
Allegany County

FINAL

Local Solid Waste Management Plan

Prepared For

Allegany County Department of Public Works

7 Court Street

Belmont, New York 14813

May 2021

Allegany County Department of Public Works
Allegany County, New York

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EXECUTIVE SUMMARY

The purpose of the Allegany County Solid Waste Management Plan is to identify the path to be pursued for managing solid waste generated in Allegany County during a ten-year planning period in an economical and environmentally sound manner that is consistent with the State's solid waste management policy. The initial year of this ten-year planning period will commence following approval of this Plan by the New York State Department of Environmental Conservation (DEC), which is expected to be 2021. The ten-year planning period will be 2021-2030.

The residents, businesses, industries, and institutions in Allegany County currently produce approximately 60 tons of solid waste every day. This creates a need to develop a plan about how to increase recovery, to decrease disposal or incineration, and to reduce waste generation, now and in the future.

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

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

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

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

NYSDEC (December 2010) issued a statewide SWMP, *Beyond Waste: A Sustainable Materials Management Strategy for New York*. It defines broad statewide objectives for waste reduction, reuse and recycling, waste-to-energy, landfilling, and special issues consistent with the State Solid Waste Management Policy. The quantitative goal of *Beyond Waste* is to reduce the amount of waste New

Yorkers dispose by preventing waste generation and increasing reuse, recycling, composting and other organic material recycling methods. Based on the data gathered and compiled for this LSWMP, the County has identified program strategies to work toward during a ten-year LSWMP planning period that is consistent with the State Solid Waste Management Policy. The strategies set forth below were identified with the goal of further enhancing the reuse and recycling of materials generated in Allegany County and providing for the means to recover energy in an environmentally sound manner from solid waste that has not been reused or recycled. Each strategy and corresponding goal will be evaluated for feasibility and cost effectiveness on an individual basis according to the implementation schedule included in Chapter 6.0.

Implementation Task #1 – Promote Waste Reduction Programs

Goal: Establish a waste reduction policy to increase waste reduction at County facilities and events.

Implementation Task #2 – Promote Reuse Programs

Goal: Promote reuse programs through education and outreach.

Implementation Task #3 – Expand Accepted Materials

Goal: Increase the types of materials accepted for recycling at the County's transfer stations and educate residents of proper recycling programs.

Implementation Task #4 – Participate in Agricultural Plastics Recycling

Goal: Support the potential development of an agricultural plastics recycling program through the Allegany County Cornell Cooperative Extension, the Soil and Water Conservation District, or through partnering with neighboring planning units.

Implementation Task #5 – Increase Recycling at County Facilities & Events

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

Implementation Task #6 – Adopt Product Stewardship Framework

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

Implementation Task #7 – Promote Backyard Composting

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

Implementation Task #8 – Support Yard Waste Composting Efforts

Goal: Encourage yard waste composting to increase diversion of yard waste from the solid waste disposal stream through education and training

Implementation Task #9 – Evaluate Pay-As-You Throw Program

Goal: Continue the PAYT program at Convenience Stations and potentially expand to curbside collection.

Implementation Task #10 – Improve Public Outreach and Education

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

Implementation Task #11 – Improve Solid Waste and Recycling Data Collection

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

Implementation Task #12 – Enforce Local Hauler Licensing Program

Goal: Improve data collection and increase potential revenue streams by modifying and enforcing existing local hauler licensing requirements.

Implementation Task #13 – Improve C&D Debris Reduction

Goal: Evaluate the feasibility of including C&D recovery requirements on County projects.

Implementation Task #14 – Identify Private Sector Management and Coordination Opportunities

Goal: Assess the availability of funding opportunities or partnerships with private facilities or other organizations to assist the County in accomplishing the LSWMP implementation tasks.

Implementation Task #15 – Continue Landfilling as Primary Disposal for Non-Recyclable/Non-Recoverable Waste

Goal: Continue to provide reliable, economical, and environmentally-sound outlets for County residents to dispose of all non-recyclable and non-recoverable waste.

ABBREVIATIONS

C&D	Construction and demolition debris
EPA	United States Environmental Protection Agency
HDPE	High density polyethylene (plastic #2)
HHW	Household hazardous waste
LSWMP	Local Solid Waste Management Plan
MBT	Mechanical-biological treatment
MSW	Municipal solid waste
MWC	Municipal waste combustor
NYSDEC	New York State Department of Environmental Conservation
PAYT	Pay as you throw
PET	Polyethylene terephthalate (plastic #1)
RAPP	Recycling Agricultural Plastics Program
RCA	Recoverable Container Act
RDF	Refuse derived fuel
SWMP	Solid Waste Management Plan
WTE	Waste to energy
WWTF	Wastewater treatment facility

1.0 PLANNING UNIT DESCRIPTION

1.1. Size, Location, Population

1.1.1. Physical Setting

Allegany County is located in the southern portion of Western New York. As shown on Figure 1-1, Allegany County is bordered by Pennsylvania to the south; Steuben County to the east, Cattaraugus County to the west; and Wyoming and Livingston Counties to the north. The County is situated along an eroded plateau of the Allegheny Mountains, approximately 40-70 miles due south of Rochester and about 75 miles southeast of Buffalo. Major highways serving Allegany County include Interstate Highway 86 (U.S. Rt. 17), which links Allegany County with Erie Pennsylvania and New York City on west-east corridor, and New York State Routes 19, 21, 305, and 417, which link Allegany County with neighboring counties to the north, east and west.

Allegany County has a land area of 1,029 square miles with a population density of 48 people per square mile (sq mi). The County's population is approximately 98.8% rural, with approximately 1.2% characterized as suburban. The County is largely rural, consisting of mostly farmland, forested hills, and surface water bodies, including several lakes and the Genesee River.

Allegany County was incorporated in 1806 and it is currently governed by a fifteen-member legislature with day to day operations managed by a county administrator. Allegany County's political subdivisions consist of twenty nine towns (Alfred, Allen, Alma, Almond, Amity, Andover, Angelica, Belfast, Birdsall, Bolivar, Burns, Caneadea, Centerville, Cuba, Friendship, Genesee, Granger, Grove, Hume, Independence, New Hudson, Rushford, Scio, Ward, Wellsville, West Almond, Willing, and Wirt), and ten villages (Alfred, Almond, Andover, Angelica, Belmont, Bolivar, Canaseraga, Cuba, Richburg, and Wellsville). The village of Belmont, incorporated in 1871, serves as the Allegany County seat. A map displaying the County's municipal jurisdictions is presented in Figure 1-1.

Figure 1- 1 - Municipalities in Allegany County

Allegany County Context: Town and Village Boundaries

Allegany
COUNTY



Data Sources:
ESRI, NY State GIS Clearinghouse,
U.S. Census Bureau American FactFinder.

DISCLAIMER OF USE:
This map is intended for planning purposes only.
The County assumes no liability associated with
the use or misuse of information contained herein.

Allegany County
Comprehensive Plan
for more maps:
<http://alleganyplanning.com>

1.1.2. Population and Number of Households in the Local Planning Unit^{1,2}

According to the U.S. Census data for 2010, Allegany County's population is approximately 48,917, and is distributed over 29 towns and 10 villages, with 18,009 households. Allegany County's population decreased from 49,927 in 2000 to 48,917 persons in 2010, a decrease of 981 persons. Previously, the population of Allegany County had peaked in 1980, at 51,742 persons. According to Cornell University's Program of Applied Demographics, the population of Allegany County was estimated at 46,430 in 2018 and is projected to decrease by 5,246 persons to 43,700 persons by the year 2040.

1.2. Planning Unit Members and Administrative Structure

The Planning Unit members consist of the 29 towns and 10 villages that make up the County. The membership of the Planning Unit has not changed since its inception. It is not anticipated that there will be any further changes of municipalities within the Planning Unit.

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

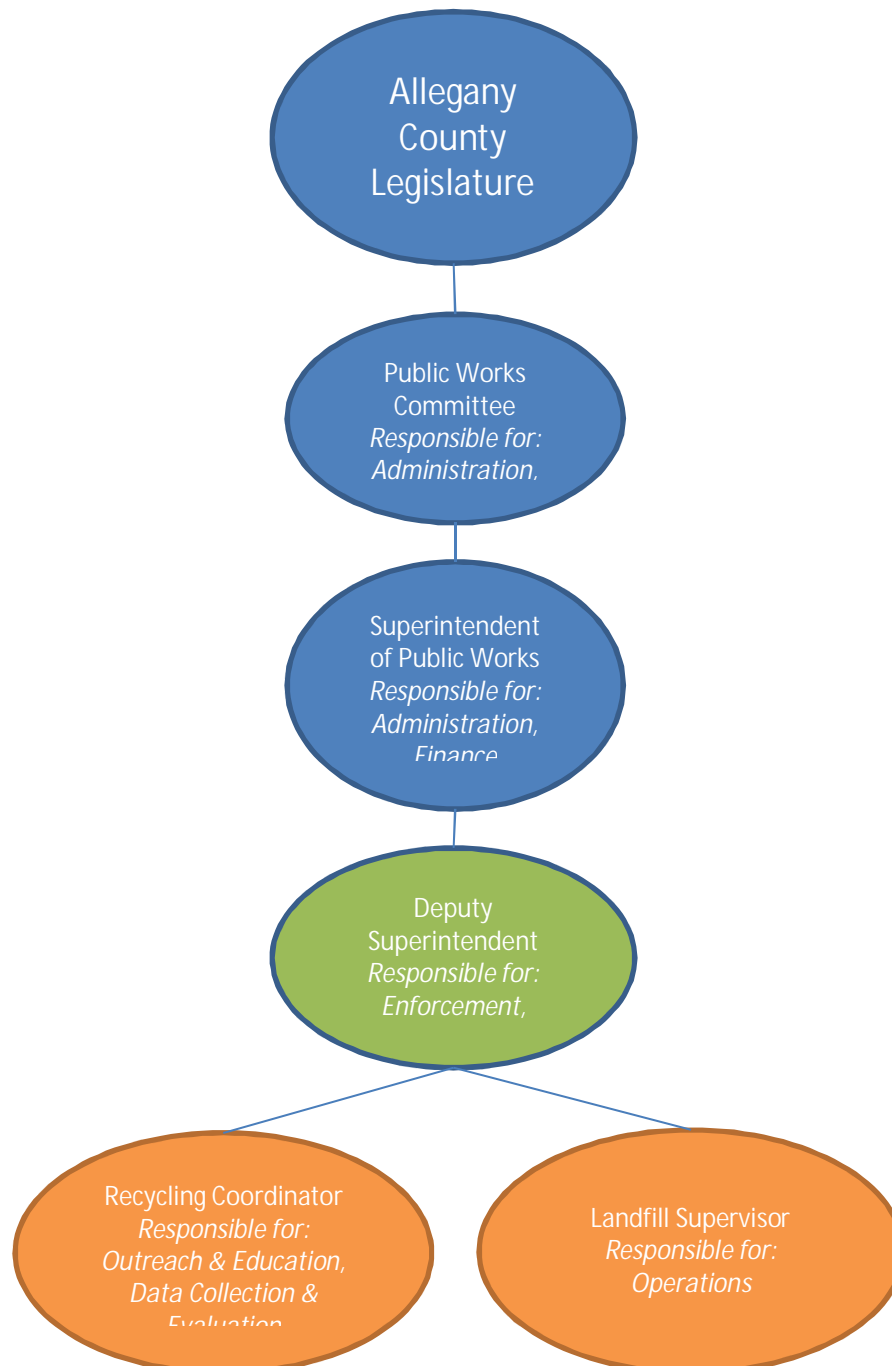
The County Administrator is appointed by the legislature and is the administrative head of the County government. The County Administrator also serves as the Chief Budget Officer of the County and is responsible for preparing the operating and capital budgets of the County for presentation to the legislature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

Ultimately, the County is responsible for implementation of this Plan. Within the Allegany County Legislature, the Public Works Committee oversees the budget and operation of the Public Works Department. This department with the staff identified in Figure 1-2, in addition to other duties and responsibilities, is charged with the operation of the County's solid waste and recycling facilities and with the implementation of this LSWMP. The County may delegate tasks to other partners as appropriate based on the nature of the contract, relationship or partnership. Any such delegated task may be assigned with County oversight. Figure 1-2 depicts the administrative structure to be utilized for implementing the programs and objectives outlined in this Plan. Each entity has a role in the success of the solid waste management system including operations, administration, finance, outreach and education, enforcement, data collection and evaluation, and LSWMP updates and report. These are identified in Figure 1-2.

¹ U.S. Census, 2010.

² Cornell University's Program of Applied Demographics, 2010.

Figure 1- 2 - LSWMP Administrative Structure



1.2.1. Neighboring Planning Units

Table 1-2 lists the neighboring planning units along with possible opportunities for inter-jurisdictional programs or issues that may impact implementation of the County's LSWMP and achievement of its goals. Further evaluation of these opportunities or potential impacts will be discussed in Chapter 5, and tasks will be included in the Implementation Schedule.

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

Neighboring Planning Unit	Existing or Potential Inter-Jurisdiction Considerations/Impacts	Effects of Opportunities or Impacts to Implement the LSWMP
GLOW Region Solid Waste Management Committee ³ (Genesee, Livingston, Wyoming)	GLOW Region Solid Waste Management Committee was formed in 1987 by the counties of Genesee, Livingston, Orleans and Wyoming through an Intermunicipal Cooperation Agreement. The purpose of this partnership was, and continues to be, to develop strategies for the management of solid waste in the region. The agreement was renewed by the counties every two (2) years through 2003, at which time Orleans County ended its participation in the organization. Current programs include: Household Hazardous Waste Collections, Mat-Ex: Western/Central New York Materials Exchange, Backyard Composting, School and Community Presentations, and Technical Assistance.	No known impacts on implementing the LSWMP.
Steuben County ⁴	Steuben County does not offer hauling to its residents; instead residents can hire a private hauler to collect their waste or bring waste directly to a disposal location. Steuben County operates a landfill located in Bath, and the County also operates transfer stations in the towns of Hornell, Wayland and Painted Post. Steuben County accepts many recyclable materials at the Bath Landfill and the three Transfer Stations - most are at no charge. The Bath Landfill and the three Transfer Stations also accept solid waste from residents. Hakes Landfill, a private C&D landfill owned and operated	Allegany County exports a portion of the waste generated in the County to the Steuben County Bath Landfill. Potential partnership opportunities will be explored with this neighboring Planning Unit

³ <http://glowsolidwaste.org/>

⁴ <https://www.steubencony.org/pages.asp?PID=429>

Neighboring Planning Unit	Existing or Potential Inter-Jurisdiction Considerations/Impacts	Effects of Opportunities or Impacts to Implement the LSWMP
	by Casella, is also located in Steuben County but does not currently handle any waste from Allegany County.	
Cattaraugus County	Cattaraugus County owns and operates eight transfer stations, which are located in the towns of Allegany, Conewango, Dayton, Ischua, Mansfield, Machias, Westons Mills, and Salamanca. All of these locations besides Ischua accept both solid waste and recyclable materials from residents and haulers. The waste is then transferred to the out of County neighboring planning unit landfills.	No known impacts on implementing the LSWMP.

1.2.2. Planning Unit Membership and Impacts on Implementing LSWMP

Table 1-2 includes a list of the planning unit members as well as conditions that pose a significant impact to implementing the LSWMP and achievement of the LSWMP goals. Currently, the members are not directly involved in preparing or implementing the plan; however the members contribute to the plan through their representation in the legislature and participation in the public review and comment period. Planning unit members could also play a significant role in the gathering of information and quantities of materials collected and recycled within the towns, at various businesses, schools, and other recycling facilities. The significant impacts are discussed further in Section 1.4 of this chapter. Additionally, more details related to organic waste management are provided in Table 3-3 in Chapter 3.

Table 1- 2 – Planning Unit Membership

Municipal Member	Population Density – Character ⁵	Unique Conditions or Issues ^{6,7}
Towns		
Alfred	161.9/sq mi - rural	None noted.
Allen	16.3/sq mi - rural	None noted.
Alma	18.1/sq mi - rural	None noted.
Almond	35.2/sq mi - rural	County owned and operated residential drop-off facility available (Alfred Transfer Station).
Amity	63.4/sq mi - rural	None noted.
Andover	42.4/sq mi – rural	None noted.
Angelica	38.2/sq mi - rural	County owned and operated residential drop-off facility available (Landfill Residential Drop-off) and location of closed Allegany County Landfill. HHW annual event. Active privately-owned Hyland Landfill.
Belfast	51.4/sq mi - rural	None noted.
Birdsall	4.8/sq mi - rural	None noted.
Bolivar	63.9/sq mi - rural	None noted.
Burns	51.3/sq mi - rural	None noted.
Caneadea	71.6/sq mi - rural	County owned and operated residential drop-off facility available (Caneadea Transfer Station).
Centerville	23.5/sq mi – rural	None noted.
Clarksville	24.3/sq. mi – rural	None noted.
Cuba	90.1/sq mi - rural	None noted.
Friendship	52.6/sq mi - rural	County owned and operated residential drop-off facility available (Cuba-Friendship Transfer Station). The town offers curbside pickup for garbage and recyclables.
Genesee	42.1/sq mi - rural	The Town offers garbage and recycling curbside pickup for residents. There is a yard waste drop off facility available.
Granger	18.6/sq mi - rural	None noted.
Grove	13.7/sq mi - rural	None noted.
Hume	51.4/sq mi - rural	None noted.
Independence	35.3/sq mi - rural	None noted.
New Hudson	23/sq mi - rural	None noted.
Rushford	26.9/sq mi - rural	None noted.
Scio	43.9/sq mi - rural	None noted.

⁵ Census 2010 Summary File 1 (SF 1), U.S. Census Bureau

⁶ Further evaluation will be completed as discussed in Chapter 5.

⁷ Residential drop-off locations are listed in the town or village in which they are physically located, not by address.

Municipal Member	Population Density – Character ⁵	Unique Conditions or Issues ^{6,7}
Towns		
Ward	14.5/sq mi - rural	None noted.
Wellsville	196.5/sq mi - rural	Registered private C&D processing facility. Active private C&D Landfill.
West Almond	9.7/sq mi - rural	None noted.
Willing	37.8/sq mi - rural	None noted.
Wirt	28.3/sq mi - rural	None noted.
Villages		
Alfred	3478.3/sq mi - suburban	Offers curbside pickup for garbage and recyclables.
Almond	667.6/sq mi - suburban	None noted.
Andover	1042/sq mi - suburban	None noted.
Angelica	404.2/sq mi -suburban	None noted.
Belmont	969/sq mi - suburban	County seat. Offers curbside pickup for garbage and recyclables.
Bolivar	1308.8/sq mi - suburban	None noted.
Canaseraga	518.9/sq mi -suburban	County owned and operated residential drop-off facility available (Canaseraga Transfer Station).
Cuba	1290.9/sq mi -suburban	Offers curbside pickup for garbage and recyclables.
Richburg	500/sq mi - suburban	County owned and operated residential drop-off facility available (Bolivar Transfer Station).
Wellsville	1957.7/sq mi - suburban	County owned and operated residential drop-off facility available (Wellsville Transfer Station).

1.3. Seasonal Variations and Unique Circumstances

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

- Spring is a large cleanup time and influx of brush, downed trees, lawn debris, and scrap metal from residences. The impacts and effects of these wastes are discussed in Section 1.4.1.
- Summer brings the end of the school year for both high schools and colleges, and brings with it cleanout wastes from lockers, equipment left behind, and wastes from any remodels or construction projects at schools and colleges, as well as agricultural clean ups. The impacts and effects of these wastes are discussed in Section 1.4.2.
- There are also many events held within the County during the year for which the County provides solid waste and/or recycling services as listed in Table 1-7. Additional events occur within the County that may generate significant quantities of waste. The impacts and effects of these events are discussed in Section 1.4.5.

- Summer also brings an increase of yard wastes, agricultural wastes and cleanups, as well as garden wastes which could all be composted. The impacts and effects of these wastes are discussed in Section 1.4.1.
- Fall brings the return of students to school and college. With this brings new electronics, books, etc. This also brings a larger amount of food wastes. All school and college wastes are managed by private haulers and no generation or recovery data is available. The impacts and effects of these wastes are discussed in Section 1.4.2.
- There are public libraries within the County. Potential recycling options for waste/recyclable materials generated at libraries are discussed in Section 1.4.3.
- There are some small manufacturers, businesses, nursing homes, jail and other institutional facilities which manage their own waste and recyclables. Recycling activities and data for these facilities are unknown. Recycling programs and data collection will be discussed in the Alternative Technology Evaluation in Chapter 5. Tasks will be included in the Implementation Schedule to evaluate and implement new or improved recycling programs, including packaging and organics recovery, and to collect data.

1.4. Overview of Solid Waste Generation Sources within Allegany County

The majority of Allegany County's industrial, commercial, retail, institutional, and governmental facilities are located within the I-86 and State Route 19 transportation corridor. Major employment centers within the County are concentrated in the Village of Wellsville.

Allegany County's economic base is relatively diversified. The educational services, manufacturing, and health care & social assistance field contributes the largest share of jobs in Allegany County followed by accommodation and food services, retail trade and construction. The County's labor force totaled 20,132 in 2017⁸. The largest individual employers were the Alstom Power (700 employees), SUNY College of Technology at Alfred (614 employees), Alfred University (606 employees), Empire Cheese (400 employees), and Friendship Dairies (350 employees).

The unemployment rate peaked in January 2010 at 9.8% and has been steadily declining to a rate of 6.1% in March of 2019. The number of private sector jobs, which has stayed relatively constant for the past five years, and was 11,395 in March of 2017. This has likely changed due to the closure of Dresser Rand, in Wellsville.

A total of 789 active farms existed in the County in 2017. These farms occupied approximately 184,626 acres of the County's total land area, and the average farm size was 234 acres. The County is experiencing a progressive displacement of agricultural land, particularly in the County's valley areas along the I-86 highway corridor, as a result of residential and commercial development.

⁸ <https://datausa.io/profile/geo/allegany-county-ny/>

1.4.1. Spring and Summer Residential and Agricultural Wastes

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

Table 1- 3 – Impacts of Residential and Agricultural Wastes in the Planning Unit⁹

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

The possibility of recycling organics, such as by composting or anaerobic digestion, will be discussed in the Alternative Technology Evaluation in Chapter 5, and tasks will be included in the Implementation Schedule as appropriate.

