compost is an excellent soil conditioner for even the smallest yard and garden - it's safe to use and it costs practically nothing to make.

✔ Compost grows healthy plants and healthy plants improve the air by removing carbon dioxide and making fresh oxygen.

✔ For serious gardeners, compost is an inexpensive alternative to peat and other soil enhancements.

Uses for Compost

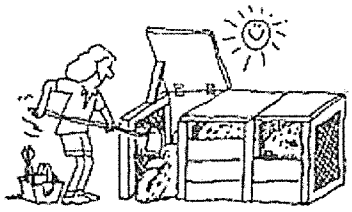
Gardens - improves moisture retention and soil texture. Use it around garden beds, trees or shrubs.

Lawns - It can also be sprinkled on your lawn. You will need to finely screen the compost first.

House Plants - use ½ to a of your container volume instead of soil.

Composting Do's And Don'ts

DO add lime, small amounts of wood ashes or crushed eggshells to the compost pile to neutralize acids which may form and cause an odor problem.



DO mix grass clippings with other wastes to loosen them up. They have a tendency to compact.

DO keep the compost pile damp, especially during dry spells.

DON'T use unfinished compost. It will rob your plants of nitrogen instead of acting as a fertilizer.

DON'T compost weeds that are heavily laden with seeds. Some seeds will not be killed during the heating process.

DON'T add diseased vegetable plants to the pile if the compost will be used on a vegetable garden. The disease organisms may reappear the following year.

DON'T add meat, fish, bones or fatty food scraps to the compost mixture. They will attract animals (dogs, cats, rats, etc.) and they do not decompose readily.

Composting Summary

Composting is simple and easy! Now that you read this booklet, you can be a composting expert! Just remember your compost pile needs:

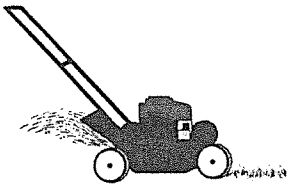
- ❀ Microorganism, beetles, earthworms.
- ❀ A good C:N Ratio (greens and browns).
- ❀ A large enough pile to keep itself warm if you want compost in six months.
- ❀ Enough moisture (but not too wet).
- ❀ Air.
- ❀ Time.

Put it all together and the microorganisms and bugs will do the rest!

Yard Waste Management Besides Composting

Mulching - Yard waste can be used for weed control and water retention. Use woody yard wastes, leaves and grass. Just spread the materials around your plants. Woody wastes may need to be chipped first.

Leave It On The Lawn - If you don't want to compost your grass clippings, just leave them on the lawn. For more information on this, see our "Leave It On The Lawn" pamphlet.



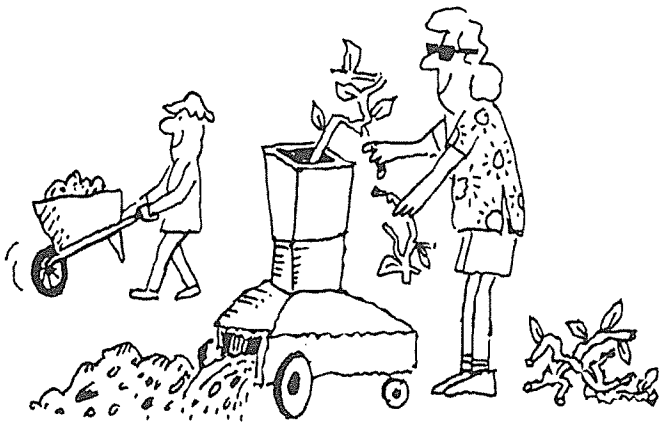
Troubleshooting Your Compost Pile

SYMPTOM	PROBLEM	SOLUTION
Rotten odor.	Not enough air Too much water	Turn the mixture. Add dry materials.
Low pile temperature.	Pile too dry Pile too small Lack of air	Moisten materials while turning the pile. Make pile larger. Turn the pile.
Compost too hot.	Pile too big.	Make the pile smaller - start another pile.
The compost is damp & warm in the middle, but nowhere else.	Too small	Add more materials and turn.
The compost is damp and sweet smelling but will not heat up.	Lack of nitrogen	Add grass clippings, manure or ammonium sulfate

For More Information

If you want to know more about composting and ways to make good compost, consult books or gardening magazines at your local library - or call your county **Cooperative Extension** office, listed in the telephone directory.
Or call or write to:

NYS Department of Environmental Conservation
Division of Solid & Hazardous Materials
Bureau of Waste Reduction & Recycling
625 Broadway
Albany, NY 12233-7253
(518) 402-8704



Material Type	Company Name	Contact Information
Batteries		
	Advanced Recovery, Inc.	Sales (866)794-8050 Port Jervis, NY
	All Recycling, Inc.	Sales (845)562-0216 Newburgh, NY
	American Lamp Recycling, LLC	Robert Judkins, Jr. (800)315-6262 Wappingers Falls, NY
	Eco-Bat New York, LLC	Tom Kelly (800)527-9452 Middletown, NY
	Hudson Metal	Sales (518)465-3387 Albany, NY
	Mercury Refining Co. Inc.	Leon Cohen (800)833-3505 Albany, NY
	Nathan Kelman Inc.	Fran Kelman (518)237-5133 Cohoes, NY
	Ontario Scrap Metal	Bill Ahl (518)463-2213 Albany, NY
	Precision Industrial Maintenance	William Verhayden (888)888-7464 Schenectady, NY
	RK Freedman	Sales (518)273-1142 Albany, NY
	Universal Metal & Ore	Sales (914)664-0200 Mount Vernon, NY
	WeRecycle, Inc.	Sales (877)937-3292 Mount Vernon, NY
Chemical Waste		
	Advanced Liquid Recycling, Inc.	Sales (800)582-5906 Cohoes, NY
	Advanced Recycling Technology, Inc.	Sales (800)999-1660 Hudson, NY
	Precision Industrial Maintenance	William Verhayden (888)888-7464 Schenectady, NY
	United Industrial Services	Sales (888)276-0887 Cohoes, NY
Drink Boxes/ Aseptic		

	Adirondack Plastics & Recycling, Inc.	John Aspland (518)638-8960 Fort Edward, NY
	FCR Claverack	Angelo Porfirio (800)227-3552 Ghent, NY
	J.C. Paper Co., Inc.	Ronald Chugerman (845)454-2170 Poughkeepsie, NY
	Sierra Fibers	Dan Dorlon, III (518)433-0020 Albany, NY
	Sterling Recycling, Inc.	Sales (845)753-6666 Sloatsburg, NY
Electronics		
	Advanced Recycling Technology, Inc.	Sales (800)999-1660 Hudson, NY
	Asset Management & Control	Nick Magliato (845)236-6650 Marlborough, NY
	eLot Electronics Recycling, Inc.	Sales (518)266-9385 Troy, NY
	ERC Community Warehouse	Joanna Decker (518)686-7540 Hoosick Falls, NY
	Hudson Metal	Sales (518)465-3387 Albany, NY
	Lifespan Technology Recycling	Sales (888)720-0900 Albany, NY
	Mercury Refining Co. Inc.	Leon Cohen (800)833-3505 Albany, NY
	PlastiCycle Corporation	Joseph Cirillo (914)997-6882 White Plains, NY
	Precision Industrial Maintenance	William Verhayden (888)888-7464 Schenectady, NY
	SunnKing, Inc.	Manager (877)860-7866 Albany, NY
	Waste Management & Recycling	Peter Bennison (518)377-9900 Scotia, NY
Ferrous Metal		
	All Recycling, Inc.	Sales (845)562-0216 Newburgh, NY

	Amsterdam Wrecking and Salvage	Steve Skee (518)842-1400 Amsterdam, NY
	County Waste & Recycling Services	Gil Houk (518)877-7007 Halfmoon, NY
	Hudson Metal	Sales (518)465-3387 Albany, NY
	RK Freedman	Sales (518)273-1142 Albany, NY
	Sierra Fibers	Dan Dorlon, III (518)433-0020 Albany, NY
	Sterling Recycling, Inc.	Sales (845)753-6666 Sloatsburg, NY
Fluorescent/HID Lamps		
	American Lamp Recycling, LLC	Robert Boil (800)315-6262 Fishkill, NY
	Frey-Electric Construction, Co.	Bob Snyder (716)974-1710 Tonawanda, NY
	PMC Recycling Corp.	Sales (718)518-9800 Bronx, NY
	Waste Management & Recycling	Sales (518)377-9900 Scotia, NY
Glass		
	Advanced Recovery, Inc.	Sales (866)794-8050 Port Jervis, NY
	County Waste & Recycling Services	Gil Houk (518)877-7007 Halfmoon, NY
	FCR Claverack	Angelo Porfirio (800)227-3552 Ghent, NY
	Sierra Fibers	Dan Dorlon, III (518)433-0020 Albany, NY
	Sterling Recycling, Inc.	Sales (845)753-6666 Sloatsburg, NY
	Trilogy Glass	Stephen Klemann (585)526-4789 Stanley, NY
	WM Biers, Inc.	Chuck Oliver (518)434-2747 Albany, NY
Mixed Plastic		