1.4.2. Schools

Allegany County is served by a large number of private institutions and community service facilities. The County's educational system consists of public, private, and parochial school systems, including elementary, middle, and high schools and colleges. The County is also served by the Cattaraugus-Allegany-Erie-Wyoming Board of Cooperative Educational Services (CAEW BOCES). This region's BOCES program is run by the CTE Center at Olean. SUNY Alfred, Alfred University and Houghton College are four-year institutions, located within the County.

Table 1-4 lists the schools in the planning unit, along with conditions and impacts that affect implementation of the LSWMP and achievement of its goals. Information and data in the table will be revised throughout the Planning Period as more details become available.

⁹ Information and data in table to be revised throughout the Planning Period as more details become available.

Table 1- 4 – Impacts of Schools Within the Planning Unit

Source of Wastes	Unique Situation or Circumstances	Quantity/Quality Impacts	Impacts On LSWMP
Colleges/Universities			
SUNY Alfred	Summer cleanout/ construction. Seasonal food wastes from cafeterias. Wastes from events held at the schools. Private hauling of school wastes and recyclables.	Dorm content, equipment left behind, C&D debris, and other wastes at the end of semesters. Influx of food wastes. Paper, books and electronics recycling.	Has a composting unit. Lack of data available. Further evaluation needed.
Alfred University	Same as above	Same as above	Lack of data available. Further evaluation needed.
Houghton College	Same as above	Same as above	Same as above
New York State College of Ceramics at Alfred University	Same as above	Same as above	Same as above
Elementary and Secondary Schools			
Alfred-Almond Central School	Summer cleanout/ construction. Seasonal food wastes from cafeterias. Private hauling of school wastes and recyclables.	Locker content left behind, C&D debris, and other wastes from end-of-school cleanouts. Influx of food wastes. Paper, books and electronics recycling.	May participate in education/outreach activities provided by Allegany County. Lack of data available on waste generation, further information is needed.
Andover Central School	Same as above	Same as above	Same as above
Belfast Central School	Same as above	Same as above	Same as above
Bolivar-Richburg Central School	Same as above	Same as above	Same as above
Canaseraga Central School	Same as above	Same as above	Same as above
Cuba-Rushford Central School	Same as above	Same as above	Same as above
Fillmore Central School	Same as above	Same as above	Same as above
Friendship Central School	Same as above	Same as above	Same as above

Source of Wastes	Unique Situation or Circumstances	Quantity/Quality Impacts	Impacts On LSWMP
Genesee Valley Central School	Same as above. Participates regularly in outreach programs.	Same as above	Same as above
Scio Central School	Summer cleanout/ construction. Seasonal food wastes from cafeterias. Private hauling of school wastes and recyclables.	Same as above	Same as above
Wellsville Central School	Same as above. Participates regularly in outreach programs.	Same as above	Same as above
Whitesville Central School	Summer cleanout/ construction. Seasonal food wastes from cafeterias. Private hauling of school wastes and recyclables.	Same as above	Same as above
Technical Schools			
Cattaraugus-Allegany-Erie-Wyoming BOCES	Same as above	Same as above	Same as above
Private Schools			
Houghton Academy	Same as above	Same as above	Same as above
Immaculate Conception School	Same as above	Same as above	Same as above

All of the schools within the planning unit generate various amounts and types of waste and recyclable materials, but specific details are unknown. Typically these schools contract with private haulers to manage the wastes and recyclables. Given that private haulers manage these materials, the types and quantities are not reported individually. Steps to improve the reporting of data to the planning unit will be discussed in the Alternative Technology Evaluation in Chapter 5. Tasks will be included in the Implementation Schedule to evaluate and implement new or improved recycling programs, including organics recovery, and to collect data.

1.4.3. Libraries

Table 1-5 lists the libraries in the planning unit, along with conditions and impacts that affect implementation of the LSWMP and achievement of its goals. Information in this table will be updated throughout the Planning Period as more detail becomes available.

Table 1- 5 – Impacts of Libraries Within the Planning Unit

Source of Wastes	Unique Situation or Circumstances	Quantity/Quality Impacts	Impacts on LSWMP
Alfred Box of Books Library	Periodic cleanouts. Private hauling of all library wastes.	Large amounts of books and magazines. Data unavailable.	Opportunity for libraries to coordinate a recycling management program among libraries or as a venue for education and outreach. Further evaluation needed.
20 th Century Club Library	Same as above.	Same as above.	Same as above.
Andover Free Library	Same as above.	Same as above.	Same as above.
Angelica Free Library	Same as above.	Same as above.	Same as above.
Belfast Public Library	Same as above.	Same as above.	Same as above.
Free Library of the Belmont Literary and Historical Society	Same as above.	Same as above.	Same as above.
Bolivar Free Library	Same as above.	Same as above.	Same as above.
Essential Club Free Library	Same as above.	Same as above.	Same as above.
Cuba Circulating Library Association	Same as above.	Same as above.	Same as above.
Wide Awake Club Library	Same as above.	Same as above.	Same as above.
Friendship Free Library	Same as above.	Same as above.	Same as above.
Genesee Library	Same as above.	Same as above.	Same as above.
Colonial Library	Same as above.	Same as above.	Same as above.
Rushford Free Library	Same as above.	Same as above.	Same as above.
Scio Memorial Library	Same as above.	Same as above.	Same as above.
David A. Howe Public Library	Same as above.	Same as above.	Same as above.
Whitesville Public Library	Same as above.	Same as above.	Same as above.

It is not known what these libraries are now doing with their wastes that they are generating. Possible recycling programs and data collection will be discussed in the Alternative Technology Evaluation in Chapter 5. This could include recycling programs for cardboard, outdated books and periodicals, and for materials generated from any events held at the library facilities. Tasks will be included in the Implementation Schedule to evaluate and implement new or improved recycling programs, and to collect data, as appropriate.

1.4.4. Jails, Institutions, Nursing Homes

Table 1-6 lists the jails, institutions and nursing homes in the planning unit, along with conditions and impacts that affect implementation of the LSWMP and achievement of its goals. Information in this table will be updated throughout the Planning Period as more detail becomes available.

Table 1- 6 – Impacts of Jails, Institutions, Nursing Homes Within the County

Source of Wastes	Facility Type/Unique Situation or Circumstances	Quantity/Quality Impacts	Impacts On LSWMP
Allegany County Jail	Needs further evaluation.	Needs further evaluation.	Needs further evaluation related to existing disposal and recycling activities. Possible compost of food wastes.
Jones Memorial Hospital	Medical facility	Unknown solid waste. Potential for high quantity of medical waste.	Same as above.
Cuba Memorial Hospital	Medical facility	Unknown solid waste. Potential for high quantity of medical waste.	Same as above.
Manor Hills Adult Care	Periodic cleanouts. Food wastes. Medical waste. No data available.	Unknown solid waste. Potential for high quantity of medical waste.	Same as above.
Houghton Rehabilitation and Nursing Center	Same as above.	Same as above.	Same as above.
Highland Park Rehabilitation and Nursing Home	Same as above.	Same as above.	Same as above.
Garden Heights (assisted living)	Same as above.	Same as above.	Same as above.
Wellsville Nursing Home	Same as above.	Same as above.	Same as above.
Willcare	Same as above.	Same as above.	Same as above.
Total Senior Care	Same as above.	Same as above.	Same as above.

Source of Wastes	Facility Type/Unique Situation or Circumstances	Quantity/Quality Impacts	Impacts On LSWMP
Wellsville Manor Care Center	Same as above.	Same as above.	Same as above.
Crandall Health Center	Same as above.	Same as above.	Same as above.

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

1.4.5. Special Events within the Planning Unit

Table 1-7 lists the special events in the planning unit, along with conditions and impacts that affect implementation of the LSWMP and achievement of its goals. This data will be updated throughout the planning period as more information becomes available.

Table 1- 7 – Impacts of Special Events Within the Planning Unit

Sources of Wastes	Unique Situation or Circumstances	Quantity/Quality Impacts	Impacts On LSWMP
The Great Allegany County Fair	Many vendors and activities with packaging, food waste, and/or recyclable drink bottles. Attendees may or may not care about recycling or waste diversion.	The County provides both solid waste and recycling receptacles and services for this event.	There are many waste/recyclable materials that could be captured from these events. Possibility of composting organics and recycling of packaging. Data needed. Opportunity for education outreach to the community related to recycling and waste diversion.
Pioneer Oil Days	Same as above.	The County provides solid waste receptacles and services for this event.	This event is a potential target for increasing waste diversion by providing recycling in addition to solid waste collection.
Angelica Heritage Days	Same as above.	Same as above.	Same as above.
Rushford's Labor Day Weekend	Same as above.	Same as above.	Same as above.

Sources of Wastes	Unique Situation or Circumstances	Quantity/Quality Impacts	Impacts On LSWMP
Cuba Garlic Festival	Same as above.	Same as above.	Same as above.
Angelica Civil War Reenactment	Same as above.	Same as above.	Same as above.
Various Office for the Aging Events	Potentially large gatherings of people that could produce significant quantities of waste and/or recyclables.	Same as above.	Same as above.
Highway Superintendents Clam Bake	Same as above.	Same as above.	Same as above.
Municipal Spring Cleanups	Regularly held events to provide solid waste collection for community cleanups.	Same as above.	Same as above.
Local Municipality and State DOT Cleanups	Same as above.	Same as above.	Same as above.
Household Hazardous Waste Day	Event held to collect HHW annually.	1,585 pounds of HHW (solids) and 1,380 gallons of HHW (liquid) were collected in 2018	Other recycling events could be co-located during these events. Opportunity for education outreach to the community related to recycling and waste diversion.

The potential of capturing recycling and wastes from special events could be increased dramatically. Currently, the County only provides solid waste collection services for events, with the exception of the Allegany County Fair. In addition to the events listed for which the County currently provides services, many other events occur within the County and it is unknown at this time the extent to which wastes are being captured or recycled at these events. It needs to be investigated as to what events are held, when and where they are held, what types of waste/recyclable materials are being generated, and how they are currently being managed. Possible recycling programs and data collection will be discussed in the Alternative Technology Evaluation in Chapter 6. Tasks will be included in the Implementation Schedule to evaluate and implement new or improved recycling programs, including packaging and organics recovery, and to collect data.

1.5. Summary of Implementation of Previous LSWMP

The 1993 SWMP developed by Allegany County was approved by the NYSDEC in 1994. The SWMP set forth the details of the Solid Waste Management Program for the County including the specific plans and approach for receiving the solid waste generated, the operation of the mandatory recycling program, and providing solid waste disposal in compliance with local, State and Federal laws, rules and regulations.

Since 1994, the SWMP has served as the foundation for decision-making by the County, for its growing solid waste management and recycling efforts.

Allegany County has submitted SWMP Compliance Reports to the NYSDEC through the initial planning period, documenting the progress made on achieving the goals and objectives of the 1993 SWMP. Throughout the planning period, several modifications have been made in response to planning and development in Allegany County.

Flow control was enacted in 2004, in order to maximize the collection of waste and recyclables generated within the County. Waste was collected from outside the County for a short period, however was later discontinued. Rising disposal and operational costs and reduced funding from the State has been an obstacle for the County, however, they continued to own and operate the Allegany County Landfill and transfer stations in accordance with the 1993 SWMP. Following closure of the landfill, the County continues to own and operate the transfer stations in the County as well as conduct post-closure maintenance on the landfill.

Over the last planning period, the County continued to enhance recycling programs to the extent possible, including adding collection of HHW, sharps, textbooks, textiles, mercury-containing devices, CFLs, and electronics despite rising disposal costs and losing state funding for many programs. The County participated in RAPP for agricultural plastics until its discontinuation and studied the feasibility of composting programs for yard waste and sewage sludge. Allegany County also joined and still actively participates in the Western Materials Exchange to promote material reuse. Some recovery programs for materials were subsequently abandoned due to lack of funds, however the County continues to provide safe and local disposal options for HHW, sharps, electronics, CFLs, and mercury-containing items in addition to the standard waste and recyclable streams.

Overall, the County has implemented many of the items identified in the 1993 SWMP. In order to promote use of the County's solid waste management system, the County has elected to provide economical waste disposal options rather than greatly increase disposal fees as in some Planning Units. As state funding for programs has decreased, the County has struggled to maintain certain programs using tax dollars and tip fees and anticipates cost to be a continued obstacle in the coming planning period. The County will, however, continue to provide local and economical solid waste management services to its residents.

1.6. Summary of Changes to the Planning Unit

One of the most impactful changes to the Planning Unit was the closure of the County-owned MSW landfill in the County. Although the County still owns and operates many of the transfer stations within the County, there is no longer a County-controlled disposal option. In 2002, the first closure project at the County landfill began, and in 2018 the final closure of the landfill was completed. While there are still private entities operating within the County, including a private MSW landfill, the County has control over less waste. In 2016, flow control for waste generated within the County was removed from the Local Law due to the landfill closure. Flow control is still enacted for recyclable materials generated within the County with some exceptions but is not enforced. However, without the tip fees from the landfill, the County will have less revenue to implement additional programs. See Appendix B for the Local Solid Waste and Recycling Law.

There have been some changes in industry in the Planning Unit since the original Plan. Several businesses have left the area. Due to the recent economic decline in the area, some commercial businesses have left the planning unit, resulting in a difference in the types of waste received. One major manufacturer that has closed is Dresser Rand located in Wellsville, New York. Approximately 250 jobs have been affected by this. The Dresser-Rand Wellsville Plant produced parts for the US Navy which included turbines and valves as well as equipment for the extraction of petroleum and natural gas to be used as energy. The shutdown of this plant will impact both the type and quantity of waste generated within the planning unit. The loss of the Dresser Rand could result in a population drop in the County which would be expected to adversely impact the area's economy. The loss of jobs may also result in the relocation of some families out of the planning unit and therefore a decline in waste generation.

There have been no changes in schools or colleges being introduced to the planning unit. The impacts of schools and colleges and commercial establishments and related LSWMP tasks are addressed in Section 1.4.

Retail businesses have declined within the planning unit. Of particular note is the closure of the K-Mart in Allegany County, which funded the sharps collection program. Due to the closure of the K-Mart and its pharmacy, the County now bears the cost of its sharps collection.

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

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

Planning Unit Changes	Quantitative and Qualitative Impacts	Impacts on LSWMP
Landfill Closure	Shedding of waste out-of-county results in lost revenue from tip fees; post-closure monitoring and maintenance results in lower	No county-controlled waste disposal location; less tip fee revenue available to fund LSWMP program strategies.

Planning Unit Changes	Quantitative and Qualitative Impacts	Impacts on LSWMP
	operational costs than active landfilling.	
Job Losses	Fewer families producing waste within the planning unit. Job losses and population decline also result in a decline in tax base.	Less waste being generated. Less tax revenue for use on LSWMP programs.
Fewer Manufacturing Businesses	Less wastes from manufacturing	Different waste generated, different materials available for recycling

2.0 SOLID WASTE AND RECYCLABLES QUANTITIES AND TYPES

This chapter provides information on the waste streams generated in Allegany County based on self-reported data, data from private facilities made available through NYSDEC reporting, and estimates from the NYSDEC MSW composition projections.

2.1. Waste Types

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

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

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

Non-hazardous industrial waste is typically generated by manufacturing facilities as a result of an industrial process and is made up of materials such as sludge, ash, drill cuttings and dust. According to annual reports submitted to NYSDEC, some portion of these materials are disposed of in local landfills; however, the homogeneous nature and relatively large quantity of these wastes typically available can also make them useful as feedstocks for other processes or result in unique management methods. Therefore, only partial data for the generation of these materials within the county is currently available. Implementation of a plan to collect data and estimate MSW by material type, including estimating industrial waste generation and recovery, considering these circumstances is further discussed in Chapter 6.

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

As defined in the Part 360 regulations, biosolids are the accumulated semisolids or solids resulting from treatment of wastewaters from publicly or privately owned or operated sewage treatment plants. Biosolids does not include grit or screenings, or ash generated from the incineration of biosolids. Municipal treatment plants generate sludge/biosolids that require special handling and management. A majority of this material is landfilled and some is also land applied, and the data is readily available from the annual reports to NYSDEC. Hyland Landfill, a privately owned site located in Angelica, New York, reported 830.57 tons of biosolids from Allegany County landfilled in 2018.

Processed scrap metals are typically generated by commercial or industrial sectors, but in potentially large quantities which makes it worth monitoring. Data from these types of operations and uses is difficult to obtain. Implementation of a plan to collect data and estimate scrap metals generation in the County and recovery, considering these circumstances is further discussed in Chapter 6.

2.2. Availability of Generation and Recovery Estimates

2.2.1. Data Sources and Methodology

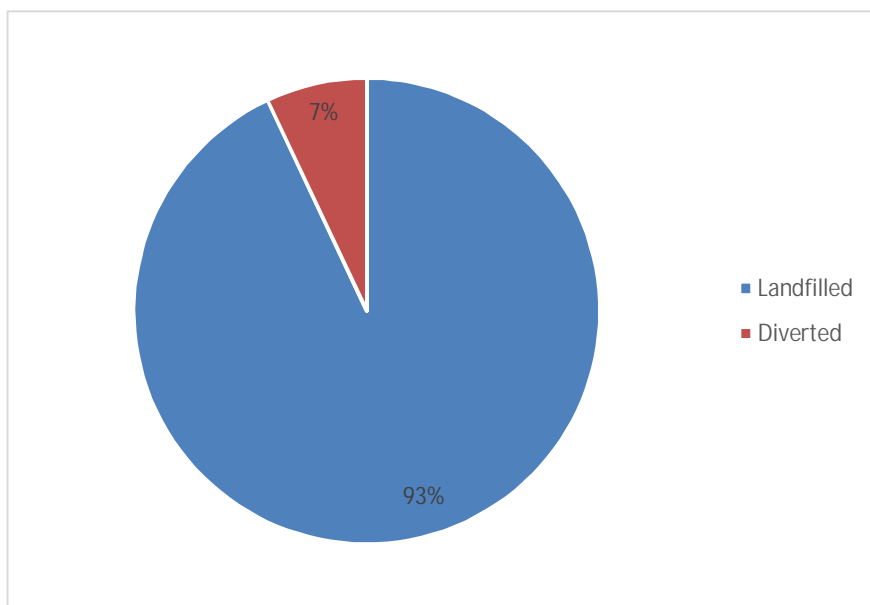
As discussed above, much of the following waste generation estimates were derived from available reports provided to the NYSDEC by permitted landfills, transfer stations, sewage treatment plants, and recycling centers. Limitations associated with the data are as follows and will be considered when evaluating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

- Incomplete data: Data on the public sector solid waste management is often incomplete.
- Inconsistent data: Where data exists, different methods have been used from year to year and facility to facility to collect and categorize it.
- Unavailable data: Data on privately managed waste is generally unavailable. With the County's proximity to Pennsylvania, any data for waste exported there is not available.

2.2.2. Estimation of Total Waste Generation in Allegany County

Based on annual reports submitted to the NYSDEC for 2018, Allegany County residents and businesses generated approximately 27,721 tons of waste (including potentially recyclable materials) based on available data. Figure 2-1 shows the overall method of management for the waste. The fraction for each waste management sector was determined by analyzing annual tonnage reports for those facilities that reported accepting waste from Allegany County. Based on the information available to interpret, the majority of the waste is landfilled (25,790 tons or 93 percent) while the remainder is recycled (1,932 tons or 7 percent).

Figure 2- 1 - Estimated Waste Management Methods in Allegany County in 2018



Source: NYSDEC, Facility Annual Reports, 2018; Self-Reporting

Allegany County has eight wastewater treatment facilities (WWTFs). Table 2-1 shows the method of sludge management utilized.

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

Treatment Plant	Treatment Method	Dewatering Device	Tons/Year	Use/Disposal Method	Location
Village of Alfred WWTP	Aerobic and Anaerobic Digestion	Drying Beds	127	Landfill	Steuben County Bath Landfill
Village of Belmont WWTF	Aerobic Digestion	None	Not Reported	Reed Beds	Onsite
Village of Bolivar WWTF	Aerobic Digestion	Drying Beds	Unknown	Landfill	Unknown
Village of Canaseraga WWTP	Reed Beds	Vacuum Filter	Not Reported	Reed Beds	Not Reported
Town of Caneadea WWTP	Anaerobic Digestion	Screw	Not Reported	Landfill	Hyland Landfill
Town of Cuba WPCP	Aerobic Digestion	Drying Beds	110	Landfill	Hyland Landfill
Town of Friendship WPCP	Aerobic Digestion	Drying Beds	Not Reported	Landfill	Hyland Landfill
Village of Wellsville WWTP	Anaerobic Digestion	Drying Beds	610	Landfill	Hyland Landfill
Total Sewage Sludge Used/Disposed On-site			Unknown	<i>Source: Facility surveys; NYSDEC, Biosolids Management in New York State, 2018</i>	
Total Sewage Sludge Landfilled			<u>958</u>		
Total Municipal Sewage Sludge Generated			958		

The data in Table 2-1 above was generated from data compiled from surveys of the facilities. Treatment and drying methods are based on NYSDEC reporting and verified through conversations with wastewater treatment facility staff. Biosolids quantities are 2018 disposal numbers obtained through facility surveys. A total of 958 tons of sewage sludge was landfilled in 2018. Some individual facilities did not report the 2018 tonnage landfilled, but the total landfilled municipal sewage sludge was verified using NYSDEC Landfill Annual Reports. Small quantities of sewage sludge at two WWTFs are handled on-site in reed beds and are unquantifiable.

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

Table 2- 2 - Estimation of Total 2018 Waste Tonnage by Management Method

	Amount (Tons)	% of Management Method	% of Total Generation
Landfilled ¹⁰			
MSW ¹¹	20,812	81%	75%
Construction and Demolition Debris	1,484	6%	5%
Sewage Sludge	958	3%	3%
Industrial	2,295	9%	8%
Beneficial Use Determination Material	242	1%	1%
Total	25,790	100%	93%
Diverted			0%
Composted Sewage Sludge	0	0%	0%
Land Applied Sewage Sludge	0	0%	0%
Composted Yard Waste	0	0%	0%
Recovered/Composted Food Scraps	0	0%	0%
Recycled	1,348	70%	5%
Processed Construction & Demolition Material	584	30%	2%
Vehicle Scrap Metal	0	0%	0%
Total	1,932	100%	7%
Total Waste Generation	27,721		100%

2.2.3. Estimation of Potential MSW Recovery

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

¹⁰ NYSDEC 2018 Facility Annual Reports

¹¹ Shaded categories are considered to be part of the MSW category, and will be utilized in the MSW composition analysis.

counties. Using the NYSDEC MSW composition tool, Table 2-3 below provides some assumptions as to the quantity of materials recovered as part of RCA in 2010.¹²

Table 2-3 provides a detailed estimate of materials that could be recovered or diverted from a waste disposal location if the appropriate programs were in place. These numbers are based on the actual total tons of MSW generated within the County, as reported in Table 2-2. Based on transfer station records, Allegany County diverted approximately 1,348 tons of material (6 percent) from the 22,160 tons of MSW generated from residential, commercial, and institutional generators in 2018¹³.

However, not all of the categories tracked by the NYSDEC are populated for the 2018 recovery quantities due to the fact that not all categories are able to be accounted for individually. Several materials identified below are collected and recovered at the recycling centers or other similar facilities in Allegany County; however, there are no mechanisms for gathering data for the individual materials at this time. Therefore, the NYSDEC MSW composition tool was applied to the actual waste generation totals to estimate quantities for more specific materials that are not tracked individually within waste streams.

¹² According to 2010 RCA data from the NYSDEC, 59% of deposit containers are recovered. Of the containers, 80% of Aluminum containers are deposits, 50% of glass containers are deposits, and 45% of PET containers are deposits.

¹³ Excludes processed C&D, asbestos, industrial waste, sewage sludge, contaminated soil, beneficial use determination materials previously reported in Table 2-2.

Table 2- 3 - Estimated MSW Recoverable Materials in Allegany County

Material	Estimated MSW Tons Generated (2018) ¹⁴	Estimated % of Total Tons Generated (2018)	Actual MSW Tons Diverted (2018) ¹⁵	Actual % of Each Material Diverted (2018)
Newspaper	859	3.88%	0	0.00%
Corrugated Cardboard	2,111	9.53%	310	14.68%
Other Recyclable Paper (Total)	2,380	10.74%	475	19.96%
Other Compostable Paper	1,506	6.80%	0	0.00%
<i>Total Paper</i>	6,856	30.94%	785	11.45%
Ferrous/Aluminum Containers (Total)	468	2.11%	55	11.72%
Other Ferrous Metals	1,170	5.28%	0	0.00%
Other Non-Ferrous Metals (Total)	296	1.34%	160	53.98%
<i>Total Metals</i>	1,934	8.73%	215	11.10%
PET Containers	217	0.98%	0	0.00%
HDPE Containers	199	0.90%	0	0.00%
Other Plastic (3-7) Containers	36	0.16%	0	0.00%
Film Plastic	1,280	5.78%	0	0.00%
Other Plastic (Total)	1,352	6.10%	114	8.42%
<i>Total Plastics</i>	3,084	13.92%	114	3.69%
Glass Containers	882	3.98%	93	10.54%
Other Glass	102	0.46%	0	0.00%
<i>Total Glass</i>	984	4.44%	93	9.41%
Food Scraps	2,870	12.95%	0	0.00%
Yard Trimmings	531	2.40%	0	0.00%
<i>Total Organics</i>	3,401	15.35%	0	0.00%
Clothing Footwear, Towels, Sheets	877	3.96%	64	7.29%
Carpet	302	1.36%	0	0.00%
<i>Total Textiles</i>	1,179	5.32%	64	5.42%

¹⁴ NYSDEC MSW Combined Composition Analysis and Projections¹⁵ 2018 NYSDEC Facility Annual Reports

Material	Estimated MSW Tons Generated (2018) ¹⁴	Estimated % of Total Tons Generated (2018)	Actual MSW Tons Diverted (2018) ¹⁵	Actual % of Each Material Diverted (2018)
<i>Total Wood</i>	1,336	6.03%	0	0.00%
C&D Materials	1,725	7.78%	0	0.00%
Other Durables	403	1.82%	5	1.28%
Diapers	350	1.58%	0	0.00%
Electronics	298	1.34%	65	21.76%
Tires	398	1.80%	0	0.00%
HHW	80	0.36%	8	9.95%
Fines	132	0.60%	0	0.00%
<i>Total Miscellaneous</i>	3,386	15.28%	78	2.30%
Total	22,160	100.00%	1,348	6.08%

2.2.4. Estimation of Potential C&D Waste Recovery

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

Based on the data reported in the NYSDEC 2018 Facility Annual Reports, Table 2-4, below, provides an overview of the tons of C&D debris that could be recovered or diverted from a waste disposal location if the appropriate programs were in place.

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

Material	Estimated Components of C&D Debris Tons Generated per NYSDEC Model (2018)	% of Total C&D Debris Generated (2018)	Tons of C&D Debris Diverted per 2018 Data Obtained	
			Tons Diverted	% Diverted
Concrete/Asphalt/Rock/Brick	399.6	19%	440	21%
Wood	427.6	21%	144	7%
Roofing	283.9	14%	0	0%
Drywall	138.2	7%	0	0%
Soil/Gravel	268.8	13%	0	0%
Metal	213.1	10%	0	0%
Plastic	12.1	1%	0	0%
Corrugated/Paper	84.2	4%	0	0%
Other	270.5	13%	0	0%
Total	2,068	100%	584	28%

Based on the quantities of potential divertible materials that were reported to the NYSDEC or estimated, Allegany County diverted approximately 584 tons of material (28 percent) from the C&D disposal stream in 2018. Table 2-4, above, indicates that 2,068 tons of C&D materials is generated within the County from residential and non-residential construction, renovation or demolition projects. A task has been added to the Implementation Schedule to evaluate and implement data collection efforts. Chapters 3 and 6 describe the existing systems for recovering these materials as well as possible future programs during this planning period to increase the County's diversion rate.

2.2.5. Estimation of Potential Industrial Waste Recovery

According to the 2018 NYSDEC Facilities Annual Reports, Allegany County generated 2,295 tons of Industrial Waste in 2018, which includes contaminated soil and asbestos. An exact number of the amount of waste disposed in the county is uncertain because the diversion of waste is so significant because many industries recycle outside of the traditional recycling process.

2.2.6. Estimation of Potential Biosolids Recovery

Table 2- 5 - Estimated Biosolids Recoverable in Allegany County

Material	Estimated Components of Biosolids Tons Generated in 2018	Tons of Biosolids Diverted per 2018 Data Obtained	
		Tons Diverted	% Diverted
Biosolids	1,365 ¹⁶	407	29.8%

Source: 2018 NYSDEC Facility Annual Reports.

Based on the quantities of potential biosolids divertible materials that were reported to the NYSDEC or estimated, Allegany County diverted approximately 407 tons of material (29.8 percent) from the biosolids disposal stream in 2018. The diverted tonnages represent land applied septic pumpings and were not included in the accounting of municipal sewage sludge in Section 2.2.2. Table 2-5, above, indicates that 1,365 tons of biosolids could potentially be available for diversion. A task has been added to the Implementation Schedule to evaluate and implement data collection efforts.

In addition to the biosolids diverted, two large manufacturers within the County land applied a food manufacturing byproduct classified as sludge. According to 2018 Annual Reports, Saputo Dairy and Empire Cheese diverted 32,524.50 tons of food sludge. While this is a large amount of diverted material this number is not considered municipal solid waste and is therefore not included in the County's overall diversion rate.

¹⁶ Does not include minor amounts treated on-site.

3.0 EXISTING PROGRAM DESCRIPTION

The County owns one central landfill that began operating in 1985 and closed in 2018. Additionally, the County operates 7 residential waste and recyclables drop-off stations in the Towns Caneadea, Canaseraga, Friendship, Almond, Bolivar, Wellsville, and Angelica. These facilities deliver their collected waste to Hyland Landfill or to Bath Landfill in Steuben County. There is also one private transfer station in the Town of Wellsville which sends their collected waste to Chaffee Landfill in Erie County. The generators and haulers are not required to deliver waste to the County facilities and businesses may self-market their wastes. Recyclables, however, are required to pass through the County facilities for marketing as required by the County's flow control law, except those collected by commercial waste haulers.

Given the rural nature of Allegany County, a limited variety of collection services are used in the County to collect and transport solid wastes to landfills and recycling centers/transfer stations. Methods include residential drop-off stations or private contracts. Most entities transport their waste directly to surrounding landfills for proper management by a private contractor. Allegany County does not collect or transport materials from the source. In some cases, private haulers contract on an individual basis to collect and transport the waste and recyclables to a transfer station or disposal location of their choice. Three municipalities, the Villages of Wellsville, Belmont, and Alfred, and one partnership between municipalities, the Village of Cuba/Town of Friendship, within Allegany County offer municipally-run or private collection for residential garbage and recycling. All residential properties located within the respective villages and/or towns may elect to receive garbage collection. All participants may opt-out of the program at any time. A summary of waste disposal activities by waste type follows.

3.1. Solid Waste Management Facilities

3.1.1. Landfill Facilities

Allegany County currently owns one closed solid waste landfill in the town of Angelica. Hyland Landfill, a solid waste landfill, and Southern Tier-Kleen Fill Inc., a C&D landfill, are privately owned active landfills within the County, in the towns of Angelica and Wellsville, respectively.

Additionally, other landfills, located outside of Allegany County, are available for the disposal of MSW. Each of these out-of-county landfills accepted waste that was generated in Allegany County in 2018. Other landfills also exist throughout New York State; however, they may have disposal restrictions or are located outside a reasonable service area to accept waste generated in Allegany County. The out-of-County landfills accepting Allegany County waste are summarized in Table 3-1.

Table 3- 1 – Out-of-County Solid Waste Landfills Servicing Allegany County Waste¹⁷

Solid Waste Facility	Facility Address	Permitted Capacity (cubic yards)	Expected Site Life (years)	Waste Types Accepted ¹⁸	Operating Status
Steuben County Landfill	5632 Turnpike Road, Bath, NY 14810	1,307,678	4.9	Asbestos (Friable); Construction & Demolition Debris; Non-Radioactive; Industrial; Petroleum Contaminated Soil; MSW (Residential/ Institutional & Commercial)	Municipally owned and operated.
Chaffee Landfill	10860 Olean Road, Chaffee, NY 14030	1,175,000	6.8	Ash (Coal-Bottom); Ash (Coal-Fly); Asbestos (Non-Friable); Construction & Demolition Debris; Sludge (Industrial); Asbestos (Friable); Biosolids; MSW (Residential/Institutional & Commercial)	Privately owned and operated by Waste Management
High Acres Landfill	425 Perinton Parkway, Fairport NY 14450	47,297,000	32.8	Treated RMW; MSW (Residential/Institutional & Commercial); Construction & Demolition Debris; Asbestos (Friable); Asbestos (Non-Friable); Industrial; Ash MSW Energy Recovery Fly; Sewage Treatment Plant Sludge; Petroleum Contaminated Soil	Privately owned and operated by Waste Management
Ontario County Landfill	1879 St Rt 5 & 20 Stanley, NY 14561	7,247,322	6.9	MSW (Residential/Institutional & Commercial); Construction & Demolition Debris; Asbestos (Friable); Asbestos (Non-Friable); Industrial; Ash MSW Energy Recovery Fly; Sewage Treatment Plant Sludge; Petroleum Contaminated Soil	Municipally owned; Operated by Casella
Chautauqua County Landfill	3889 Towerville Road, Jamestown, NY 14701	7,441,860	20	Ash (Coal-Bottom); Ash (Coal-Fly); Asbestos (Non-Friable); Construction & Demolition Debris; Sludge (Industrial); Waste Tires; Asbestos (Friable); Biosolids; MSW (Residential/ Institutional & Commercial)	Municipally owned and operated.

¹⁷ NYSDEC Annual Facility Reports, 2018¹⁸ <https://data.ny.gov/Energy-Environment/Landfill-Solid-Waste-Management-Facilities-Map/afg5-7i6u>

3.1.2. Transfer Stations or Residential Drop-Offs

Most residents that are either not served by or elect not to contract with a private hauler, deliver their waste to a transfer station owned by Allegany County. The one private transfer station within the County is not open to residents but accepts residential waste from curbside collection. Residents or commercial/institutional entities located within the County can drop off solid waste and recyclables to any County transfer station, regardless of which municipality they are located in; commercial/institutional entities that do not contract directly with a hauler must dispose of waste by weight at the Belmont Transfer Station.

Allegany County offers multiple options for waste disposal fees. Residents can pay per bag or item, on a weight basis, or elect to purchase a solid waste permit (a residential hanging tag) for 3 cubic yards per day of disposal on an annual basis for a fixed one-time annual cost. The transfer station's individual pay per bag prices are included in Table 3-2. Residents may also elect to pay by weight for waste disposal at the Belmont Transfer Station. The county offers the residential hanging tag for an annual fee of \$200. With the tag, residents can dispose of most materials at any of the County-owned transfer stations for no additional fee. Some exceptions are C&D and CFC-containing appliances. Tags are valid from April 1 to March 31 of the following year.

Table 3-2 Transfer Station Disposal Fees

Quantity	Cost
1-13 gallon bags	\$1
14-30 gallon bags	\$3
31-55 gallon bags	\$5
Per ton (Belmont only)	\$50 (\$20 minimum)
CFC-Containing Appliances	\$10
Tires-Passenger/Light Truck	\$2.50
Tires-20" to 24.5"	\$15

Residential drop-offs are located around the County for residential use. These stations are located in the Towns of Almond (Alfred Transfer Station), Angelica (Belmont Transfer Station), Caneadea, Friendship (Cuba-Friendship Transfer Station) and the Villages of Canaseraga, Richburg (Bolivar Transfer Station), and Wellsville. Recyclables are collected at the transfer stations and sold to market. Various appliances containing Freon and tires may be accepted for a nominal fee and are segregated so that they may be transported for disposal or recycling at an appropriately permitted facility. Recyclable materials accepted free of charge include; electronics, glass bottles and jars, tin and

aluminum containers, plastics #1- #7, mixed paper, office paper, magazines, newspaper, cardboard, scrap metal, non-Freon containing appliances, and textiles.

A privately owned and operated transfer station is also located in the Town of Wellsville.

A listing of the transfer station facilities in Allegany County is presented in the following Table 3-3.

Table 3- 3 - Active Transfer Stations in Allegany County

Transfer Station Name	Owner/Operator	Facility Address	Disposal Destination	Infrastructure Components
Belmont Transfer Station	Allegany County	6006 County Road 48 Angelica, NY 14709	Hyland Landfill/ Steuben County Landfill	Accepts MSW and recyclables. Has truck scale.
Alfred Transfer Station	Allegany County	394 Satterlee Hill Road Almond, NY 14804	Hyland Landfill/ Steuben County Landfill	Accepts MSW and recyclables.
Bolivar Transfer Station	Allegany County	135 Reed St Bolivar, NY 14715	Hyland Landfill/ Steuben County Landfill	Accepts MSW and recyclables.
Caneadea Transfer Station	Allegany County	9425 Molyneaux Road Caneadea, NY 14717	Hyland Landfill/ Steuben County Landfill	Accepts MSW and recyclables.
Canaseraga Transfer Station	Allegany County	89 Main Street Canaseraga NY 14822	Hyland Landfill/ Steuben County Landfill	Accepts MSW and recyclables.
Cuba- Friendship Transfer Station	Allegany County	7915 County Road 20 Friendship NY 14739	Hyland Landfill/ Steuben County Landfill	Accepts MSW and recyclables.
Wellsville Transfer Station	Allegany County	77 West Dyke Street Wellsville NY 14895	Hyland Landfill/ Steuben County Landfill	Accepts MSW and recyclables.
LaForge Transfer Station	Privately Owned	3090 Trapping Brook Rd Wellsville NY 14895	Steuben County Landfill/ Chataqua County Landfill	Accepts MSW and recyclables.

3.2. Out-of-County Waste

The privately owned Hyland Landfill is the only facility within the County identified as bringing in significant quantities of out-of-County waste that are disposed of within Allegany County. Hyland Landfill is a private landfill located within Allegany County that also accepts solid waste and recyclables. Casella owns and operates this facility and offer private hauling to residents for a fee. The following is a summary of the types and quantities of waste that are handled at Hyland Landfill.

Table 3- 4 – Out-of-County Waste

County/State	MSW (Tons)	C&D (Tons)	Industrial (Tons)
Albany, NY	-	-	203.39
Berkshire, MA	9.77	-	-
Bristol, MA	-	351.74	6.95
Bronx, NY	30,466.82	60,930.75	-
Burlington, NJ	-	-	136.75
Cattaraugus, NY	982.40	471.20	4,137.10
Cayuga, NY	-	-	30.94
Chautauqua, NY	-	16.42	-
Chittenden, NY	-	-	208.57
Chemung, NY	47,158.87	172.21	173.53
Chittenden, NY	-	-	813.02
Cheshire, NH	-	-	161.74
Cortland, NY	-	-	334.73
Delaware, NY	-	-	217.74
Dutchess, NY	-	-	4,297.86
Erie, NY	1,335.69	442.87	5,924.25
Erie, PA	-	-	10.65
Essex, MA	-	-	14.33
Greene, NY	20.61	14.59	-
Genesee, NY	-	676.55	790.19
Herkimer, NY	-	-	67.51
Hornell, NY	3,549.20	-	-
Jefferson NY	-	-	13.40
Kings, NY	-	21,961.37	-
Lewis NY	-	-	20.99
Litchfield, CT	-	-	111.28
Livingston, NY	2,055.93	143.58	51.63

County/State	MSW (Tons)	C&D (Tons)	Industrial (Tons)
Madison, NY	-	-	155.03
Middlesex, NJ	-	-	22.20
McKean, PA	7.30	49.21	5.30
Montgomery, NY	-	28.56	45.65
Monroe, NY	24,308.67	509.61	1,035.41
Nassau, NY	-	-	6,423.48
Niagara, NY	-	-	651.10
Onondaga, NY	-	-	18,169.30
Orange, NY	1,802.05	1,455.20	7,808.69
Ontario, NY	-	23.66	-
Otsego, NY	-	-	1.82
Plymouth, MA	-	-	6.75
Potter, PA	7,841.55	-	262.62
Putnam, NY	-	-	49.20
Queens, NY	1,009.58	4,164.49	440.96
Rensselaer, NY	-	-	386.25
Richmond, NY	-	125.01	-
Rockland, NY	60,210.98		-
Sarasota, NY	-	-	5.93
Saratoga, NY	-	-	17.62
Seneca, NY	-	-	6.47
Schenectady, NY	-	-	154.74
Schuyler, NY	-	-	29.19
Schoharie, NY	67.98		1,469.02
Suffolk, NY	-	-	48,329.65
Somers, NY	129.15	-	-
Steuben, NY	20,664.24	3,542.62	907.38
Sullivan, NY	291.06	1,028.48	961.33
Tioga, NY	3,581.90	-	43,131.45
Tolland CT	-	-	41.56
Tompkins, NY	6,094.33	-	22.09
Ulster, NY	-	2,689.94	101.98
Warren, NY	-	-	330.69
Westchester, NY	29,137.81	4,382.18	136.83
Windham VT	-	-	5.25

County/State	MSW (Tons)	C&D (Tons)	Industrial (Tons)
Wyoming, NY	-	22.75	-
Sum	240,725.89	103,202.99	148,841.49

Industrial waste includes waste reported as asbestos, BUD, contaminated soil, sludge and industrial waste on the NYSDEC annual reports.

3.3. Reduction, Reuse Recycle Programs

3.3.1. Residential Sector Recycling Facilities and Efforts

Table 3-3 provides a summary of the transfer stations that accept recyclables. Some materials accepted at transfer station locations are consolidated, baled, and shipped to their respective markets.

Casella, who provides hauling services in the County and operates the Hyland Landfill, and the LaForge Transfer Station offer “zero sort” recycling. This service offered to residents allows for the collection of single-stream recyclables. Residents, however, must contract with a hauler for curbside pick-up to use these services.

Allegany County provides a multi-stream recycling program for source-separated recyclables. Residents separate recyclable materials from solid waste into the marketable categories, which allows the County to sell each commodity stream. Residential drop-off at transfer stations is currently the only collection system for recyclables offered by Allegany County. Residents who elect not to hire a private hauler typically drop off recyclables at transfer stations across the County. The transfer stations do not charge for the acceptance of recyclables. Recycling flyers available to residents are provided in Appendix C for further information.

Other items collected for recycling include white goods/appliances, scrap metal, and electronics. Bulky items such as appliances are only accepted at the Belmont Transfer Station. Scrap metal collection is free and collected in a separate container from other recyclables at any of the transfer stations. Metal is traditionally one of the more highly valued recyclable materials. Electronics collection events are held on a monthly basis and rotate through the transfer stations for where the event is held.

The County is unable to track all the materials broken down by the NYSDEC composition spreadsheets; therefore, Chapter 5 includes solid waste management program strategies to address data collection, education, outreach and enforcement needs, etc., for each facility or program that manages residential recyclables generated in Allegany County. The evaluations are to assess the effectiveness and/or needs of these facilities and programs and Allegany County’s activities related to them, to determine what

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

3.3.2. Commercial Sector Recycling Facilities and Efforts

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

Since there is no reporting requirement for these commercial entities, the quantities and types of waste/recyclable materials disposed or recovered in Allegany County are difficult for the County track. Chapter 5 is intended to address the issue of the lack of data being reported by the various commercial entities. Additionally, Public Outreach and Education will include the commercial recycling sector. The evaluations are to assess the effectiveness and/or needs of these facilities and programs and Allegany County's activities related to them, to determine what improvements, partnerships, or other alternatives should be evaluated for implementation and what the resulting future recovery goals could be.

3.3.3. Agricultural Sector Recycling Efforts

The County previously participated in a Recycling Agricultural Plastics Program (RAPP) that allowed a small number of farmers to bale their agricultural plastics in lieu of other disposal options. Materials accepted in the program have included agricultural film, greenhouse poly, irrigation and sap collection tubing, and black plastic greenhouse pots and flats. This program is currently constrained by the availability of markets interested in the baled commodity. The NYSDEC cut funding for this program, therefore the program dissolved within Allegany County. The County will continue to work on establishing markets and looking for partnership opportunities with other planning units, so that the program may provide a regional benefit and commodity quantities that are desirable to the recycling markets.