	Allied Waste Services of Albany	Bob griffin (518)785-7030 Latham, NY
	County Waste & Recycling Services	Gil Houk (518)877-7007 Halfmoon, NY
	Hudson Metal	Sales (518)465-3387 Albany, NY
	Sierra Fibers	Dan Dorlon, III (518)433-0020 Albany, NY
	Sterling Recycling, Inc.	Sales (845)753-6666 Sloatsburg, NY
	Upland Industries	Michael Carman (518)357-0855 Schenectady, NY
Non-Ferrous Metals		
	Advanced Recovery, Inc.	Sales (866)794-8050 Port Jervis, NY
	Advanced Recycling Technology, Inc.	Sales (800)999-1660 Hudson, NY
	All Recycling, Inc.	Sales (845)562-0216 Newburgh, NY
	Empire Recycling Corporation	Steve (315)724-7161 Utica, NY
	FCR Claverack	Angelo Porfirio (800)227-3552 Ghent, NY
	Hudson Metal	Sales (518)465-3387 Albany, NY
	RK Freedman	Sales (518)273-1142 Albany, NY
	Sierra Fibers	Dan Dorlon, III (518)433-0020 Albany, NY
	Sterling Recycling, Inc.	Sales (845)753-6666 Sloatsburg, NY
	Universal Metal & Ore	Sales (914)664-0200 Mount Vernon, NY
Corrugated Cardboard		
	Adirondack Plastics & Recycling, Inc.	John Aspland (518)638-8960 Argyle, NY

	Advanced Recovery, Inc.	Sales (866)794-8050 Port Jervis, NY
	Allied Waste Services of Albany	Bob griffin (518)785-7030 Latham, NY
	Ash Trading Corporated	Irwin Margolis (818)463-6666 Menands, NY
	County Waste & Recycling Services	Gil Houk (518)877-7007 Halfmoon, NY
	FCR Claverack	Angelo Porfirio (800)227-3552 Ghent, NY
	Hudson Baylor Corporation	Straat Tenney (845)561-0167 Newburgh, NY
	Hudson Metal	Sales (518)465-3387 Albany, NY
	J.C. Paper Co., Inc.	Ronald Chugerman (845)454-2170 Poughkeepsie, NY
	Jordan Trading Inc.	Elisabeth Jordan (845)338-5379 Kingston, NY
	Northeast Data Destruction & Recycling	Mark Wachtel (845)331-5554 Kingston, NY
	Perkins Recycling Corporation	Jeff Davis (518)798-4041 Queensbury, NY
	Sierra Fibers	Dan Dorlon, III (518)433-0020 Albany, NY
	Sterling Recycling, Inc.	Sales (845)753-6666 Sloatsburg, NY
	T.A. Predel & Sons	Mary Predel (518)346-3445 Schenectady, NY
	Upland Industries	Michael Carman (518)357-0855 Schenectady, NY
Paper: Mixed Office		
	Adirondack Plastics & Recycling, Inc.	John Aspland (518)638-8960 Argyle, NY
	Allied Waste Services of Albany	Bob griffin (518)785-7030 Latham, NY