Agricultural operations across New York State have incorporated the management of food waste and other organic components of MSW into their organics management technologies. The most common practice is anaerobic digestion. Due to the rural nature of Allegany County, there are many farms that may be utilizing this technology or have the ability to expand their collections. At the time of the completion of this report the Pollution Prevention Institute's (P2I) Organic Resource Locator was undergoing maintenance and offline; therefore, it could not be searched for organic collection facilities within Allegany County. Allegany County will continue to monitor P2I's site and identify possible agricultural operations that are managing organic components of MSW.

3.3.4. C&D Debris Sector Processing Facilities and Efforts

Collection of C&D debris for processing is not provided by the County and collection must be contracted for independently with private haulers or contractors. One privately owned C&D processor is located within the County and is associated with the privately owned C&D landfill.

In addition, the Western/Central New York Materials Exchange currently services residents and businesses within Allegany County. This organization markets free or low cost items, mainly building materials, that could be used by others but that would otherwise be discarded. The County will continue to support the WNY Materials Exchange program, and will continue to monitor potential partnership opportunities with other planning units.

3.3.5. Institutional Recycling Efforts

Large institutions, such as colleges, local school districts, prisons, nursing homes, hospitals, and senior living complexes, tend to produce large quantities of paper wastes and food wastes. Section 1.4 in Chapter 1 provided an overview of several of these institutions. These institutions manage their own waste and recyclables. Allegany County does not monitor or enforce recycling efforts at these facilities; however, most of these facilities would likely benefit from waste reduction and recovery efforts. There is no reporting requirement for these institutional entities, however, the quantities and types of waste disposed or recovered in Allegany County is likely included in waste quantities reported from disposal and recycling facilities, just not available per individual institution. Section 5.9 is intended to address the issue of the lack of data from these various entities. Additionally, Public Outreach and Education will include the institutional recycling sector and how best to increase recycling efforts. The evaluations are to assess the effectiveness and/or needs of these facilities and programs and Allegany County's activities related to them, to determine what improvements, partnerships, or other alternatives should be evaluated for implementation and what the resulting future recovery goals could be.

3.3.6. Public Sector Recycling Efforts

Municipal recycling efforts in the Planning Unit revolve almost entirely around the County's program as discussed in Section 3.1.2. Although the County provides numerous recycling programs to residents through its transfer stations, the County does not currently have a formal policy in-place for waste reduction or recycling at County facilities and events or on County projects.

3.3.7. Industrial Facility Recycling Efforts

There are a few industries located within Allegany County, such as Alstom Power, and Friendship Dairies. These facilities manage their own waste, which does not pass through the County system.

3.3.8. Public Space / Events Recycling Efforts

The County currently provides solid waste receptacles for several in-County events; recyclables collection is also provided by the County for the Allegany County Fair. Other public space and special event recycling efforts are currently handled individually by each event sponsor. The impacts of special events within the Planning Unit are provided in Table 1-8.

3.3.9. Processed Scrap Metal Recycling

According to research conducted by the US Environmental Protection Agency, recycling scrap metals can be quite beneficial to the environment. Using recycled scrap metal in place of virgin iron ore can yield¹⁹:

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

Any scrap metal generated that is not collected or processed by a County division is not monitored, however, it is likely that this material is being recycled due to the fact that the material has a monetary value.

3.3.10. Public Education Efforts to Promote Recycling

Allegany County recognizes the importance of educating the community on waste reduction, recycling and material recovery opportunities. To effectively manage these evolving programs, the County has implemented the follow education and outreach efforts:

- The ReSource, an annual publication with updated information on transfer station and recycling drop-off hours, disposal fees, materials accepted in the

¹⁹ <http://www.norstar.com.au/Recycling/Processing/Benefits.aspx>

County's recycling program, and special collection events such as for HHW and electronics.

- Radio ads
- Newspaper ads
- Social media presence
- Flyers and handouts available in public areas and at events
- Display booth at the Allegany County Fair
- Presence at local farmers markets
- Presentations for special interest groups including schools, after school programs, Boy Scouts, and Girl Scouts.

The County also provides for public education through regularly updating solid waste and recycling information on the Allegany County website.

3.3.11. Organic Wastes Diversion

Interest in organic waste diversion has increased over the last few years, particularly because it has the potential to divert a significant portion of the waste stream away from landfills. The composting process can be applied to yard waste, food waste, MSW, sewage sludge, non-hazardous industrial sludge, or some combination of these materials. According to the Cornell Waste Management Institute Compost Facilities Map, there are currently no organics composting facilities located within Allegany County. Due to the rural nature of the County, organic diversion is typically organized and performed by each household or a small community of people. To aid in organic waste diversion efforts, the County relies on educating and informing communities on how to properly compost organics.

3.3.12. Yard Trimmings

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

Currently, there are no County yard waste collection programs within Allegany County, but some villages provide curbside pickup for residents. At this time there is no known data quantifying the amount that is collected and composted.

3.3.13. Food Scraps/Food Processing Waste/Food Banks

The County has 15 towns participating in food pantries or mobile food pantries where the public can obtain quality food that would otherwise be landfilled²⁰. Several large dairy processing facilities exist within Allegany County and manage their own waste, which is typically land applied. No large food banks or other sources of food scraps have been identified in the County.

3.3.14. Electronics Recycling

Allegany County collects residential electronics at quarterly recycling events held throughout the year. The collection events are held at the Belmont Transfer Station and collect residents' TVs, monitors, computers and computer equipment, small electronics, VCRs/DVRs/DVD players, game consoles, and small-scale servers. Monthly television collection days are also held at rotating locations through the remaining County-owned transfer stations. These events are held the first Saturday of every month.

3.3.15. Sharps Collection

The County collects sharps in approved containers for disposal at any County-owned transfer station during normal business hours. Approved sharps disposal containers are available to County residents free of charge. As discussed in Section 1.6, the County now bears the entire cost of this program due to the closure of K-Mart.

3.3.16. Tire Handling

Tires are accepted at the Belmont Transfer Station for a fee based on the tire size and as detailed in Table 3-2. All tires must be removed from the rims. Residents with solid waste tags are limited to disposal of up to four passenger-sized tires included in the annual fee.

3.4. Biosolids/Sewage Sludge Handling

According to surveys of local WWTFs, biosolids/sewage sludge generated in Allegany County were managed as identified Table 2-1 in Chapter 2.

3.5. Management of Household Hazardous Waste

The County's HHW program includes both educational and collection components. Allegany County has voluntarily offered a public HHW collection event for County residents since 1999. Currently, the County manages an annual event that is partially funded through a NYSDEC grant. In recent years this event has been very successful. Table 1-8 in Section 1.4.5 summarizes the

²⁰ <http://accordcorp.org/menus/food-pantry.html>

quantities of HHW that was collected in June 2018 during the Household Hazardous Waste Collection Day.

3.6. Efforts to Enforce Local Disposal and Recycling Laws

The County's preferred method of encouraging residents and local businesses to adhere to local disposal and recycling laws is through education and outreach rather than enforcement. Since enforcement is difficult with the County's current resources, the County will continue to rely on education efforts directed towards recycling and proper disposal rather than implementing a punitive approach.

3.7. Volume-based Pricing Incentives

The residential transfer stations located throughout the County use a hybrid system for solid waste disposal fees; the County offers both a volume-based pricing mechanism and an annual fee hanging tag. Residents using the pay per bag system are charged a flat fee per size of bag. The trash bag sizes range from 1-13 gallon, 13-33 gallon, and 55 gallon or barrel. As an alternative, residents have the opportunity to purchase an annual fee hanging tag allowing disposal of up to 3 cubic yards per day at any county owned facility. Most recyclables are accepted at these facilities free of charge.

3.8. Recycling Market Agreements

All recyclables collected at the transfer stations are marketed by the County. Therefore, the county annually searches for improved recycling market agreements and will continue to monitor the general markets for recyclables.

3.9. Local Hauler Licensing

Currently, Allegany County requires all haulers, businesses, landlords, and property management companies to obtain a hauler's permit in order to collect MSW or recyclables within the county. Although Allegany County does not currently enforce this requirement, the program gives the County a potential future mechanism for tracking waste and recyclables brought to County owned facilities, impose penalties on haulers who do not follow facility guidelines, and track payments.

3.10. Recycling Data Collection Efforts

As demonstrated in the previous sections of this plan, Allegany County's residents and commercial, industrial and institutional waste generators have outlets to divert their waste from disposal to reduction, reuse and recycling. However, unlike solid waste data that is reported to the NYSDEC annually, a complete set of waste diversion data is not readily available since much of it is not required to be reported by private entities to any agency (except for those facilities that must submit recycling reports to NYSDEC). At this time, the majority of the residential and

light commercial recyclables data has been reported by the recycling centers and is summarized in Table 2-2 in Chapter 2. Private businesses within the County are not currently required to report the destinations of their recyclables. As referenced in Table 2-2 in Section 2, based on 27,721 tons of waste (including recyclable materials) generated within Allegany County in 2018, 25,790 tons were disposed in landfills and 1,932 tons of materials were diverted either by composting or recycling. Consequently, Allegany County's current overall waste diversion rate is estimated at 7.0%. When examining just the MSW component of the overall waste stream, the County's MSW diversion rate is estimated at 6.1% -- this excludes contaminated soil, sewage sludge, construction and demolition debris, processed scrap metal, and industrial waste. Since there is no reporting requirement for these entities; quantities and types of waste disposed or recovered in Allegany County has not been made readily available to the County.

4.0 EXISTING ADMINISTRATIVE AND FINANCIAL STRUCTURE

4.1. Staff in Charge of Implementing New System

Following the closure of the County-owned landfill, the Allegany County Department of Public works is responsible for the post-closure maintenance and monitoring of the landfill; the County also maintains control of its in-county residential drop-off facilities and is responsible for the implementation of the program strategies described in Chapter 5. Although the County may not have direct financial or administrative responsibility for each item, they will bear the responsibility of working with municipalities, institutions, and private sector waste managers to address the implementation of the program strategies. On a biennial basis, the County will assess the status of the implementation of these strategies and update them as necessary to continue to fulfill the County's needs.

4.2. Financial Structure

Since the closing of the Allegany County Landfill, the county relies on revenues produced from bag fees, the sale of solid waste permits, and recyclables marketing from the county-owned residential drop-off facilities. This revenue does not cover the cost of operations, and the remainder of costs is covered by the County's general fund including insurance and maintenance costs. Should a capital investment be needed as a result of the LSWMP process, it would be assessed during the County's budget review process. The system is also partially funded by grant funding from the DEC, including the HHW collection program. Previously, the electronics collection program was partially funded by state grant funding. The Recycling Coordinator's salary was also previously 50% reimbursed by state grant funding, however, this funding was not available to the County in 2019. The ongoing discontinuation of grant funding from the state has limited the programs the County can make available for residents. Given the County's financial responsibilities, implementing additional program strategies to promote waste diversion and recovery as described in Chapter 5 will be difficult.

As stated above, the Allegany County Landfill has been closed; however, the County has a Closure and Post Closure Care Cost Estimate is develops annually. The most recent estimate is provided in Appendix G.

4.3. Laws, Regulations or Ordinances

4.3.1. Local Law

In 1991, Allegany County passed Local Law #3 (Solid Waste Management and Resource Recovery) which required the segregation of recyclables, for which economic markets exist, from the waste stream. The law was amended in 1992 and again in 2000 with further clarification of definitions and more stringent penalties. In 2004, the County enacted Local Law #4 (attached in Appendix B), which established a new Allegany

County Solid Waste and Recycling Law and repealed these prior laws. The law was amended in 2016, but the main tenets are still in effect. In general, Local Law #4:

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

No new local laws, ordinances, regulations or amendments are expected to be needed to fully implement the LSWMP.

4.3.2. Waste Importation and Flow Control

Allegany County does not currently have any laws limiting the export of solid waste to or from Allegany County. Importation of waste to County-owned facilities is prohibited without authorization from the Board of Legislators. The local law also dictates the flow control of recyclables in the County. Since the County markets and sells their own recyclables, in 2004 the County implemented flow control of waste and recyclables within the County to optimize their profits. In 2016, in anticipation of the landfill closure, the flow control portion of the local law was revised to apply only to recyclables generated within the County, so that private haulers can export waste to nearby permitted solid waste facilities but recyclables remain within the County system.

4.4. Solid Waste Management Policies

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

5.0 ALTERNATIVE TECHNOLOGY EVALUATION

The County evaluated various programs and technologies that could possibly enhance existing solid waste management program elements or add new program elements to the planning unit as alternative programs. While evaluation of the existing solid waste management system may be necessary during the planning period, no significant technology changes from existing solid waste management approaches are anticipated during the planning period. The County anticipates continuing the current integrated approach to solid waste services – providing diversion, recycling, and disposal opportunities for County residents. The alternatives listed within this section will be subject to a public comment period.

5.1. Waste Reduction Programs

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

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

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

- An electronic documents policy to allow for the use of electronic documents where paper copies are currently required.
- A double-sided printing policy to save paper where paper copies are required.
- Standard document formatting policies that reduce margin width and unused space.
- The use of high efficiency hand dryers in all bathrooms at County facilities to eliminate paper towel waste.
- Changes in purchasing policy to supply compostable flatware where plastic flatware was purchased by the County in the past.
- Installation of water bottle refill stations in office buildings and other County facilities, to encourage the use of reusable water bottles.

- Increasing the availability of recycling receptacles in County buildings and at County events.

Additional outreach and education programs would encourage waste reduction within the County. A low-cost education program could include additional literature on the County website which provides waste reduction guidance for residents, covering topics such as food waste reduction.

The Administrative/Technical Impacts, Jurisdictional Impacts, and Selected Alternatives Identification can be found in more detail in Appendix D.

5.2. Reuse Programs

Reuse programs focus on everyday materials that have the potential to be reused for their original purpose or for a new purpose. Reuse programs allow products to be used to their full potential and also keeps these materials out of disposal facilities. Additionally, reusing products conserves natural resources and saves valuable landfill space. Antique shops, thrift stores and consignment shops all provide opportunities for reuse. The County will incorporate the promotion of existing reuse programs in their education and outreach programs. For example, the County plans to promote the Western/Central New York Material Exchange program, managed by GLOW Region Solid Waste Management Committee, on the County website.

The Administrative/Technical Impacts, Jurisdictional Impacts, and Selected Alternatives Identification can be found in more detail in Appendix D.

5.3. Recyclables Recovery Program

The main objective of a Recyclables and Recovery Program is finding solutions for beneficial reuse or recycling waste into new raw materials protects and preserves our environment by limiting our dependence on landfills, conserving natural resources and decreasing our community's environmental footprint. According to 2015 data from the EPA, the average person generates 4.5 pounds of trash every day. Of the waste generated, over 75% of waste is recyclable, but only 34% of it is recycled.²¹

5.3.1. Expansion of Accepted Materials

Sustainable diversion includes locating markets that, at the minimum, are long-term, consistent, safe (to human health and the environment) and economical. The County has always aggressively expanded its recycling/recovery program as emerging markets allow for sustainable diversion.

²¹ <https://www.epa.gov/facts-and-figures-about-materials-waste-and-recycling/national-overview-facts-and-figures-materials>

The County will continue to examine the County's waste stream annually to determine new items eligible for sustainable diversion through the County's recycling program. Examples include new materials, such as textiles, or expansions of existing accepted materials, such as e-waste.

The Administrative/Technical Impacts, Jurisdictional Impacts, and Selected Alternatives Identification can be found in more detail in Appendix D.

5.3.2. Agricultural Plastics Recycling

About 25% of the total land area in Allegany County is active farmland. Land in farms has stayed relatively constant over the last twenty years, increasing slightly over the last five years²². The agricultural plastics that farmers use, such as plastic baling twine, greenhouse plastics, hay bale wraps, mulch film, and pesticide containers are not currently included in the list of acceptable recyclables items in Allegany County. As such, many of these materials end up in landfills or buried at their point of origin. One challenge to recycling these products is that many of them are bulky and difficult to transport, as well as the concern that many of them may be contaminated with pesticides, mold, and soil. Recently a handful of agricultural plastics recyclers have begun to emerge across the country, along with new concepts in the handling of these materials to enhance the ability to recycle them.

The County previously participated in the Recycling Agricultural Plastics Program (RAPP) in conjunction with Cornell Cooperative Extension in the past to implement an agricultural waste recycling program. This program was ultimately discontinued due to a lack of funding. The County and its partners will continue to look into reinstituting an agricultural plastics recycling program. The feasibility of larger scale use will be investigated and outside Planning Unit partners will be sought out to participate, or the County will seek out existing programs sponsored by adjacent planning units to participate in. Chapter 6 – Implementation Schedule provides the milestones through the planning period that are anticipated to be completed to expand this program throughout the County.

The Administrative/Technical Impacts, Jurisdictional Impacts, and Selected Alternatives Identification can be found in more detail in Appendix D.

5.3.3. Recycling at County Facilities and Events

Allegany County is interested in taking the initiative to promote recycling at county-owned facilities and in-county events. The County already provides waste collection

²² <https://agcensus.usda.gov/Publications/>

services at many in-county events and recycling services at one in-county event. Allegany County will act as a model to other municipalities within Allegany County to increase recycling at County facilities and by offering recycling services at additional in-county events where feasible. Allegany County realizes that in order to increase recycling county-wide, their staff must be engaged to achieve this goal. Allegany County staff will explore a plan or policy to increase recycling at county owned and/or operated facilities. Later in the planning period, the County will look into the feasibility of expanding this goal to public events, schools, institutions, etc. Given the lack of participation and information specified previously in Section 3, this task will be dependent upon the completion of data gathering program strategies. The implementation schedule in Section 6 provides an outline of the resources and subtasks necessary to increase recycling at county owned facilities.

The Administrative/Technical Impacts, Jurisdictional Impacts, and Selected Alternatives Identification can be found in more detail in Appendix D.

5.3.4. Product Stewardship

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

The Administrative/Technical Impacts, Jurisdictional Impacts, and Selected Alternatives Identification can be found in more detail in Appendix D.

5.4. Organic Recovery Program

Each American disposes of about 460 pounds of organic waste annually; 100% of that waste can be composted²³. Composting of organic materials from the solid waste stream not only provides a valuable benefit to nutrient deficient soils, but also reduces the amount of waste that ends up in landfills or incinerators. Other benefits of composting organic matter include the increase in beneficial soil organisms such as worms and centipedes, suppression of certain plant diseases,

²³ <https://www.epa.gov/facts-and-figures-about-materials-waste-and-recycling/national-overview-facts-and-figures-materials>

the reduced need for fertilizers and pesticides, prevention of soil erosion and nutrient run-off, and assistance in land reclamation projects.

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

According to NYSDEC records as of July 2019, there are 63 facilities permitted for composting in New York State. Of these, 30 compost biosolids/sewage sludge, 28 compost yard wastes, and 5 compost source-separated organics. An additional 126 active registered sites are operating within New York State to compost these materials. No permitted or registered composting facilities are located within Allegany County.

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

The NYS Food Donation and Food Scraps Recycling Law, effective Jan 1, 2022, will require organic waste generators, who generate at least 2 tons/week and are within 25 miles of an organics recycling facility, to divert their organic waste. According to NYSP21's Organic Resource Locator, there are approximately 20 organic waste generators in Allegany County, which generate at least 2 tons/week. The majority of these generators are either CAFOs or food retailers. However, according to NYSP21's Organic Resource Locator, there are no organics recyclers within Allegany County. While there are some biosolids compost sites in the surrounding counties, there are no applicable organics recyclers within 25 miles of the Allegany County generators. Therefore, under the current circumstances, Allegany County organic waste generators will be unaffected by the NYS Food Donation and Food Scraps Recycling Law. This may change as this Law is implemented and the County will continue to stay apprised of the developments of this Law and any proposed projects associated with it.

5.4.1. Food Waste Management

While composting of all organic waste can be an effective method of low technology recycling that can significantly reduce the stream of waste destined for a disposal facility, collection of these materials on a household basis can prove both difficult and expensive. Another method for removal of these wastes from the disposal waste stream is to implement a backyard composting program, through which residents are provided information regarding the methods of backyard composting. It is anticipated that many residents are already participating in a backyard composting program of their own; however, this task would allow for the program to become more formalized and

allow residents to share information amongst themselves. The County plans to explore potential partnerships with local organizations such as Cornell Cooperative Extension, which provides some backyard composting informational programs, to provide or subsidize compost bins for residents with additional education efforts to increase backyard composting in the County.

Based on the estimates calculated for this plan, there is a potential to divert nearly three thousand tons of organics from the MSW waste stream on an annual basis by increasing backyard composting efforts. With the implementation of this task during the planning period, it is anticipated that the diversion rates will increase. Additionally, with the gathering of data proposed as part of this Plan, the diversion percentages are expected to increase based on better reporting. The implementation schedule in Chapter 6 provides an outline of this implementation task.

The Administrative/Technical Impacts, Jurisdictional Impacts, and Selected Alternatives Identification can be found in more detail in Appendix D.

5.4.2. Yard Waste Management

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

The Planning Unit's service area is primarily rural, with some more populous areas in the villages. Like other rural areas around the state and the country, residents tend to manage yard trimmings on their own property, which will be further discussed in Section 5. Through educational outreach, Allegany County encourages, as the first step in the hierarchy of yard waste management, that residents and businesses implement grass-cycling (leaving their grass clippings on the lawn), and/or backyard composting for yard waste management.

Allegany County will support existing educational partners, such as Soil and Water Conservation and Cornell Cooperative Extension, as well as potential new partners, to bolster yard waste composting education in the County. The implementation schedule in Chapter 6 provides a year by year breakdown of the different steps necessary to undertake this task.

The Administrative/Technical Impacts, Jurisdictional Impacts, and Selected Alternatives Identification can be found in more detail in Appendix D.

5.5. Develop or Improve Local and Regional Markets for Recyclables Program

The County actively evaluates the demand for markets and pursues opportunities as appropriate economically. On an annual basis, the County assesses recycling markets and vendors to ensure that outlets exist for materials accepted through the County's recycling program and to assess additional materials for acceptance. Such items could include textiles, bulky rigid plastics, or other items not currently accepted through the County's recycling program. If these market opportunities become available, acceptance of these materials will be incorporated into the recycling program as discussed above. However, the County has limited influence over regional markets to improve recycling. As such, no further tasks related to market improvement are possible at this time.