	Ash Trading Corporated	Irwin Margolis (818)463-6666 Menands, NY
	County Waste & Recycling Services	Gil Houk (518)877-7007 Halfmoon, NY
	FCR Claverack	Angelo Porfirio (800)227-3552 Ghent, NY
	Finch Paper, LLC	Everett O'Neill (800)833-9983 Glens Falls, NY
	Hudson Baylor Corporation	Straat Tenney (845)561-0167 Newburgh, NY
	Hudson Metal	Sales (518)465-3387 Albany, NY
	J.C. Paper Co., Inc.	Ronald Chugerman (845)454-2170 Poughkeepsie, NY
	Jordan Trading Inc.	Elisabeth Jordan (845)338-5379 Kingston, NY
	Northeast Data Destruction & Recycling	Mark Wachtel (845)331-5554 Kingston, NY
	Perkins Recycling Corporation	Jeff Davis (518)798-4041 Queensbury, NY
	SCA Tissue: North America	Kyle Brock (518)793-5684 South Glens Falls, NY
	Sierra Fibers	Dan Dorlon, III (518)433-0020 Albany, NY
	Sterling Recycling, Inc.	Sales (845)753-6666 Sloatsburg, NY
	T.A. Predel & Sons	Mary Predel (518)346-3445 Schenectady, NY
Newspaper		
	Adirondack Plastics & Recycling, Inc.	John Aspland (518)638-8960 Argyle, NY
	Allied Waste Services of Albany	Bob griffin (518)785-7030 Latham, NY
	Ash Trading Corporated	Irwin Margolis (818)463-6666 Menands, NY
	Bennington Paperboard Company	Procurement (518)686-7357 North Hoosick, NY

	Hudson Baylor Corporation	Straat Tenney (845)561-0167 Newburgh, NY
	Hudson Metal	Sales (518)465-3387 Albany, NY
	J.C. Paper Co., Inc.	Ronald Chugerman (845)454-2170 Poughkeepsie, NY
	Jordan Trading Inc.	Elisabeth Jordan (845)338-5379 Kingston, NY
	Northeast Data Destruction & Recycling	Mark Wachtel (845)331-5554 Kingston, NY
	Perkins Recycling Corporation	Jeff Davis (518)798-4041 Queensbury, NY
	Sierra Fibers	Dan Dorlon, III (518)433-0020 Albany, NY
	Sterling Recycling, Inc.	Sales (845)753-6666 Sloatsburg, NY
	T.A. Predel & Sons	Mary Predel (518)346-3445 Schenectady, NY
Paper: Residential Mix		
	Adirondack Plastics & Recycling, Inc.	John Aspland (518)638-8960 Argyle, NY
	Allied Waste Services of Albany	Bob griffin (518)785-7030 Latham, NY
	Ash Trading Corporated	Irwin Margolis (818)463-6666 Menands, NY
	Bennington Paperboard Company	Procurement (518)686-7357 North Hoosick, NY
	County Waste & Recycling Services	Gil Houk (518)877-7007 Halfmoon, NY
	FCR Claverack	Angelo Porfirio (800)227-3552 Ghent, NY
	Hudson Baylor Corporation	Straat Tenney (845)561-0167 Newburgh, NY
	Hudson Metal	Sales (518)465-3387 Albany, NY

	J.C. Paper Co., Inc.	Ronald Chugerman (845)454-2170 Poughkeepsie, NY
	Jordan Trading Inc.	Elisabeth Jordan (845)338-5379 Kingston, NY
	Natural Environmental, Inc.	Bob VanMeter (800)227-3552 Blasdell, NY
	Perkins Recycling Corporation	Jeff Davis (518)798-4041 Queensbury, NY
	Sierra Fibers	Dan Dorlon, III (518)433-0020 Albany, NY
	Sterling Recycling, Inc.	Sales (845)753-6666 Sloatsburg, NY
	T.A. Predel & Sons	Mary Predel (518)346-3445 Schenectady, NY
Paper: Sorted Office		
	Adirondack Plastics & Recycling, Inc.	John Aspland (518)638-8960 Argyle, NY
	Allied Waste Services of Albany	Bob griffin (518)785-7030 Latham, NY
	Ash Trading Corporated	Irwin Margolis (818)463-6666 Menands, NY
	Bennington Paperboard Company	Procurement (518)686-7357 North Hoosick, NY
	FCR Claverack	Angelo Porfirio (800)227-3552 Ghent, NY
	Finch Paper, LLC	Everett O'Neill (800)833-9983 Glens Falls, NY
	Hudson Baylor Corporation	Straat Tenney (845)561-0167 Newburgh, NY
	Hudson Metal	Sales (518)465-3387 Albany, NY
	J.C. Paper Co., Inc.	Ronald Chugerman (845)454-2170 Poughkeepsie, NY
	Jordan Trading Inc.	Elisabeth Jordan (845)338-5379 Kingston, NY