5.6. Enforcement Programs

The County has identified areas in which the existing Solid Waste and Recycling Law could be improved to adequately ensure that waste is disposed of or recycled in accordance with state and local regulations. However, in the County's extensive solid waste management history and expertise, training and education of residents is far more effective than enforcement actions. Due to the County's limited resources to provide enforcement at every County facility, the County has opted to enhance existing training and education programs to improve recycling and promote proper waste disposal during this planning period. For more information, see Section 5.7 – Education and Outreach Programs.

5.7. Incentive Programs

Incentive programs within a solid waste management system are programs used to promote or encourage specific actions by the community to increase the success of programs the landfill is trying to integrate. The County currently operates a hybrid structure where residents can choose to pay by volume of waste disposed of or pay a fixed annual fee for disposal of up to 3 cubic yards per day with a solid waste permit. Currently, the pay by volume option is used by few residents and the solid waste permit program is used by many, with some known issues including residents sharing tags, haulers bringing large trailers with excessive amount of waste, and no way to enforce or verify the residency requirement. There is no correlation between the fee paid and the amount of waste delivered, which does not incentivize waste reduction. As such, the County is particularly interested in exploring the conversion to an incentive program for solid waste management.

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

their trash. All of these variations on the PAYT programs allow residents to pay less for waste disposal if they recycle more and throw away less waste.

Another type of PAYT program allows customers to select the appropriate number or size of containers for their standard weekly disposal amount. The bag program allows customers to purchase bags, or some other indicator such as a sticker or tag, and dispose of waste in these specially marked bags. The price of each bag or sticker incorporates the cost disposal of the waste; the cost of collection and transportation would be the responsibility of the generator, whether the bags are picked up by a private hauler or self-hauled to a County transfer station. The more bags customers use the more they are paying for waste collection and vice versa.

Hybrid PAYT programs vary greatly from community to community. An example of a hybrid program would be offering residents a limited collection (e.g., a limit of five bags per week) with any additional bags being bought at a per bag fee from the municipality, hauler, etc. In this type of program, the initial cost of service is often billed to the residents in the form of taxes or quarterly bills through the municipality or hauler. Weight based programs are another option and use a modified scale located on the waste collection trucks and charge customers based on the actual pounds of garbage set out for disposal. On board computers record weights by household and customers are billed on this basis. Based on the County's existing infrastructure, a weight based program would not be easily implemented.

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

Advantages:

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

Disadvantages:

- PAYT programs may raise concerns regarding illegal dumping or contamination of recycling streams.
- PAYT programs can be a concern for large poor families who cannot afford to pay for the amount of waste they dispose.
- PAYT programs can be hard to implement at first if communities are unwilling to embrace the change that the program requires.
- Implementing PAYT programs (e.g., purchasing of stickers, cans, bags, etc., retrofitting waste trucks, employee reassignment, etc.) can prove challenging.
- Budgeting expected revenues can be difficult during the initial years of implementing a PAYT program (e.g. estimated bag or sticker purchases).

As discussed previously, Allegany County has a mechanism for PAYT disposal for residents at the transfer stations and will continue to offer this option, although it is currently used much less than the annual solid waste permit option. Allegany County is very interested in exploring the possibility of transitioning completely to a PAYT program and will monitor the availability and public need for how best to implement this program. Since Allegany County is not responsible for curbside collection of residential waste, the PAYT program would need to target both residents that self-haul and the local private haulers through the hauler licensing program (see Section 5.10). Chapter 6 – Implementation Schedule provides the milestones through the planning period that are anticipated to evaluate this task.

The Administrative/Technical Impacts, Jurisdictional Impacts, and Selected Alternatives Identification can be found in more detail in Appendix D.

5.8. Education and Outreach

Public outreach and education regarding waste diversion programs and responsible disposal of special wastes has been identified as a key component of solid waste management programs in New York State. Raising the awareness of reduce, reuse and recycle has been a goal of the NYSDEC since the first Earth Day in 1970. To reach audiences, numerous programs and events have been organized. The NYSDEC's Recycling Outreach and Education program is available to other communities to help them spread the word. Without education none of the recovery programs or technologies will be successful.

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

- Appropriate Use of the County's Permit Tag System
- Reuse Programs
- Recycling at County Facilities and Events
- Backyard Composting
- Yard Waste Composting
- Food Scrap Composting at Institutions and/or Large Commercial Generators (also the Food Donation and Food Scraps Recycling Law, which goes into effect January 1, 2022)
- HHW Collection Events
- C&D Debris Diversion Opportunities
- Mercury Containing Materials Disposal Options
- E-waste Management Options
- Pharmaceuticals Management (NYS Drug Take-Back Law)
- Paint Stewardship
- Foam packaging ban

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

During this planning period, the County will evaluate its current and potential education methods for promoting the Allegany County Solid Waste and Recycling Law. The expansion of education and outreach will be focused on school events initially to target school-age children. In June of 2019, a new sustainability unit was created as required curricula in middle schools throughout New York State; the County plans to look into collaborating with schools to expand their education and outreach efforts to this new curricula program. The County will evaluate the feasibility of adding recycling education at public events, specifically in the areas where they can team with local companies and not for profit agencies to encourage the recycling of specific waste streams. To the extent that sufficient funds and resources are available, much of the education will be focused in local public schools as well as colleges and universities and public events, which were all previously listed in Chapter 1 – Tables 1-5 and 1-8. This will provide the most exposure to the maximum quantity of people for each effort. Later in the planning period, other groups such as, libraries (Table 1-6) and jails, institutions, nursing homes (Table 1-7) could be added to the outreach program.

Providing information to these generators regarding options for implementing recycling programs, as well as providing resources for in-house training programs, may also offer a

valuable method for increasing diversion rates in these types of facilities. The Implementation Schedule in Section 6.0 provides the milestones through the planning period that are anticipated to evaluate this task.

The Administrative/Technical Impacts, Jurisdictional Impacts, and Selected Alternatives Identification can be found in more detail in Appendix D.

5.9. Data Collection and Evaluation Efforts

The County has a recycling program, with many materials being mandatory to recycle. While the County offers recycling options, the Facility Annual Reports produced by the County consistently report recycling percentages below what would be expected. It is the County's belief that this is due to the fact that reported recycling numbers are based solely on the materials that are handled through the County's solid waste management system. Large recyclables producers such as vehicle dismantling facilities, and even private recyclables collection companies, may ship recyclable products directly to the end user for a profit, bypassing the intermediate recycling facilities. As a result, these materials are not being accounted for in the County's recycling reports.

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

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

- capacity/expected life,

- service areas, and
- operating status.

For Planning Unit owned facilities/programs information would include:

- infrastructure/components,
- age,
- operating dates,
- size,
- regulatory status,
- partnerships/ opportunities,
- contracts,
- improvements or changes, and
- resources/needs/costs.

Undertaking this data collection program would require significant County resources, including staff time that is already limited. In addition to pursuing grant opportunities, the County will examine potential partnerships with interested citizen groups and/or local universities to assist with data collection and analysis.

The Administrative/Technical Impacts, Jurisdictional Impacts, and Selected Alternatives Identification can be found in more detail in Appendix D

5.10. Enforcement of the Local Hauler Licensing Program

Currently, Allegany County requires all haulers, businesses, landlords, and property management companies to obtain a hauler's permit in order to collect MSW or recyclables within the county. Although Allegany County does not currently enforce this requirement, the program gives the County a potential future mechanism for tracking waste and recyclables brought to County owned facilities, impose penalties on haulers who do not follow facility guidelines, and track payments. This program does not, however, apply to haulers that operate in the County but haul waste to out-of-county facilities.

Although Allegany County currently has a local hauler licensing program, there is not a reporting component associated with this permitting process. To provide stricter oversight of the haulers responsible for collection of solid waste and recyclables, the County could opt to require any hauling companies that collect, transport or dispose of discarded materials (garbage, recyclables or compostables) to be licensed by the municipality in which they are performing these services, regardless of disposal destination. Hauler licensing allows municipalities to gain access to data

on amounts of material collected and managed, as well as a potential revenue source for the County.

The Administrative/Technical Impacts, Jurisdictional Impacts, and Selected Alternatives Identification can be found in more detail in Appendix D.

5.11. Flow Control and Districting Potential

Flow control legislation allows local governments to direct solid waste and/or recyclables to designated facilities to ensure a continuous source of revenue and eliminates the possibility that any portion of the municipality's waste stream could be diverted.

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

Allegany County enacted flow control for both waste and source-separated recyclables in 2004 to optimize revenues at the county-owned landfill. However, since the landfill has closed, the County removed waste from their Local Solid Waste and Recycling Law flow control requirements in 2016. Flow control is still enacted for source-separated recyclables, which are managed through the County's facilities, but is not enforced. Since this policy is already implemented in the County and provides a source of revenue through the sale of a marketable product, no further consideration is given to this implementation item.

5.12. C&D Debris Reduction

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

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

- Potential revenue to developers and contractors from the sale of recoverable and recyclables
- Potential revenue to processors from the sale of processed C&D
- Decrease in the amount of waste for disposal

Upstream diversion of C&D is the act of separating recoverable materials for recycling or reuse at a construction, demolition or remodeling job site. These materials are then processed and transported to an end market which keeps them from being disposed of in landfills. Separating C&D provides an opportunity for the contractor to save money on disposal costs and sometimes the materials can be reused by the contractor on future or current projects. Some of the common materials that are recycled or reused from new construction projects are wood, metal, drywall and cardboard. Contractors are faced with decisions when determining if it is economically efficient to recycle C&D debris. Separating the debris will require additional staging areas for separate containers and additional labor, increasing costs, and in turn extending the duration of construction. Lastly, the contractor's ultimate decision is to decide if the material has any economic value. Some cities and counties have passed ordinances mandating source separation of recoverable C&D materials at the job site to ensure that there is a decrease in the amount of waste disposed of in landfills. The County could potentially enact such an ordinance or law, or add provisions to demolition projects on a case-by-case basis.

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

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

According to the NYSDEC's database of active registered or permitted facilities, there are two registered C&D processing facilities located in Allegany County:

- A.L. Blades-Cuba HMA Plant Facility

- K.S. LaForge Excavating (Junebug)

An additional out-of-county C&D processor accepts C&D generated from Allegany County (L&R Disposal in Cattaraugus County).

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

When considering the downstream diversion program, the County must evaluate the overall economic impact of incorporating this program into their municipal bids. There would be capital and operational expenses associated with this additional practice on County projects. In addition, viable recycling outlets for the minor components of the C&D waste stream may not be available, therefore making the implementation of this program not practical. As such, the County will monitor potential partnering opportunities with existing C&D processing facilities to facilitate C&D reduction and/or diversion programs. The County will contemplate incorporating C&D debris recovery requirements into municipal bids if and when such a policy becomes feasible.

The Administrative/Technical Impacts, Jurisdictional Impacts, and Selected Alternatives Identification can be found in more detail in Appendix D.

5.13. Private Sector Management and Coordination Opportunities

In addition to some of the collaborations mentioned previously, other opportunities for teaming up with private sector entities will be monitored by Allegany County to provide additional services that may not be possible otherwise. Due to required participation by third parties, these opportunities may be difficult for the County to come by, however, the County will continue to pursue and assess potential collaborations throughout the planning. These collaborations could include:

- Partnering with Jones Memorial Hospital in Allegany County, now affiliated with Strong Memorial Hospital in Rochester, to enhance the facility's corporate sustainability policy, if any, and explore opportunities for sharps disposal;
- Reaching out to Casella Waste Management, operators of the Hyland Landfill in Allegany County, to invest in collection programs that keep prohibited materials out of the

Hyland Landfill and aid the facility with its regulatory compliance but have been historically funded by the County (examples include electronic waste);

- Exploring partnerships with local agencies that have similar objectives such as Cornell Cooperative Extension, Allegany County Soil and Water Conservation District, and/or public interest groups; and
- Any other potential waste reduction, diversion, or funding opportunities that arise in the County through private industry or other organizations.

The results of data gathered as part of Implementation Item No. 11 could aid the County in identifying potential partners and/or opportunities for additional programs.

The Administrative/Technical Impacts, Jurisdictional Impacts, and Selected Alternatives Identification can be found in more detail in Appendix D.

5.14. Management of Waste through Thermal Treatment Technologies

Thermal Treatment Technologies involve high temperatures in the processing of the waste feedstock. Frequently, this involves the combustion of waste materials. The following sections discuss the different types of thermal treatment technologies available.

5.14.1. Waste-to-Energy (Combustion/Incineration)

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

Although the total volume of MSW requiring disposal is reduced, a secondary disposal method such as landfilling would be required for the ash. If Allegany County initiated the permitting, construction and operation of their own WTE facility within the County, high construction and operations and maintenance costs as well as uncertainty in energy sales revenues, would result in higher disposal costs per ton than landfilling in Allegany County. For example, a 600 ton per day WTE facility capital cost could be in the range of \$160 million with an average per ton cost of \$92/ton. In 2016, the County closed its landfill site, which was permitted to accept 262 tons per day. With the economy of scale for processing a reduced tonnage rate, construction and operation of a WTE facility would not be economically feasible for the County.

There are currently ten active WTE facilities in the State; however, none have been permitted or constructed in the State in the past 20 years. It should be noted that Cattaraugus County previously operated a permitted WTE facility in the Town of Cuba

that was closed in 1992 and was ultimately decommissioned but to which Allegany County previously sent waste. The Allegany County Landfill was originally constructed to accept bulky waste and incinerator ash but was later converted to the County's primary solid waste management facility. Following closure of this WTE facility, the region overall has had little appetite for thermal treatment of waste. As such, a WTE facility is not a viable option for solid waste management in Allegany County.

5.14.2. Pyrolysis/Gasification

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

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

Pyrolysis and gasification of MSW have too short a history in the United States for complete analysis of economic feasibility. There are currently about one hundred mixed MSW gasification plants in the world, primarily in Japan, that have a successful history of continuous operation. The capital cost of developing this technology for Allegany County is estimated to be at least 10% higher than conventional WTE plants. This conceptual estimate is based on a short history of pyrolysis/gasification development for MSW applications in the United States, a lack of established pyrolysis or gasification plants and the greater complexity of the technology. According to a recent EPA study²⁴ of pyrolysis and gasification technologies, the cost to process mixed MSW is

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

approximately \$90 per ton which is significantly higher than landfill disposal costs in New York State. There are no current full scale operational systems in New York State for MSW treatment. One plant for the pyrolysis of plastics, which has since closed, was previously located in Niagara Falls, NY and one gasification plant has been commissioned in Montgomery, NY using only portions of the MSW waste stream.

5.14.3. Plasma Arc Gasification

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

There are currently 5 plasma arc gasification facilities in operation worldwide, which combine for a total design capacity of approximately 200 metric tons of waste per day. Many more facilities were planned or commissioned in the U.S., Canada, and the UK but ultimately failed due to funding issues.

The technologies outlined above do not present economically feasible options for Allegany County at this time. Combustion/incineration is cost-prohibitive and pyrolysis/gasification and plasma arc gasification have not yet been proven for mixed MSW waste streams on a commercial scale in New York State. As such, these alternative technologies will not be contemplated further at this time.

5.15. Waste Disposal Options

5.15.1. Landfilling

Allegany County operated its landfill from 1987 to 2017. The landfill is comprised of 24-acres of lined landfill area located on a 292-acres site. The landfill was permitted to receive 262 tons per day of waste, which included all municipal solid waste generated within Allegany County. The landfill ceased accepting waste in 2017 and was closed in 2018. The site also includes a residential drop-off area for waste and recyclables that remains operational.

Since closure of the landfill, the County-owned transfer stations transport waste to the Steuben County Landfill or Hyland Landfill for disposal. Due to the remote nature of the region, few other economical disposal options are available to the County. While the prominent foci of this Plan is overall waste reduction and local recycling/reuse and composting programs, the region will still require a local, dependable facility for the disposal of all non-recyclable and non-hazardous waste. The County will continue to study and assess improvements to existing disposal methods and new disposal methods

through emerging technologies over the course of the planning period as an alternative to waste exportation or reliance on a privately-owned disposal facility.

5.15.2. Mixed Municipal Solid Waste Composting

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

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

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

5.15.3. Mechanical/Biological Treatment

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

2011 survey, there are currently over 330 active MBT systems in operation across Europe²⁵, with a majority of these facilities operating as pilot scale projects (exact numbers are not available).

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

5.15.4. Anaerobic Digestion

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

Specific to the United States, few mixed MSW anaerobic digestion facilities exist, as the technology has not proven economically feasible. An EPA study²⁶ estimates that waste processing costs using anaerobic digestion are close to \$115 per ton of MSW, which is even higher than pyrolysis/gasification. At this time, only two commercially operational MSW anaerobic digestion facilities exist, both in Ohio. Several more facilities exist but accept only a portion of the MSW waste stream, such as source separated organics, food manufacturing industry waste, or a mixed agricultural/food waste. Many are still in a demonstration phase and are not fully operational. In New York State, there are many anaerobic digesters in operation in the wastewater and agricultural markets, with some anaerobic facilities being converted into mixed organic waste facilities. Two

²⁵ <https://www.solidwastemag.com/feature/mechanical-biological-treatment-in-the-eu/>

²⁶ State of Practice for Emerging Waste Conversion Technologies, USEPA Office of Research and Development, October 2012

anaerobic digesters have been permitted in Region 9 by Quasar Energy Group. These systems will manage regional biomass residuals (organic waste) to produce electricity that would be sold to NYSEG. Under the regional biomass residual model, there is still the need to manage other portions of the waste stream that cannot be recycled. In addition, digestate and liquids from the anaerobic digester process must also be managed, which may be recycled, landfilled or processed at a wastewater treatment plant depending on their constituents.

5.15.5. Ethanol Production

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

5.15.6. Alternative Chosen

Based on the technologies discussed above, the continued landfilling of waste appears to be the only viable disposal option for any wastes that cannot be reduced, reused, or diverted. The in-county disposal facilities should be operated as integrated material management facilities, providing means for the reduction of prohibited items from within the waste stream disposed of within the facility to ensure ongoing protection of the environment. Should any of the other technologies discussed above be pursued in the future, further analysis and a separate environmental review process would be required to analyze the benefits and impacts of these technologies. In addition, should any of the other technologies discussed above be implemented, it is imperative that long term waste commitments be in place to undertake a full scale program within Allegany County. Allegany County does not propose evaluating the feasibility of these other alternative waste disposal options any further during the 10 year planning period; however, Allegany County does acknowledge that they are available and will keep

abreast of their further development. If advances in the above technologies occur, the County will reassess these opportunities during the next planning period.

The Administrative/Technical Impacts, Jurisdictional Impacts, and Selected Alternatives Identification can be found in more detail in Appendix D.

6.0 IMPLEMENTATION SCHEDULE

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

7.0 WASTE STREAM PROJECTIONS

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

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

7.1. Anticipated Changes to the Local Planning Unit

Allegany County has experienced a relatively consistent population decline over the past four decades. U.S. Census data reveals that Allegany County's population steadily decreased from a peak of 51,742 in 1980 to 48,917 in 2010. In 2018, the population was estimated to be 46,430 persons. The largest estimated municipal population change between 2000 and 2010 occurred in the Town of Birdsall, which experienced an estimated population loss of 17.5% during that period, due to its low initial population. The Town of Willing also experienced a large population loss at an estimated 10.4% loss. By contrast, the Towns of Independence and Centerville experienced estimated population gains of 8.7% and 7.9%, respectively, between 2000 and 2010. However, overall the County has been experiencing a consistent decline in population totaling a loss of 2.0% between 2000 and 2010.

Baseline population projections reflecting these historical trends have been developed and analyzed by Cornell University's Program of Applied Demographics, an affiliate of the U.S. Census Research Data Center network. Allegany County's population projections indicate a continued decrease in the County's total population from its present level to 44,580 in 2030, and 43,700 in 2040²⁷. The baseline population projections noted are not forecasts of future population size; they simply project population levels that would be expected if current life expectancy, birth, and net migration rates continue unchanged in future years.

7.2. Anticipated Changes to the Waste Stream

Over the course of the previous planning period, changes to the waste stream have occurred nationally, which includes local trends in Allegany County as well. Consumers have moved towards a throw-away society where one-time use products are preferred for convenience sake as opposed to environmental concerns. Consumer products are quickly replaced with newer models or better versions. Household items, such as thermostats, electronics, batteries, contain

²⁷ <https://pad.human.cornell.edu/profiles/Allegany.pdf>

harmful chemicals such as mercury, Freon, and heavy metals. Both proper disposal and diversion are key aspects of solid waste management today. Education is an integral component to changing the solid waste management practices nationally, as well as locally.

Based on the declining population trends referenced in Section 7.1, it is the opinion of the County that the amount of waste produced within its borders will parallel the population's downward trend.

It is anticipated that with the implementation of this Plan, more data will be collected on the financial and partnership opportunities in the County for additional waste diversion programs to be made available to residents. This, in addition to better data capture for private facilities, should in turn increase the County's waste diversion percentage. Chapter 5 describes the various programs that will be made available to County residents and how these tasks and goals will be implemented.

Appendix A

Detailed Waste Composition Spreadsheets

Note: Based on 2018 data, which is labelled in the tables as 2020.

Population and Municipal Solid Waste Composition Calculator

Purpose and Background

Developing a Local Solid Waste Management Plan (LSWMP) consist of several steps:

- Assessment of current planning unit conditions,
- Forecasting the future,
- Establishing objectives with clear statements of what is need to be achieved and when,
- Identifying and evaluating various alternatives and courses of action,
- Making decisions and selecting the best alternative for accomplishing objectives,
- Formulating tasks, subtasks, milestones, responsible parties, and certainly ensuring its effective implementation, as well as
- Evaluating achievements and taking corrective actions when necessary.

The purpose of the Population and Municipal Solid Waste Composition Calculator is to support planning units during the planning process, through a graphic and numerical representation of the current and future characteristics of the waste stream. The calculator has been designed to aid the development of a LSWMP from its early stage of assessment to its implementation and even evaluation of the plan over time.

The calculator intends to approximate the solid waste stream composition of the planning unit based on specific demographics and the goals set up for a specific planning period.

This projection tool is not intended to substitute for the valuable information gained by performing a municipal specific waste composition analysis. There is no substitute for accurately gathered and analyzed municipal specific waste composition data. This tool is merely intended to help refine the waste composition differences between planning units as a result of the wide array of demographics in New York State.

For this tool, DEC developed estimates of material's composition present in the MSW stream using data inputs that include field-based waste composition studies, performed within New York State and in other major US cities and States that have similar demographic characteristics to some of New York's regions.

After a careful review of dozens of composition analyses, the data from the following sources were used:

- Municipalities within New York State: New York City and Onondaga County Resource Recovery Authority (OCRRRA).
- Municipalities in other states: Seattle, WA and San Francisco, CA.
- Other States: Vermont, Wisconsin, Missouri, Georgia, Oregon, Ohio, Delaware, Pennsylvania, and California.

Step 1. Planning Unit and Plan Period Selection

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

Planning Unit	Allegany County
Planning Period	2021-2030

Step 2. Waste Generation Rate

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

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

Allegany County

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

☒ I know the amount of MSW generated (Tons/year):

Enter tons disposed here:

20,811.53

☐ The planning unit Average MSW Generation Rate (lb/person/day) is:

☐ The amount of MSW Generated and the planning unit Average MSW Generation Rate are unknown.

Enter tons diverted here:

1,347.86

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

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

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

Population Projection:

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

MSW Generation Projection:

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

First Option:

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

Second Option:

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

Third Option:

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

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

Note:

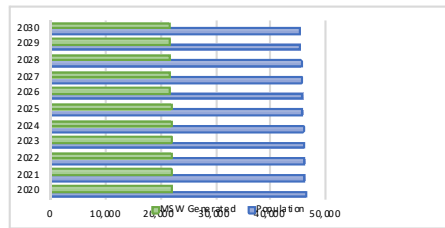
The graphic will display the Population and MSW Generation projections over the selected planning period. It has been designed to visualize the contrast of the final outcomes, based on the selections of each planning unit.

Allegany County

2021-2030

Current Data

2010 Population Census	48,917
2018 Population	46,430
2020 MSW Generated (Tons/yr)	22,159
2020 MSW generation rate (Lb/person/day)	2.37
2020 MSW Disposed (Tons/yr)	20,812
2020 MSW Diverted (Tons/yr)	1,348



Annual rate of population growth (%)	-0.20%
--------------------------------------	--------

Population Projection

2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
46,337	46,244	46,152	46,060	45,968	45,876	45,784	45,692	45,601	45,510	45,419

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

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

Reduction Factor (per year)

MSW Generation Projection

2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	
2.61	2.61	2.61	2.61	2.61	2.61	2.61	2.61	2.61	2.61	2.61	(Lb/person/day)
22,077	22,033	21,989	21,945	21,901	21,857	21,813	21,770	21,726	21,683	21,639	Tons/yr

MSW generation rate (Lb/person/day)	2.61
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Step 4. Municipal Solid Waste (MSW) Detailed Composition Analysis

The next step is to Identify the Materials Composition of the Waste Stream based on population density, and demographic characteristics of the Planning Unit.

This tab will provide the PU with a more detailed estimate of the materials present in the waste stream, which could be crucial when prioritizing the initiatives and programs of the LSWMP.

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

- Rural: <325 persons/mi²
- Suburban: >325 and $<5,000$ persons/mi²
- Urban: $>5,000$ persons/mi²

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

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

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

Allegany County										2021-2030		
Density Population Distribution	Rural			Suburban			Urban			MSW Materials Composition (%)		
	98.80%			1.20%			0.00%					
	Residential	Comm/Inst.	Combined	Residential	Comm/Inst.	Combined	Residential	Comm/Inst.	Combined			
	60.00%	40.00%	100.00%	55.00%	45.00%	100.00%	0.00%	0.00%	0.00%			
Material	Newspaper		5.20%	1.90%	3.88%	5.00%	1.90%	3.61%	6.60%	2.00%	0.00%	3.88%
	Corrugated Cardboard		6.60%	13.90%	9.52%	6.60%	13.90%	9.89%	6.90%	13.70%	0.00%	9.52%
	Other Recyclable Paper	Paperboard	3.20%	1.10%	2.36%	3.30%	1.00%	2.27%	3.60%	0.90%	0.00%	2.36%
		Office Paper	0.80%	3.80%	2.00%	0.90%	4.20%	2.39%	1.10%	5.80%	0.00%	2.00%
		Junk Mail	3.00%	0.70%	2.08%	3.20%	0.70%	2.08%	3.50%	0.70%	0.00%	2.08%
		Other Commercial Printing	1.70%	2.30%	1.94%	1.70%	2.40%	2.02%	2.30%	2.60%	0.00%	1.94%
		Magazines	1.10%	0.90%	1.02%	1.00%	0.80%	0.91%	1.10%	1.00%	0.00%	1.02%
		Books	0.50%	0.30%	0.42%	0.50%	0.30%	0.41%	0.60%	0.40%	0.00%	0.42%
		Paper Bags	0.50%	0.20%	0.38%	0.50%	0.20%	0.37%	0.60%	0.20%	0.00%	0.38%
		Phone Books	0.30%	0.30%	0.30%	0.30%	0.30%	0.30%	0.30%	0.20%	0.00%	0.30%
	Poly-Coated	0.20%	0.30%	0.24%	0.20%	0.20%	0.20%	0.30%	0.20%	0.00%	0.24%	
	Other Recyclable Paper (Total)		11.30%	9.90%	10.74%	11.60%	10.10%	10.93%	13.40%	12.00%	0.00%	10.74%
	Other Compostable Paper		6.80%	6.80%	6.80%	6.40%	6.40%	6.40%	6.80%	6.80%	0.00%	6.80%
	Total Paper		29.90%	32.50%	30.94%	29.60%	32.30%	30.82%	33.70%	34.50%	0.00%	30.94%
	Ferrous/Aluminum Containers	Ferrous Containers	1.90%	1.00%	1.54%	1.20%	0.70%	0.98%	1.40%	0.70%	0.00%	1.53%
		Aluminum Containers	0.70%	0.40%	0.58%	0.60%	0.30%	0.47%	0.50%	0.40%	0.00%	0.58%
	Ferrous/Aluminum Containers (Total)		2.60%	1.40%	2.12%	1.80%	1.00%	1.44%	1.90%	1.10%	0.00%	2.11%
	Other Ferrous Metals		5.20%	5.40%	5.28%	5.00%	5.80%	5.36%	3.30%	3.70%	0.00%	5.28%
	Other Non-Ferrous Metals	Other aluminum	0.20%	0.30%	0.24%	0.20%	0.30%	0.25%	0.20%	0.30%	0.00%	0.24%
		Automotive batteries	0.80%	0.50%	0.68%	0.70%	0.40%	0.57%	0.20%	0.20%	0.00%	0.68%
		Other non-aluminum	0.50%	0.30%	0.42%	0.30%	0.40%	0.35%	0.40%	0.20%	0.00%	0.42%
	Other Non-Ferrous Metals (Total)		1.50%	1.10%	1.34%	1.20%	1.10%	1.16%	0.80%	0.70%	0.00%	1.34%
	Total Metals		9.30%	7.90%	8.74%	8.00%	7.90%	7.96%	6.00%	5.50%	0.00%	8.73%
	PET Containers		1.10%	0.80%	0.98%	0.90%	0.80%	0.86%	1.20%	1.00%	0.00%	0.98%
	HDPE Containers		1.10%	0.60%	0.90%	0.90%	0.70%	0.81%	1.00%	0.70%	0.00%	0.90%
	Other Plastic (3-7) Containers		0.20%	0.10%	0.16%	0.20%	0.20%	0.20%	0.20%	0.20%	0.00%	0.16%
	Film Plastic		5.70%	5.90%	5.78%	5.50%	5.80%	5.64%	5.80%	5.80%	0.00%	5.78%
	Other Plastic	Durables	3.10%	3.20%	3.14%	3.00%	3.20%	3.09%	3.20%	3.30%	0.00%	3.14%
		Non-Durables	1.60%	1.80%	1.68%	1.60%	1.80%	1.69%	1.80%	1.90%	0.00%	1.68%
		Packaging	1.40%	1.10%	1.28%	1.40%	1.10%	1.27%	1.50%	1.10%	0.00%	1.28%
	Other Plastic (Total)		6.10%	6.10%	6.10%	6.00%	6.10%	6.05%	6.50%	6.30%	0.00%	6.10%
	Total Plastics		14.20%	13.50%	13.92%	13.50%	13.60%	13.55%	14.70%	14.00%	0.00%	13.92%
	Glass Bottles, Jars and Containers		4.10%	3.80%	3.98%	3.90%	3.80%	3.86%	4.30%	3.80%	0.00%	3.98%
	Other Glass (Flat glass, dishware, light bulbs, etc.)		0.50%	0.40%	0.46%	0.30%	0.40%	0.35%	0.40%	0.40%	0.00%	0.46%
	Total Glass		4.60%	4.20%	4.44%	4.20%	4.20%	4.20%	4.70%	4.20%	0.00%	4.44%
	Food Scraps		12.70%	13.30%	12.94%	12.90%	15.50%	14.07%	17.20%	25.20%	0.00%	12.95%
	Leaves and Grass / Pruning and Trimmings		3.10%	1.10%	2.30%	11.30%	9.10%	10.31%	4.20%	1.50%	0.00%	2.40%
	Total Organics		15.80%	14.40%	15.24%	24.20%	24.60%	24.38%	21.40%	26.70%	0.00%	15.35%
	Clothing Footwear, Towels, Sheets		4.60%	3.00%	3.96%	4.40%	3.20%	3.86%	4.80%	2.50%	0.00%	3.96%
	Carpet		1.40%	1.30%	1.36%	1.70%	1.40%	1.57%	1.70%	0.90%	0.00%	1.36%
Total Textiles		6.00%	4.30%	5.32%	6.10%	4.60%	5.43%	6.50%	3.40%	0.00%	5.32%	
Total Wood (Pallets, crates, adulterated and non-adulterated wood)		4.10%	9.00%	6.06%	2.90%	4.10%	3.44%	2.00%	3.50%	0.00%	6.03%	
DIY - Construction & Renovation Materials		8.00%	7.60%	7.84%	3.80%	2.70%	3.31%	4.40%	3.80%	0.00%	7.79%	
Diapers		1.90%	1.10%	1.58%	2.10%	1.20%	1.70%	2.30%	1.10%	0.00%	1.58%	
Electronics		1.30%	1.40%	1.34%	1.60%	1.70%	1.65%	1.30%	1.30%	0.00%	1.34%	
Tires		1.80%	1.80%	1.80%	1.70%	1.40%	1.57%	0.50%	0.40%	0.00%	1.80%	
HHW		0.60%	0.00%	0.36%	0.60%	0.00%	0.33%	0.50%	0.00%	0.00%	0.36%	
Soils and Fines		0.60%	0.60%	0.60%	0.10%	0.20%	0.15%	0.10%	0.10%	0.00%	0.59%	
Other Composite Materials - Durable and/or Inert		1.90%	1.70%	1.82%	1.60%	1.50%	1.56%	1.90%	1.50%	0.00%	1.82%	
Total Miscellaneous		16.10%	14.20%	15.34%	11.50%	8.70%	10.24%	11.00%	8.20%	0.00%	15.28%	
Total			100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	0.00%	100.00%	

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

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

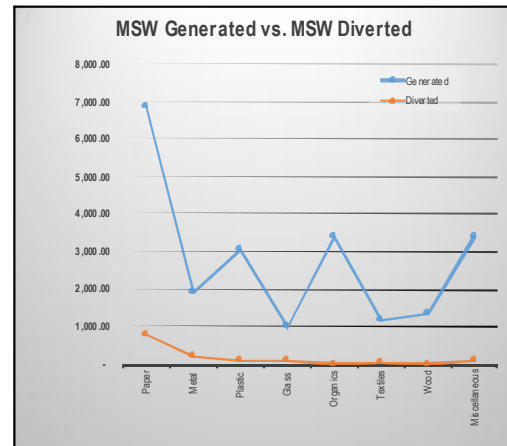
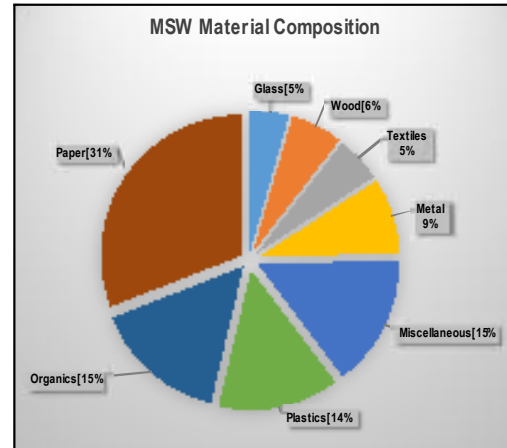
The total tons of MSW diverted per year will be auto-populated based on previous data inputs, while the amount tons diverted for each material by category should be populated by the user. **Purple** should be used for amounts of diverted waste by type of material, and a totaled number by category (e.g.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

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

Allegany County

2021-2030

		2020		
		MSW Materials Composition	MSW Generated (Tons)	MSW Diverted (Tons)
Material		100.0%	22,159	1,348
Paper	Newspaper	3.9%	859	0
	Corrugated Cardboard	9.5%	2,111	310
	Other Recyclable Paper (Total)	10.7%	2,380	475
	Other Compostable Paper	6.8%	1,506	0
	Total Paper	30.9%	6,856	785
Metal	Ferrous/Aluminum Containers (Total)	2.1%	468	55
	Other Ferrous Metals	5.3%	1,170	0
	Other Non-Ferrous Metals (Total)	1.3%	296	160
	Total Metals	8.7%	1,935	215
Plastic	PET Containers	1.0%	217	0
	HDPE Containers	0.9%	199	0
	Other Plastic (1-7) Containers	0.2%	36	0
	Film Plastic	5.8%	1,280	0
	Other Plastic (Total)	6.1%	1,352	114
	Total Plastics	13.9%	3,084	114
Glass	Glass Bottles, Jars and Containers	4.0%	882	93
	Other Glass (Flat glass, dishware, light bulbs, etc.)	0.5%	102	0
	Total Glass	4.4%	983	93
Organics	Food Scraps	13.0%	2,870	0
	Leaves and Grass / Pruning and Trimmings	2.4%	531	0
	Total Organics	15.3%	3,401	0
Textiles	Clothing Footwear, Towels, Sheets	4.0%	877	64
	Carpet	1.4%	302	0
	Total Textiles	5.3%	1,179	64
Wood	Total Wood (Pallets, crates, adulterated and non-adulterated wood)	6.0%	1,336	0
Miscellaneous	DIY Construction & Renovation Materials	7.8%	1,725	0
	Diapers	1.6%	350	0
	Electronics	1.3%	298	65
	Tires	1.8%	398	0
	HHW	0.4%	80	8
	Soils and Fines	0.6%	132	0
	Batteries	1.8%	403	5
	Total Miscellaneous	15.3%	3,386	78
Total		100.0%	22,159	1,348



Step 6. Municipal Solid Waste (MSW) Diversion Projections

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

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

Allegany County

2021-2030

Year	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
Projected MSW Generation (Tons/yr)	22,077	22,033	21,989	21,945	21,901	21,857	21,813	21,770	21,726	21,683
MSW Diverted (Tons/yr)	1,661	1,794	1,944	2,087	2,236	2,249	2,513	2,654	2,801	2,941

		MSW Materials Composition (%)	2020				2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
			MSW Generated (Tons)	MSW Diverted (Tons)	% MSW Diverted	% MSW Diverted	% MSW Diverted	% MSW Diverted	% MSW Diverted	% MSW Diverted	% MSW Diverted	% MSW Diverted	% MSW Diverted	% MSW Diverted	% MSW Diverted	% MSW Diverted
	Material		22,159	1,348	6.1%	7.5%	8.1%	8.8%	9.5%	10.2%	10.3%	11.5%	12.2%	12.9%	13.6%	
Paper	Newspaper	3.9%	859	0	0.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%
	Corrugated Cardboard	9.5%	2,111	310	14.7%	15.0%	16.0%	17.0%	18.0%	19.0%	20.0%	21.0%	22.0%	23.0%	24.0%	
	Other Recyclable Paper (Total)	10.7%	2,380	475	20.0%	1.0%	1.0%	2.0%	2.0%	3.0%	4.0%	4.0%	5.0%	6.0%	7.0%	
	Other Compostable Paper	6.8%	1,506	0	0.0%	32.0%	33.0%	34.0%	35.0%	36.0%	37.0%	38.0%	39.0%	40.0%	41.0%	
	Total Paper	30.9%	6,856	785	11.4%	12.2%	12.8%	13.6%	14.2%	15.0%	15.9%	16.5%	17.3%	18.2%	19.1%	
Metal	Ferrous/Aluminum Containers (Total)	2.1%	468	55	11.7%	12.0%	13.0%	14.0%	15.0%	16.0%	17.0%	18.0%	19.0%	20.0%	21.0%	
	Other Ferrous Metals	5.3%	1,170	0	0.0%	1.0%	1.0%	1.5%	2.0%	2.5%	3.0%	3.0%	3.5%	3.5%	3.5%	
	Other Non-Ferrous Metals (Total)	1.3%	296	160	53.9%	37.0%	38.0%	39.0%	40.0%	41.0%	42.0%	43.0%	44.0%	45.0%	46.0%	
	Total Metals	8.7%	1,935	215	11.1%	9.2%	9.6%	10.3%	11.0%	11.7%	12.6%	12.8%	13.2%	13.9%	14.2%	
Plastic	PET Containers	1.0%	217	0	0.0%	1.0%	1.0%	1.0%	1.0%	1.0%	2.0%	2.0%	2.0%	2.0%	2.0%	
	HDPE Containers	0.9%	199	0	0.0%	1.0%	1.0%	1.0%	1.0%	1.0%	2.0%	2.0%	2.0%	2.0%	2.0%	
	Other Plastic (1-7) Containers	0.2%	36	0	0.0%	1.0%	1.0%	1.0%	1.0%	1.0%	2.0%	2.0%	2.0%	2.0%	2.0%	
	Film Plastic	5.8%	1,280	0	0.0%	1.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	
	Other Plastic (Total)	6.1%	1,352	114	8.4%	12.0%	12.5%	13.0%	13.5%	14.0%	14.0%	14.5%	15.0%	15.5%	16.0%	
	Total Plastics	13.9%	3,084	114	3.7%	5.8%	6.5%	6.7%	6.9%	7.1%	7.3%	7.5%	7.7%	7.9%	8.1%	
Glass	Glass Bottles, Jars and Containers	0.0%	0	93	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	
	Other Glass (Flat glass, dishware, light bulbs, etc.)	4.3%	953	0	0.0%	14.0%	14.5%	15.0%	15.5%	16.0%	16.0%	16.5%	17.0%	17.5%	18.0%	
	Total Glass	4.4%	983	93	9.4%	14.0%	14.5%	15.0%	15.5%	16.0%	16.0%	16.5%	17.0%	17.5%	18.0%	
Organics	Food Scraps	13.0%	2,870	0	0.0%	1.0%	2.0%	3.0%	4.0%	5.0%	6.0%	7.0%	8.0%	9.0%	10.0%	
	Leaves and Grass / Pruning and Trimmings	2.4%	531	0	0.0%	1.0%	2.0%	3.0%	4.0%	5.0%	6.0%	7.0%	8.0%	9.0%	10.0%	
	Total Organics	15.3%	3,401	0	0.0%	1.0%	2.0%	3.0%	4.0%	5.0%	6.0%	7.0%	8.0%	9.0%	10.0%	
Textiles	Clothing Footwear, Towels, Sheets	4.0%	877	64	7.3%	11.0%	11.5%	12.0%	12.5%	13.0%	13.5%	14.0%	14.5%	15.0%	15.5%	
	Carpet	1.4%	302	0	0.0%	1.0%	2.0%	3.0%	4.0%	5.0%	6.0%	7.0%	8.0%	9.0%	10.0%	
	Total Textiles	5.3%	1,179	64	5.4%	8.4%	9.1%	9.7%	10.3%	11.0%	11.6%	12.2%	12.8%	13.5%	14.1%	
Wood	Total Wood (Pallets, crates, adulterated and non-adulterated w	6.0%	1,336	0	0.0%	1.0%	2.0%	3.0%	4.0%	5.0%	6.0%	7.0%	8.0%	9.0%	10.0%	
Miscellaneous	DIY Construction & Renovation Materials	7.8%	1,725	0	0.0%	1.0%	1.0%	1.0%	2.0%	2.0%	2.0%	3.0%	3.0%	3.0%	3.0%	
	Diapers	1.6%	350	0	0.0%	1.0%	2.0%	3.0%	4.0%	5.0%	6.0%	7.0%	8.0%	9.0%	10.0%	
	Electronics	1.3%	298	65	21.8%	50.5%	50.5%	51.0%	51.5%	52.0%	52.5%	53.0%	53.5%	54.0%	54.5%	
	Tires	1.8%	398	0	0.0%	1.0%	2.0%	3.0%	4.0%	5.0%	6.0%	7.0%	8.0%	9.0%	10.0%	
	HHW	0.4%	80	8	10.0%	8.0%	9.0%	10.0%	11.0%	12.0%	13.0%	14.0%	15.0%	16.0%	17.0%	
	Soils and Fines	0.6%	132	0	0.0%	1.0%	2.0%	3.0%	4.0%	5.0%	6.0%	7.0%	8.0%	9.0%	10.0%	
	Other Composite Materials- Durable and/or inert	1.8%	403	5	1.3%	2.0%	3.0%	4.0%	5.0%	6.0%	7.0%	8.0%	9.0%	10.0%	11.0%	
	Total Miscellaneous	15.3%	3,386	78	2.3%	5.6%	6.0%	6.5%	7.4%	7.9%	8.3%	9.3%	9.7%	10.2%	10.6%	