	Nathan Kelman Inc.	Fran Kelman (518)237-5133 Cohoes, NY
	Northeast Data Destruction & Recycling	Mark Wachtel (845)331-5554 Kingston, NY
	Perkins Recycling Corporation	Jeff Davis (518)798-4041 Queensbury, NY
	Sierra Fibers	Dan Dorlon, III (518)433-0020 Albany, NY
	Sterling Recycling, Inc.	Sales (845)753-6666 Sloatsburg, NY
	T.A. Predel & Sons	Mary Predel (518)346-3445 Schenectady, NY
Plastic: Film		
	Barkley World Trade/International Recycling of America, Ltd.	Spencer Sharwell (516)671-7100 Glen Cove, NY
	Blackrock Plastics, LLC	Brendan Murray (646)278-6731 New York, NY
	Buffalo Polymer Processing/Staroba Plastics & Metals	Miro Staroba (716)537-3153 Holland, NY
	Domino Plastics Company, Inc.	Mike Domino (631)642-1995 Setauket, NY
	Great Lakes Paper Fibres Corp.	Nick Nemeti (716)854-3232 Buffalo, NY
Plastic #1 PET		
	Allied Waste Services of Albany	Bob griffin (518)785-7030 Latham, NY
	Enstar Corporation	John Engster (518)279-4311 Troy, NY
	Gemark Corp	Trudy Batelic (845)561-1720 Newburgh, NY
	Hudson Baylor Corporation	Straat Tenney (845)561-0167 Newburgh, NY
	Hudson Metal	Sales (518)465-3387 Albany, NY
	J.C. Paper Co., Inc.	Ronald Chugerman (845)454-2170 Poughkeepsie, NY

	Lahr Recycling & Resins	Craig Lahr (585)425-8608 Fairport, NY
	Sierra Fibers	Dan Dorlon, III (518)433-0020 Albany, NY
	Sterling Recycling, Inc.	Sales (845)753-6666 Sloatsburg, NY
	UltraPET, LLC	Paul Zordan (518)459-1080 Albany, NY
	Upland Industries	Michael Carman (518)357-0855 Schenectady, NY
Plastic #2 HDPE		
	Adirondack Plastics & Recycling, Inc.	John Aspland (518)638-8960 Argyle, NY
	Allied Waste Services of Albany	Bob griffin (518)785-7030 Latham, NY
	B&R Specialties Inc	Dr. Robert Fried (845)889-4000 Staatsburg, NY
	Enstar Corporation	John Engster (518)279-4311 Troy, NY
	FCR Claverack	Angelo Porfirio (800)227-3552 Ghent, NY
	Fiber Conversion Inc	Nick Poot (518)883-3431 Broadalbin, NY
	Hudson Baylor Corporation	Straat Tenney (845)561-0167 Newburgh, NY
	Hudson Metal	Sales (518)465-3387 Albany, NY
	J.C. Paper Co., Inc.	Ronald Chugerman (845)454-2170 Poughkeepsie, NY
	Sierra Fibers	Dan Dorlon, III (518)433-0020 Albany, NY
Plastic #3 PVC		
	Adirondack Plastics & Recycling, Inc.	John Aspland (518)638-8960 Argyle, NY
	Allied Waste Services of Albany	Bob griffin (518)785-7030 Latham, NY

	B&R Specialties Inc	Dr. Robert Fried (845)889-4000 Staatsburg, NY
	Enstar Corporation	John Engster (518)279-4311 Troy, NY
	Fiber Conversion Inc	Nick Poot (518)883-3431 Broadalbin, NY
	Hudson Baylor Corporation	Straat Tenney (845)561-0167 Newburgh, NY
	Hudson Metal	Sales (518)465-3387 Albany, NY
	J.C. Paper Co., Inc.	Ronald Chugerman (845)454-2170 Poughkeepsie, NY
	Sterling Recycling, Inc.	Sales (845)753-6666 Sloatsburg, NY
	Upland Industries	Michael Carman (518)357-0855 Schenectady, NY
Plastic #4 LDPE		
	Adirondack Plastics & Recycling, Inc.	John Aspland (518)638-8960 Argyle, NY
	Allied Waste Services of Albany	Bob griffin (518)785-7030 Latham, NY
	B&R Specialties Inc	Dr. Robert Fried (845)889-4000 Staatsburg, NY
	Enstar Corporation	John Engster (518)279-4311 Troy, NY
	Hudson Baylor Corporation	Straat Tenney (845)561-0167 Newburgh, NY
	Hudson Metal	Sales (518)465-3387 Albany, NY
	J.C. Paper Co., Inc.	Ronald Chugerman (845)454-2170 Poughkeepsie, NY
	PlastiCycle Corporation	Joseph Cirillo (914)997-6882 White Plains, NY
	Sealed Air Corp	Earle Booth (518)386-0520 Scotia, NY
	Sierra Fibers	Dan Dorlon, III (518)433-0020 Albany, NY