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

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

Allegany County

2021-2030

		Waste Management Performance Metrics (2020-2030)																																		
		2020			2021			2022			2023			2024			2025			2026			2027			2028			2029			2030				
		MSW Composition (%)	MSW Generate d(Tons)	MSW Diverted (Tons)	%MSW Diverted	MSW generated (Tons)	MSW Diverted	%MSW Diverted	MSW generated (Tons)	MSW Diverted	%MSW Diverted	MSW generated (Tons)	MSW Diverted	%MSW Diverted	MSW generated (Tons)	MSW Diverted	%MSW Diverted	MSW generated (Tons)	MSW Diverted	%MSW Diverted	MSW generated (Tons)	MSW Diverted	%MSW Diverted	MSW generated (Tons)	MSW Diverted	%MSW Diverted	MSW generated (Tons)	MSW Diverted	%MSW Diverted	MSW generated (Tons)	MSW Diverted	%MSW Diverted				
Paper	Material	100.00%	22,159	1,348	6.1%	22,077	1,543	7.0%	22,033	1,671	8%	21,989	1,817	8.3%	21,945	1,956	8.9%	21,901	2,119	9.7%	21,857	2,237	10.2%	21,813	2,374	10.9%	21,770	2,512	11.5%	21,726	2,779	12.8%	21,683	2,791	12.9%	
	Newspaper	3.88%	859	0	0.0%	856	17	2.0%	854	17	2.0%	852	17	2.0%	851	17	2.0%	849	17	2.0%	847	17	2.0%	846	17	2.0%	844	17	2.0%	842	17	2.0%	841	17	2.0%	
	Corrugated Cardboard	9.52%	2,111	310	14.7%	2,103	315	15.0%	2,098	336	16%	2,094	356	17.0%	2,090	376	18.0%	2,086	396	19.0%	2,082	416	20.0%	2,078	436	21.0%	2,073	456	22.0%	2,069	476	23.0%	2,065	496	24.0%	
	Other Recyclable Paper	Paperboard	2.36%	523	0	0.0%	521	0	0.0%	520	0	0%	519	0	0.0%	518	0	0.0%	517	0	0.0%	516	0	0.0%	515	0	0.0%	514	0	0.0%	512	0	0.0%	511	0	0.0%
		Office Paper	2.00%	444	0	0.0%	443	0	0.0%	442	0	0%	441	0	0.0%	440	0	0.0%	439	0	0.0%	438	0	0.0%	437	0	0.0%	436	0	0.0%	436	0	0.0%	435	0	0.0%
		Junk Mail	2.08%	461	0	0.0%	459	0	0.0%	458	0	0%	457	0	0.0%	456	0	0.0%	456	0	0.0%	455	0	0.0%	454	0	0.0%	453	0	0.0%	452	0	0.0%	451	0	0.0%
		Other Commercial Printing	1.94%	430	0	0.0%	428	0	0.0%	428	0	0%	427	0	0.0%	426	0	0.0%	425	0	0.0%	424	0	0.0%	423	0	0.0%	423	0	0.0%	422	0	0.0%	421	0	0.0%
		Magazines	1.02%	226	0	0.0%	225	0	0.0%	224	0	0%	224	0	0.0%	224	0	0.0%	223	0	0.0%	223	0	0.0%	222	0	0.0%	222	0	0.0%	221	0	0.0%	221	0	0.0%
		Books	0.42%	93	0	0.0%	93	0	0.0%	93	0	0%	92	0	0.0%	92	0	0.0%	92	0	0.0%	92	0	0.0%	92	0	0.0%	92	0	0.0%	91	0	0.0%	91	0	0.0%
		Paper Bags	0.38%	84	0	0.0%	84	0	0.0%	84	0	0%	84	0	0.0%	83	0	0.0%	83	0	0.0%	83	0	0.0%	83	0	0.0%	83	0	0.0%	83	0	0.0%	82	0	0.0%
		Phone Books	0.30%	66	0	0.0%	66	0	0.0%	66	0	0%	66	0	0.0%	66	0	0.0%	66	0	0.0%	66	0	0.0%	65	0	0.0%	65	0	0.0%	65	0	0.0%	65	0	0.0%
	Poly-Coated	0.24%	53	0	0.0%	53	0	0.0%	53	0	0%	53	0	0.0%	53	0	0.0%	52	0	0.0%	52	0	0.0%	52	0	0.0%	52	0	0.0%	52	0	0.0%	52	0	0.0%	
	Other Recyclable Paper (Total)	10.74%	2,380	475	20.0%	2,372	24	1.0%	2,367	24	1%	2,362	47	2.0%	2,357	47	2.0%	2,353	71	3.0%	2,348	94	4.0%	2,343	94	4.0%	2,339	117	5.0%	2,334	140	6.0%	2,329	163	7.0%	
	Other Compostable Paper	6.80%	1,506	0	0.0%	1,500	480	32.0%	1,497	494	33%	1,494	508	34.0%	1,491	522	35.0%	1,488	536	36.0%	1,485	550	37.0%	1,482	563	38.0%	1,479	577	39.0%	1,476	591	40.0%	1,473	604	41.0%	
Total Paper	30.94%	6,856	785	11.4%	6,830	836	12.2%	6,817	871	13%	6,803	928	13.6%	6,789	962	14.2%	6,776	1,020	15.0%	6,762	1,077	15.9%	6,749	1,110	16.5%	6,735	1,167	17.3%	6,722	1,223	18.2%	6,708	1,280	19.1%		
Metal	Ferrous/Aluminum Containers	1.53%	340	40	11.7%	338	29	8.7%	338	32	9%	337	34	10.2%	336	37	10.9%	336	39	11.6%	335	41	12.3%	334	44	13.1%	334	46	13.8%	333	48	14.5%	332	51	15.2%	
	Aluminum Containers	0.58%	128	15	11.7%	128	4	3.3%	127	5	4%	127	5	3.8%	127	5	4.1%	127	6	4.4%	126	6	4.7%	126	6	4.9%	126	7	5.2%	126	7	5.5%	125	7	5.8%	
	Ferrous/Aluminum Containers (Total)	2.11%	468	55	11.7%	466	56	12.0%	465	60	13%	464	65	14.0%	463	70	15.0%	463	74	16.0%	462	78	17.0%	461	83	18.0%	460	87	19.0%	459	92	20.0%	458	96	21.0%	
	Other Ferrous Metals	5.28%	1,170	0	0.0%	1,166	12	1.0%	1,164	12	1%	1,161	17	1.5%	1,159	23	2.0%	1,157	29	2.5%	1,154	29	2.5%	1,152	35	3.0%	1,150	34	3.0%	1,147	40	3.5%	1,145	40	3.5%	
	Other Non-Ferrous Metals	Other aluminum	0.24%	53	0	0.0%	53	0	0.0%	53	0	0%	53	0	0.0%	53	0	0.0%	53	0	0.0%	52	0	0.0%	52	0	0.0%	52	0	0.0%	52	0	0.0%	52	0	0.0%
		Automotive batteries	0.68%	150	0	0.0%	150	0	0.0%	150	0	0%	149	0	0.0%	149	0	0.0%	149	0	0.0%	148	0	0.0%	148	0	0.0%	148	0	0.0%	147	0	0.0%	147	0	0.0%
		Other non-aluminum	0.42%	93	0	0.0%	93	0	0.0%	92	0	0%	92	0	0.0%	92	0	0.0%	92	0	0.0%	92	0	0.0%	91	0	0.0%	91	0	0.0%	91	0	0.0%	91	0	0.0%
	Other Non-Ferrous Metals (Total)	1.34%	296	160	53.9%	295	109	37.0%	295	112	38%	294	115	39.0%	294	117	40.0%	293	120	41.0%	292	123	42.0%	292	125	43.0%	291	128	44.0%	291	131	45.0%	290	133	46.0%	
Total Metals	8.73%	1,935	215	11.1%	1,927	177	9.2%	1,924	184	10%	1,920	197	10.3%	1,916	210	11.0%	1,912	223	11.7%	1,908	230	12.1%	1,904	243	12.8%	1,901	250	13.2%	1,897	263	13.9%	1,893	270	14.2%		
Plastic	PET Containers	0.98%	217	0	0.0%	216	2	1.0%	216	2	1%	215	2	1.0%	215	2	1.0%	214	2	1.0%	214	4	2.0%	213	4	2.0%	213	4	2.0%	213	4	2.0%	212	4	2.0%	
	HDPE Containers	0.90%	199	0	0.0%	198	2	1.0%	198	2	1%	198	2	1.0%	197	2	1.0%	197	9	4.4%	196	4	2.0%	196	4	2.0%	196	4	2.0%	195	4	2.0%	195	4	2.0%	
	Other Plastic (1-7) Containers	0.16%	36	0	0.0%	35	0	1.0%	35	0	1%	35	0	1.0%	35	0	1.0%	35	6	16.0%	35	1	2.0%	35	1	2.0%	35	1	2.0%	35	1	2.0%	35	1	2.0%	
	Film Plastic	Other Plastic	5.78%	1,280	0	0.0%	1,276	13	1.0%	1,273	25	2%	1,271	25	2.0%	1,268	25	2.0%	1,265	32	2.5%	1,263	25	2.0%	1,260	25	2.0%	1,258	25	2.0%	1,255	25	2.0%	1,253	25	2.0%
		Durables	3.14%	696	0	0.0%	693	0	0.0%	692	0	0%	690	0	0.0%	689	0	0.0%	688	0	0.0%	686	0	0.0%	685	0	0.0%	683	0	0.0%	682	0	0.0%	681	0	0.0%
		Non-Durables	1.68%	372	0	0.0%	371	0	0.0%	370	0	0%	369	0	0.0%	369	0	0.0%	368	0	0.0%	367	0	0.0%	366	0	0.0%	366	0	0.0%	365	0	0.0%	364	0	0.0%
	Packaging	1.28%	284	0	0.0%	283	0	0.0%	282	0	0%	281	0	0.0%	281	0	0.0%	280	0	0.0%	280	0	0.0%	279	0	0.0%	279	0	0.0%	278	0	0.0%	277	0	0.0%	
Other Plastic (Total)	6.10%	1,352	114	8.4%	1,347	162	12.0%	1,344	168	13%	1,341	174	13.0%	1,338	181	13.5%	1,336	187	14.0%	1,333	187	14.0%	1,330	193	14.5%	1,328	199	15.0%	1,325	205	15.5%	1,323	212	16.0%		
Total Plastics	13.92%	3,084	114	3.7%	3,072	179	5.8%	3,066	198	6%	3,060	204	6.7%	3,054	211	6.9%	3,048	235	7.7%	3,042	221	7.3%	3,035	227	7.5%	3,029	233	7.7%	3,023	239	7.9%	3,017	245	8.1%		
Glass	Glass Bottles, Jars and Containers	3.98%	882	93	0.0%	878	0	0.0%	877	0	0%	875	0	0.0%	873	0	0.0%	871	0	0.0%	870	0	0.0%	868	0	0.0%	866	0	0.0%	864	0	0.0%	863	0	0.0%	
	Other Glass (Flat glass, dishware, light bulbs, etc.)	0.46%	102	0	0.0%	101	14	14.0%	101	15	15%	101	15	15.0%	101	16	15.5%	100	16	16.0%	100	16	16.0%	100	17	16.5%	100	17	17.0%	100	17	17.5%	99	18	18.0%	
	Total Glass	4.44%	983	93	9.4%	980	14	1.4%	978	15	1%	976	15	1.6%	974	16	1.6%	972	16	1.7%	970	16	1.7%	968	17	1.7%	966	17	1.8%	964	17	1.8%	962	18	1.9%	
Organics	Food Scraps	12.95%	2,870	0	0.0%	2,860	29	1.0%	2,854	57	2%	2,848	85	3.0%	2,843	1																				

C&D Debris Waste Composition and Projection tool

Purpose and Background

Construction and Demolition (C&D) debris is the second largest waste stream in the state and is estimated to account for 25 to 30% of the total solid waste generation. Basic understanding of the materials composition of the C&D debris stream, would facilitate the management strategy and planning process at a local level of this important but usually overlooked waste stream.

The purpose of the *C&D Debris Waste Composition and Projection tool* is to estimate the generation and materials composition of the C&D debris stream for each planning unit. Calculations are based on specific characteristics such as activity, and sector of generation of C&D debris, which consist of new construction, renovation, and demolition of residential and non-residential properties, or municipal infrastructures such as roads and bridges.

A comprehensive knowledge of the C&D debris stream, will assist the selection of initiatives and management programs that minimize environmental impacts. The implementation of reduction, recycling and reuse management practices extend the lifecycle of materials and conserve the use of raw materials, water, and energy, reduce the overall building project expenses through avoiding unnecessary purchases and disposal costs, and conserve landfill space among many other benefits.

This projection tool is not intended to substitute for the valuable information gained by performing municipal waste characterization studies. There is no substitute for accurately gathered and analyzed municipal specific waste composition data. This tool is merely intended to help refine the waste composition differences between planning units as a result of the wide array of demographics in New York State.

For this tool, DEC developed estimates of materials composition in the C&D debris waste stream using data inputs that include field-based waste composition studies and research-based evaluations performed within New York State and in other major US cities and States that have similar characteristics to some of New York's regions.

After a careful review of dozens of composition analyses, the material composition of the (C&D) debris waste stream was found to be on average of RUCARB (recognizable uncontaminated concrete, asphalt, rock, and brick), wood, roofing, drywall, soil and gravel, metal, plastic, corrugated cardboard and paper, and other miscellaneous materials. The data from the following sources were used:

- Municipalities within New York State: New York City and Town of Babylon.
- Municipalities in other states: Seattle, WA and Des Moines, IA.
- Other States: Vermont, Wisconsin, Oregon, Delaware, Minnesota, Florida, and California.
- EPA

Step 1. Planning Unit and Planning Period Selection

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

Planning Unit	Allegany County
Planning Period	2021-2031

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

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

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

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

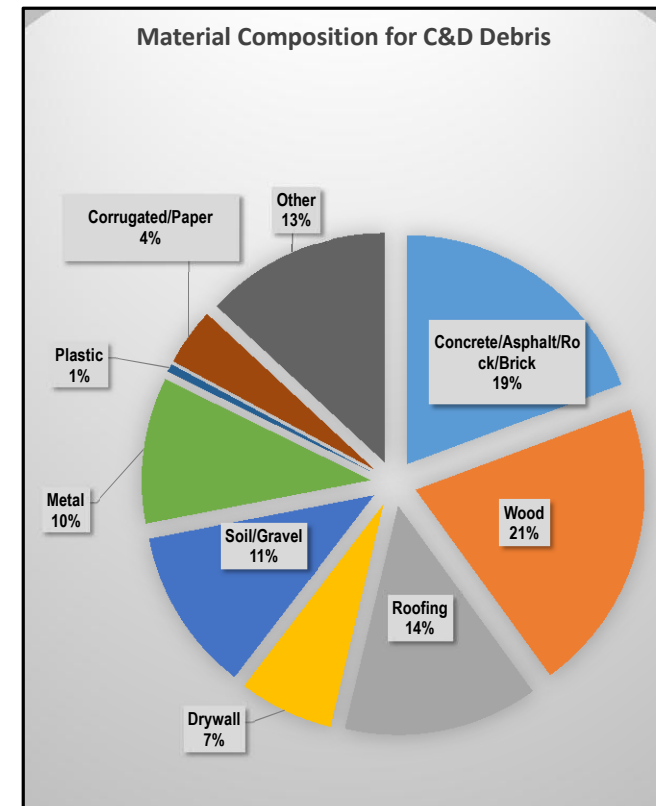
Note:

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

Allegany County

2021-2031

		Generation source								
		Residential				Non- Residential (commercial-institutional)				Other Municipal Infrastructure
		60.00%				40.00%				0.00%
		New Construction	Renovation	Demolition	Combined Residential	New Construction	Renovation	Demolition	Combined Non-Residential	Renovation
		10.00%	45.00%	45.00%	100.00%	10.00%	60.00%	30.00%	100.00%	100.00%
Materials	Concrete/Asphalt/Rock/Brick	9.80%	16.10%	21.50%	17.90%	30.70%	19.10%	23.10%	21.46%	46.00%
	Wood	29.90%	19.10%	25.70%	23.15%	22.70%	12.40%	24.20%	16.97%	10.50%
	Roofing	6.00%	22.00%	6.10%	13.25%	2.10%	21.20%	5.10%	14.46%	0.00%
	Drywall	15.60%	7.90%	5.10%	7.41%	4.60%	6.40%	4.30%	5.59%	0.00%
	Soil/Gravel	11.30%	7.10%	18.50%	12.65%	13.10%	6.50%	15.60%	9.89%	38.00%
	Metal	5.30%	11.30%	5.20%	7.96%	12.00%	15.50%	11.10%	13.83%	2.40%
	Plastic	1.50%	0.70%	0.30%	0.60%	0.50%	0.70%	0.30%	0.56%	0.30%
	Corrugated cardboard/Paper	9.30%	2.90%	3.10%	3.63%	7.10%	4.60%	4.20%	4.73%	0.30%
	Other	11.30%	12.90%	14.50%	13.46%	7.20%	13.60%	12.10%	12.51%	2.50%
Total		100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%



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

This step will estimate the amount of waste generated for each material based on the total amount of waste generated in that year. In the **purple cells** enter the amount of waste generated in the Planning Unit. It will be a known amount for the first year, **2020** and an estimate of what will be generated for each year of the planning period, **2021-2031**

Allegany County

2021-2031

			2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
		C&D Debris Materials Composition (%)	C&D Debris Generated (Tons)	C&D Debris Generated (Tons)	C&D Debris Generated (Tons)	C&D Debris Generated (Tons)	C&D Debris Generated (Tons)	C&D Debris Generated (Tons)	C&D Debris Generated (Tons)	C&D Debris Generated (Tons)	C&D Debris Generated (Tons)	C&D Debris Generated (Tons)	C&D Debris Generated (Tons)
Materials	Concrete/Asphalt /Rock/Brick	19.3%	399.6	398.8	398.0	397.2	396.4	395.6	394.8	394.0	393.2	392.5	391.7
	Wood	20.7%	427.6	426.7	425.9	425.0	424.2	423.3	422.5	421.6	420.8	419.9	419.1
	Roofing	13.7%	283.9	283.4	282.8	282.2	281.7	281.1	280.5	280.0	279.4	278.9	278.3
	Drywall	6.7%	138.2	137.9	137.6	137.3	137.1	136.8	136.5	136.2	136.0	135.7	135.4
	Soil/Gravel	11.5%	238.8	238.3	237.8	237.3	236.8	236.4	235.9	235.4	235.0	234.5	234.0
	Metal	10.3%	213.1	212.7	212.2	211.8	211.4	211.0	210.5	210.1	209.7	209.3	208.9
	Plastic	0.6%	12.1	12.1	12.0	12.0	12.0	12.0	11.9	11.9	11.9	11.9	11.8
	Corrugated cardboard/Paper	4.1%	84.2	84.0	83.8	83.7	83.5	83.3	83.2	83.0	82.8	82.7	82.5
	Other	13.1%	270.5	269.9	269.4	268.9	268.3	267.8	267.2	266.7	266.2	265.6	265.1
Total		100.0%	2,067.8	2,063.7	2,059.6	2,055.4	2,051.3	2,047.2	2,043.1	2,039.0	2,035.0	2,030.9	2,026.8

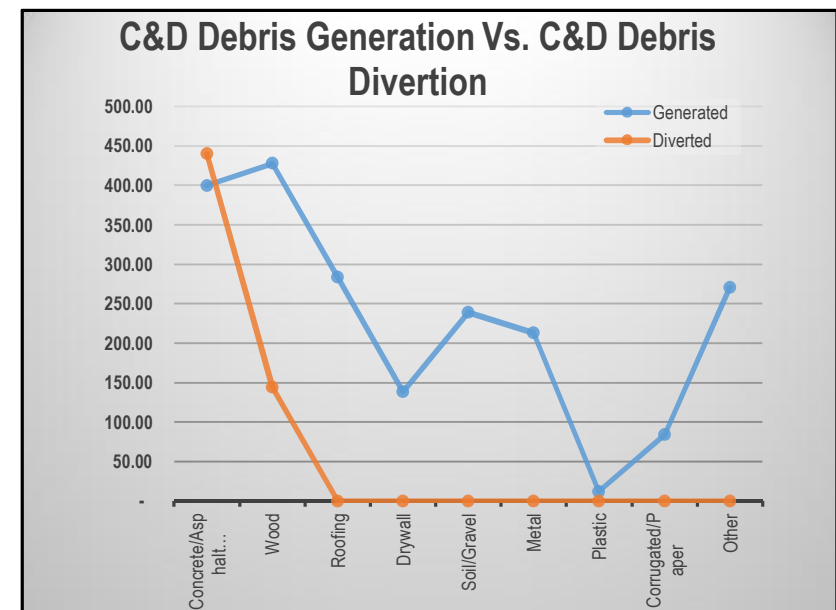
Step 4. Construction & Demolition (C&D) Debris Diversion Projections

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

Allegany County

2021-2031

Materials		C&D Debris Materials Composition (%)	2020		
			C&D Debris Generated (Tons)	C&D Debris Diverted (Tons)	% C&D Diverted
	Concrete/Asphalt /Rock/Brick	19.3%	399.6	440.0	110.1%
	Wood	20.7%	427.6	143.8	33.6%
	Roofing	13.7%	283.9	0.0	0.0%
	Drywall	6.7%	138.2	0.0	0.0%
	Soil/Gravel	11.5%	238.8	0.0	0.0%
	Metal	10.3%	213.1	0.0	0.0%
	Plastic	0.6%	12.1	0.0	0.0%
	Corrugated cardboard/Paper	4.1%	84.2	0.0	0.0%
	Other	13.1%	270.5	0.0	0.0%
Total		100.0%	2,067.8	583.8	28.2%