	Sterling Recycling, Inc.	Sales (845)753-6666 Sloatsburg, NY
	UltraPET, LLC	Paul Zordan (518)459-1080 Albany, NY
	Upland Industries	Michael Carman (518)357-0855 Schenectady, NY
Plastic #5 PP		
	Adirondack Plastics & Recycling, Inc.	John Aspland (518)638-8960 Argyle, NY
	Allied Waste Services of Albany	Bob griffin (518)785-7030 Latham, NY
	B&R Specialties Inc	Dr. Robert Fried (845)889-4000 Staatsburg, NY
	Enstar Corporation	John Engster (518)279-4311 Troy, NY
	Fiber Conversion Inc	Nick Poot (518)883-3431 Broadalbin, NY
	Hudson Metal	Sales (518)465-3387 Albany, NY
	J.C. Paper Co., Inc.	Ronald Chugerman (845)454-2170 Poughkeepsie, NY
	PlastiCycle Corporation	Joseph Cirillo (914)997-6882 White Plains, NY
	Sierra Fibers	Dan Dorlon, III (518)433-0020 Albany, NY
	Sterling Recycling, Inc.	Sales (845)753-6666 Sloatsburg, NY
	Upland Industries	Michael Carman (518)357-0855 Schenectady, NY
Plastic #6 PS		
	Adirondack Plastics & Recycling, Inc.	John Aspland (518)638-8960 Argyle, NY
	Allied Waste Services of Albany	Bob griffin (518)785-7030 Latham, NY
	Enstar Corporation	John Engster (518)279-4311 Troy, NY

	Fiber Conversion Inc	Nick Poot (518)883-3431 Broadalbin, NY
	Hudson Metal	Sales (518)465-3387 Albany, NY
	J.C. Paper Co., Inc.	Ronald Chugerman (845)454-2170 Poughkeepsie, NY
	PlastiCycle Corporation	Joseph Cirillo (914)997-6882 White Plains, NY
	Sterling Recycling, Inc.	Sales (845)753-6666 Sloatsburg, NY
	Upland Industries	Michael Carman (518)357-0855 Schenectady, NY
Plastic #7 Other		
	Allied Waste Services of Albany	Bob griffin (518)785-7030 Latham, NY
	Fiber Conversion Inc	Nick Poot (518)883-3431 Broadalbin, NY
	Hudson Baylor Corporation	Straat Tenney (845)561-0167 Newburgh, NY
	J.C. Paper Co., Inc.	Ronald Chugerman (845)454-2170 Poughkeepsie, NY
	PlastiCycle Corporation	Joseph Cirillo (914)997-6882 White Plains, NY
	Sierra Fibers	Dan Dorlon, III (518)433-0020 Albany, NY
	Sterling Recycling, Inc.	Sales (845)753-6666 Sloatsburg, NY
	UltraPET, LLC	Paul Zordan (518)459-1080 Albany, NY
	Upland Industries	Michael Carman (518)357-0855 Schenectady, NY
Tires		
	AquaTerraSys	Glen Warren, PE (978)430-4977 Bolton Landing, NY
	BCD Tire Chip Manufacturing	Customer Service (518)269-0590 Hagaman, NY

	CRM Co., LLC	Al Akhavain (518)869-6000 Colonie, NY
	RAK Tire Recovery	Collection (518)756-3641 Ravena, NY
	Unity Creations, LTD	Erik Prinz (877)418-6489 Saugerties, NY
Wood		
	AquaTerraSys	Glen Warren, PE (978)430-4977 Bolton Landing, NY
	County Waste & Recycling Services	Gil Houk (518)877-7007 Halfmoon, NY
	Sierra Fibers	Dan Dorlon, III (518)433-0020 Albany, NY
	Sterling Recycling, Inc.	Sales (845)753-6666 Sloatsburg, NY
	WM Biers, Inc.	Chuck Oliver (518)434-2747 Albany, NY