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

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

		Allegheny County															2021-2031																		
		C&D Debris Materials Composition (%)	2020			2021			2022			2023			2024			2025			2026			2027			2028			2029			2030		
			C&D Debris Generated (Tons)	C&D Debris Diverted	% C&D Diverted	C&D Debris Generated (Tons)	C&D Debris Diverted	% C&D Diverted	C&D Debris Generated (Tons)	C&D Debris Diverted	% C&D Diverted	C&D Debris Generated (Tons)	C&D Debris Diverted	% C&D Diverted	C&D Debris Generated (Tons)	C&D Debris Diverted	% C&D Diverted	C&D Debris Generated (Tons)	C&D Debris Diverted	% C&D Diverted	C&D Debris Generated (Tons)	C&D Debris Diverted	% C&D Diverted	C&D Debris Generated (Tons)	C&D Debris Diverted	% C&D Diverted	C&D Debris Generated (Tons)	C&D Debris Diverted	% C&D Diverted	C&D Debris Generated (Tons)	C&D Debris Diverted	% C&D Diverted			
Materials	Concrete/Asphalt /Rock/Brick	19.3%	399.6	440.0	110.1%	398.8	398.8	100.0%	398.0	398.0	100.0%	397.2	397.2	100.0%	396.4	396.4	100.0%	395.6	395.6	100.0%	394.8	394.8	100.0%	394.0	394.0	100.0%	393.2	393.2	100.0%	392.5	392.5	100.0%	391.7	391.7	100.0%
	Wood	20.7%	427.6	143.8	33.6%	426.7	153.6	36.0%	425.9	157.6	37.0%	425.0	161.5	38.0%	424.2	165.4	39.0%	423.3	169.3	40.0%	422.5	173.2	41.0%	421.6	177.1	42.0%	420.8	180.9	43.0%	419.9	184.8	44.0%	419.1	188.6	45.0%
	Roofing	13.7%	283.9	0.0	0.0%	283.4	2.8	1.0%	282.8	5.7	2.0%	282.2	8.5	3.0%	281.7	11.3	4.0%	281.1	14.1	5.0%	280.5	16.8	6.0%	280.0	19.6	7.0%	279.4	22.4	8.0%	278.9	25.1	9.0%	278.3	27.8	10.0%
	Drywall	6.7%	138.2	0.0	0.0%	137.9	1.4	1.0%	137.6	2.8	2.0%	137.3	4.1	3.0%	137.1	5.5	4.0%	136.8	6.8	5.0%	136.5	8.2	6.0%	136.2	9.5	7.0%	136.0	10.9	8.0%	135.7	12.2	9.0%	135.4	13.5	10.0%
	Soil/Gravel	11.5%	238.8	0.0	0.0%	238.3	2.4	1.0%	237.8	4.8	2.0%	237.3	7.1	3.0%	236.8	9.5	4.0%	236.4	11.8	5.0%	235.9	14.2	6.0%	235.4	16.5	7.0%	235.0	18.8	8.0%	234.5	21.1	9.0%	234.0	23.4	10.0%
	Metal	10.3%	213.1	0.0	0.0%	212.7	2.1	1.0%	212.2	4.2	2.0%	211.8	6.4	3.0%	211.4	8.5	4.0%	211.0	10.5	5.0%	210.5	12.6	6.0%	210.1	14.7	7.0%	209.7	16.8	8.0%	209.3	18.8	9.0%	208.9	20.9	10.0%
	Plastic	0.6%	12.1	0.0	0.0%	12.1	0.1	1.0%	12.0	0.2	2.0%	12.0	0.4	3.0%	12.0	0.5	4.0%	12.0	0.6	5.0%	11.9	0.7	6.0%	11.9	0.8	7.0%	11.9	1.0	8.0%	11.9	1.1	9.0%	11.8	1.2	10.0%
	Corrugated /Paper	4.1%	84.2	0.0	0.0%	84.0	0.8	1.0%	83.8	1.7	2.0%	83.7	2.5	3.0%	83.5	3.3	4.0%	83.3	4.2	5.0%	83.2	5.0	6.0%	83.0	5.8	7.0%	82.8	6.6	8.0%	82.7	7.4	9.0%	82.5	8.2	10.0%
	Other	13.1%	270.5	0.0	0.0%	269.9	0.0	0.0%	269.4	0.0	0.0%	268.9	0.0	0.0%	268.3	0.0	0.0%	267.8	0.0	0.0%	267.2	0.0	0.0%	266.7	0.0	0.0%	266.2	0.0	0.0%	265.6	0.0	0.0%	265.1	0.0	0.0%
	Total		100.0%	2,067.8	583.8	28.2%	2,063.7	562.1	27.2%	2,059.6	574.9	27.9%	2,055.4	587.6	28.6%	2,051.3	600.3	29.3%	2047.2	613.0	29.9%	2,043.1	625.5	30.6%	2,039.0	638.1	31.3%	2,035.0	650.6	32.0%	2,030.9	663.0	32.6%	2,026.8	675.4

Appendix B

Copy of the Local Solid Waste and Recycling Law

COUNTY OF ALLEGANY

Intro. No. 1-2016

Print No. 1

A LOCAL LAW AMENDING LOCAL LAW NO. 4 OF 2004 REGARDING SOURCE SEPARATION IMPLEMENTATION AND TO REMOVE THE REQUIREMENT THAT ALL SOLID WASTE GENERATED IN ALLEGANY COUNTY MUST BE DISPOSED OF AT A COUNTY FACILITY

BE IT ENACTED by the Board of Legislators of the County of Allegany, State of New York, as follows:

Section 1. Section 5, paragraph 1, of Local Law No. 4 of 2004 is amended to read as follows:

SECTION 5. SOURCE SEPARATION IMPLEMENTATION

1. Prior to taking any Solid Waste or Recyclable Material to a Solid Waste Management Facility, each Commercial Waste Collector proposing to collect Solid Waste and Recyclable Material generated in Allegany County, shall submit a plan, which shall include, but not be limited to, the description of the type of waste to be collected and frequency of collection and provision for collecting and marketing Recyclable Material.

Section 2. Section 7, paragraph 1, of Local Law No. 4 of 2004 is amended to eliminate the first sentence requiring all Solid Waste generated within Allegany County to be delivered to a County Facility and shall henceforth read as follows:

SECTION 7. DISPOSAL OF SOLID WASTE

1. No Waste Collector or other Person shall dispose of Solid Waste at the County Landfill or any County Facility without a duly issued and valid permit.

Section 3. Section 8, paragraph 1 of Local Law No. 4 of 2004 is amended to read as follows:

SECTION 8. DISPOSAL OF RECYCLABLE MATERIAL

1. All Waste Collectors and Persons, excepting Commercial Waste Collectors operating according to an approved plan, shall deliver all Recyclable Material generated within the County to a County Facility. No Waste Collector or other Person shall dispose of Recyclable Material at a County Facility without a duly issued and valid permit.

Section 4. In all other respect Local Law No. 4 of 2004 shall remain in full force and effect.

Section 5. This local law shall become effective upon its filing in the office of the New York State Secretary of State.

LOCAL LAW OF THE COUNTY OF ALLEGANY TO PROVIDE AN ORDERLY PROGRAM FOR THE COLLECTION, TRANSPORTATION AND DISPOSAL OF SOLID WASTE AND RECYCLABLES IN ORDER TO PROMOTE THE SAFETY, HEALTH, WELFARE AND CONVENIENCE OF THE CITIZENS OF ALLEGANY COUNTY, AND TO PROHIBIT RANDOM REFUSE DISPOSAL AND LITTERING ALONG PUBLIC HIGHWAYS AND ROADS, AND IN FURTHERANCE OF THE LEGISLATIVE FINDINGS SET FORTH BELOW, AND TO REPEAL LOCAL LAW NO. 2 OF THE YEAR 2000, AS AMENDED

BE IT ENACTED by the Board of Legislators of the County of Allegany, State of New York, as follows:

SECTION 1. LEGISLATIVE FINDINGS.

The Board of Legislators of Allegany County, upon consideration and in support of the adoption of this local law, hereby finds and declares:

The safe and proper disposal of the solid wastes generated by the people of the County of Allegany has long been and remains a matter of serious public concern. In the mid-1960's the Allegany County Board of Supervisors began the countywide examination of the problems associated with solid waste disposal in the County of Allegany. In 1969 the Board of Supervisors authorized the Allegany County Planning Board to jointly apply with Steuben County for funds from the New York State Department of Health to conduct a solid waste disposal study. A Steuben-Allegany County Solid Waste Study Committee was created by the legislatures of Allegany and Steuben Counties to carry out the study. That committee reported to the Allegany County Board of Legislators (successor to the Board of Supervisors) in 1972 and recommended a centralized county landfill as part of an integrated solid waste disposal system. At the time of this recommendation and during the preceding decades, each town and/or village in the County provided, either individually or in concert with other town or village governments, a dump or incinerator for use by local residents and businesses as a traditional government service. The growing concerns regarding the operational safety of these facilities and the increased public awareness of adverse and environmental impacts caused by the operation of these dumps and the incinerator together with the potential for public health problems associated with these types of locally provided disposal sites prompted this countywide action.

In 1973 the Board of Legislators created a Solid Waste Advisory Committee to implement the recommendations of the Steuben-Allegany County Solid Waste Study. The Advisory Committee held a public informational meeting in order to educate the public about the issues regarding solid waste disposal confronting the entire County and to acquire additional information from citizens and town and village officials. Engineering services for solid waste disposal were subsequently approved and contracted for by the Board of

Legislators. In September 1973 the Board received a report of a helicopter over flight of 14 of the County's municipal landfills and the conditions of each landfill.

The County instituted a solid waste pilot project in the Town of Willing in November 1973. This pilot project consisted of the placement on County property of solid waste disposal containers for use by the public and the disposal of the solid waste by the County. This pilot project was continued through 1974.

In October 1974 the Board of Legislators received the summary report of the Consolidated Solid Waste Disposal Study from the Solid Waste Advisory Committee. The study recommended the construction of a single County solid waste landfill to replace the municipal landfills. In late 1974 and into 1975 a series of meetings were held throughout the County to discuss the proposed County landfill. The Board of Legislators received numerous resolutions and correspondence from towns and villages both in favor of and opposing a single County owned and operated landfill. In March 1975 a resolution to approve a single landfill solid waste disposal system was defeated by the Board. In May 1975 a resolution of intent to provide a system of solid waste disposal for the County was adopted and a special Solid Waste Committee of the Board of Legislators was established. The Solid Waste Advisory Committee created in 1973 was abolished by this resolution.

In August 1975 the Solid Waste Committee reported to the Board of Legislators its determination that a single landfill system was considered the most practical and economical method for the safe disposal of solid waste in the County. The jurisdiction over solid waste matters was subsequently placed in the Historical and Planning Committee of the Board. The Board thereupon began a process of considering sites for a landfill and exploring alternative systems for the disposal of solid waste. In 1977 the Board adopted a local law pursuant to Article 8 of the Environmental Conservation Law providing for the environmental quality review of proposed actions that may have a significant effect on the environment.

In 1978 the Board considered the advisability of participating in the proposed Cuba Cheese Refuse to Energy Project under consideration by Cattaraugus County. In February 1980 a capital fund was established by the Board in the amount of \$600,988 for the Allegany County Solid Waste Program. That year also saw the purchase of County vehicles for trucking solid waste and the authorization of the expenditure of 1.25 million dollars for countywide solid waste disposal. In 1980 a contract was entered into by the County with the County of Cattaraugus to supply solid waste to the Cuba Cheese Refuse to Energy Program. In 1980 and 1981 the Board of Legislators received engineering reports recommending the establishment of a system of County solid waste transfer stations for the collection of solid waste and directed the preparation of a Draft Environmental Impact Statement (DEIS) in relation to a proposed Allegany County Transfer Station System. In September 1981 the Board of Legislators created the Allegany County Department of Public Works and assigned solid waste responsibilities to that Department. On September 28, 1981 the Board adopted a resolution finding that the DEIS for the Allegany County Transfer Station System was complete and authorized the Clerk of the Board to file a notice of completion. A public hearing was held on the DEIS on October 26, 1981.

From March 1981 through November 1981 the Board secured options for the purchase of real property for the location and construction of the Solid Waste Transfer Station System. In February 1982 the final Environmental Impact Statement for a Solid Waste Transfer Station System was completed and found satisfactory. On August 9, 1982 a resolution was adopted to continue with the development of seven solid waste transfer station sites within the County. Subsequently contracts for construction of those sites and for securing equipment were approved and executed. Construction of the transfer stations began in August 1982.

In November 1982 the Board of Legislators approved an agreement between the County and Environmental Consultants, Inc. in regard to a proposed solid waste landfill in Allegany County. In March 1983 transfer stations in the Towns of Caneadea, Canaseraga, Cuba/Friendship, Angelica, Alfred, and Bolivar were opened for operation. The transfer station in Wellsville opened on June 1, 1983.

Pursuant to its agreement with Cattaraugus County, the Allegany County Department of Public Works delivered over 12,000 tons of solid waste to the Cuba refuse to energy incinerator during 1983. Additionally, 10,000 tons of solid waste was disposed of by the County at a private landfill.

In 1984 the Board of Legislators authorized the original improvement of a refuse disposal area designated for the location of a sanitary landfill at a maximum estimated cost of \$972,000. The Department of Public Works began selling recyclable materials collected as part of the solid waste disposal process pursuant to a June 1984 resolution of the Board of Legislators.

A DEIS for the proposed Allegany County Landfill was delivered to the Legislators in November 1984. In December 1984 the Board of Legislators adopted a resolution approving the continuance of the development and operation of a proposed County owned landfill subject to the acquisition of real property. On December 21, 1984 the Board of Legislators resolved to exercise options to purchase property in the Town of Angelica from several owners as a site for the construction of a County landfill. In 1984 the County delivered 17,826 tons of Allegany County solid waste to the Cuba incinerator. The County also delivered 13,200 tons to a private landfill for disposal. In addition, 1984 saw the enactment of the statewide bottle return bill and increased recycling efforts within the County.

In 1985 construction of the County Landfill in the Town of Angelica was commenced. The County Landfill opened on September 23, 1987 and began accepting solid waste. Additionally, during that year the position of Recycling Coordinator was created in the Public Works Department. A voluntary recycling program was instituted and commenced in 1989 with a mandatory program implemented in 1990. In 1987 through 1989 the County Landfill disposed of increasing tonnages of solid waste and the separation and sale of increasing amounts of recyclable materials. In 1988 and 1989 educational programs by the Department of Public Works concerning solid waste management were initiated by the County. In addition, the related issue of the disposal of household hazardous waste was addressed through programs presented at meetings of various civic organizations and through media releases. In 1989 two new cells were constructed at the Landfill and the County Landfill took in 39,800 tons

of solid waste. The County's recycling program removed in excess of 800 tons of solid waste from the waste stream during the year 1989. 1990 saw continued educational efforts by the County with emphasis on all aspects of waste reduction, recycling and composting and their relationship to the overall issue of solid waste management. The County conducted workshops for the public and a recycling workshop for elementary school teachers. Cell 3 of the County Landfill was completed in 1990 and the Landfill disposed of 40,800 tons of solid waste and processed and removed from the waste stream almost 1,100 tons of recyclable materials.

In 1991 the County enacted Local Law No. 1 of 1991 entitled, "A Local Law in Relation to the Maintenance and Operation of Allegany County Solid Waste Management and Resource Recovery." The local law created a comprehensive solid waste management program for Allegany County including requirements for recycling and disposal of hazardous materials. A permit system was adopted for the use of County facilities and disposal of solid waste at the transfer stations and Landfill. During the year 1991 the County also adopted a resolution opposing the construction of a proposed ash monofill by a private corporation to be located in the Town of Angelica. A private construction and demolition debris landfill opened in the County in April 1991. Cell 4 of the County Landfill, construction of a leachate storage pond and new ground water monitoring wells were begun in 1991 and completed in 1992. Over 31,400 tons of solid waste was disposed of at the County Landfill and 2,150 tons of recyclable materials were collected and removed from the waste stream in 1991.

The Board of Legislators approved the construction of additional cells at the County Landfill in 1992, and in September 1992 approved the Allegany County Solid Waste Management Plan subject to the review and advice of the New York State Department of Environmental Conservation. In 1993 the County purchased additional land adjoining the Landfill in order to improve the efficiency of Landfill operations. The Allegany County Solid Waste Management Plan was officially approved by the New York State Department of Environmental Conservation and adopted by the Board of Legislators in January 1994. The Plan provided an integrated system of solid waste management for the County. The remainder of the 1990's saw the implementation of the County Solid Waste Management Plan, its updating as required by law, and the continued growth of the County recycling program.

In 1998 the proposed privately owned ash monofill in the Town of Angelica (the Hyland Facility) was permitted as a solid waste disposal facility. This facility accepted and continues to accept construction and demolition debris. The vast majority of the solid waste accepted at the Hyland Facility was and is generated outside of Allegany County.

By 1999 the County was processing on an annual basis over 4,000 tons of recyclable materials and continued construction of additional Landfill cells was authorized. In August 1999 the issue of whether or not to operate the Landfill as an enterprise fund was raised and referred to the Public Works Committee of the Board of Legislators. In 2000 the Board of Legislators enacted Local Law No. 2 of 2000 that made changes in the operation of the County Solid Waste Management and Resource Recovery System and repealed Local Law No. 1 of 1991. The early years of the 21st Century have seen continued growth in the operation of the

County's integrated solid waste management system and the efficiency of its recycling program.

Since the inception of the County's Solid Waste Management Program the expenses of the disposal of solid waste and recycling have been paid for through the general tax levy. Until 2004 only a nominal fee of \$10 had been charged for a permit to use the County system. In order to assist in paying for the operation of the Integrated Solid Waste Management System and to help reduce the tax burden, the County has entered into agreements with other municipalities and private businesses for the acceptance of solid waste generated outside of the County. Some of these materials have been used as daily cover for the Landfill thereby contributing to the economical operation of the Landfill. All of such agreements have proved to be beneficial to the County's operation. However, concern developed regarding the resulting diminution in landfill space and the attendant decrease in probable life of the County Landfill.

The general tax levy method of financing the costs of waste disposal allows tax-exempt entities to dispose of solid waste without cost. This financing method places the burden for covering the disposal expenses of those tax-exempt entities, some of which are large and produce a significant amount of waste, on the taxpayers. In 2002 and 2003 the Board of Legislators and its various committees conducted an examination of the financing of the County's Solid Waste Operation and determined that the imposition of modest annual fees should be used to help offset disposal costs. In 2003 the Board of Legislators adopted a resolution amending the solid waste rules and regulations to provide for an annual individual user fee of \$60 within the existing permit structure for the disposal of solid waste in the County's system. Additionally, municipalities that collect and haul solid waste to be disposed of in the County system, either directly or through contract, were charged a nominal fee of \$500. Large commercial solid waste collectors and haulers were charged an annual permit fee of \$2,500 and smaller commercial collectors and haulers a lesser amount. The imposition of this user fee system did not pay the total cost of solid waste disposal in Allegany County and the Board continued its study and investigation into alternative methods of paying the costs of disposal of non-recyclable solid waste.

This Board has thoroughly investigated the operations of the Allegany County Solid Waste System and has determined that the most equitable method of financing the disposal of solid waste for the citizens of Allegany County is a user fee for the disposal of non-recyclable waste. While such a user fee system will not immediately pay the total cost of solid waste disposal in the County, a user fee system is a much more fair, equitable and fiscally responsible method to pay for the solid waste system than taxes, because all waste generators, including tax-exempt entities, pay based on the amount of waste they dispose of and this fee system is structured to allow the County Solid Waste System to eventually be self-sustaining. Additionally, with no fees charged for the delivery of recyclable materials to the County system, there is a financial incentive for all waste generators to lower their disposal costs. This user fee system maximizes the opportunities for environmental benefits from increased recycling and waste reduction activities, and all waste generators are equitably served when all generators deliver their wastes, both non-recyclable and recyclable, to the County's system. However, fiscal inequity results when some waste generators or a significant number of haulers do not participate in the system. In addition, waste reduction and recycling

benefits are lost when recyclable materials are commingled with non-recyclable waste for disposal at non-County facilities.

The Allegany County Board of Legislators finds that additional programs and additions to the existing system of public solid waste disposal facilities will be required from time to time to implement the solid waste management program in the future. These include, but are not limited to, the necessity of periodically expanding the Landfill and other system components in order to continue to provide a local, long-term, publicly owned and operated solid waste management system that will provide an environmentally sound and secure disposal site for non-recyclable wastes and a processing system for recyclable wastes to reliably meet the needs of future generations of residents, businesses and other local generators of solid waste; the investigation into and implementation of new and more economical and environmentally sound methodologies for the disposal of non-recyclable solid waste and the processing of recyclables as they are developed to help extend the useful life of the County Landfill; and the continued evaluation of the feasibility of recycling additional materials, as warranted by market and economic conditions.

The Allegany County Board of Legislators further finds and declares that the integrated system developed pursuant to the Solid Waste Management Plan has been and continues to be intended to serve all of the waste generators in Allegany County in an environmentally sound and reliable manner, for current and future generations. That the integrated County system was not designed to dispose of large quantities of construction and demolition debris and that there currently exist in the County two permitted privately owned facilities which accept construction and demolition debris for disposal. Therefore, the amount of County-generated construction and demolition debris accepted for disposal in the County system should be subject to limitation. The system of disposal is most effective in achieving its goals, both in terms of system administration and equitable distribution of system costs, when all of the non-recyclable and recyclable waste generated in Allegany County is directed to the County owned facilities established for the system. As a result of recent judicial action in the Federal Courts, legal uncertainty with respect to the power of municipal governments to direct the flow of waste to public facilities has been resolved. The County of Allegany is legally empowered to direct the flow of waste generated in the County to facilities constructed by the County for the disposal, recycling or other processing of solid waste. The County hereby declares it in the public interest to adopt the annexed legislation requiring the delivery of all solid waste and recyclable waste generated within the County to the Allegany County Landfill or transfer stations for disposal, in order to include such waste within the integrated system, for the long term benefit of all participants of the system and the residents and taxpayers of this County.

SECTION 2. DEFINITIONS.

As used in this local law:

1. "Board of Legislators" means the Board of Legislators of the County of Allegany.

2. "Commercial Waste Collector" means a waste collector who engages in the collection, pickup, transfer, removal and/or disposal of solid waste and/or recyclable material and transports that solid waste or recyclable material to a Solid Waste Management Facility as a business or for compensation.

3. "Committee" means the Public Works Committee of the Board of Legislators.

4. "Commercial and Industrial Solid Waste" means solid waste generated by stores, offices, institutions, restaurants, warehouses, manufacturing or industrial processes in industrial facilities, non-manufacturing processes in industrial facilities and agricultural enterprises. This term does not include oil or gas drilling, production, and treatment wastes (such as brines, oil and fluids); or overburden, spoil, or trailing resulting from mining; or solution mining brine and insoluble component wastes.

5. "Construction and Demolition Debris" means uncontaminated solid waste resulting from the construction, remodeling, repair and demolition of structures and roads; and uncontaminated solid waste consisting of vegetation resulting from land clearing and grubbing, utility line maintenance and seasonal and storm related cleanup. Such waste includes, but is not limited to: bricks, concrete and other masonry materials, soil, rock, wood, wall coverings, plaster, drywall, plumbing fixtures, non-asbestos insulation, roofing shingles, asphaltic pavement, glass, plastics that are not sealed in a manner that conceals other wastes, electrical wiring and components containing no hazardous liquids, and metals that are incidental to any of the above. Solid waste that is not construction and demolition debris (even if resulting from the construction, remodeling, repair and demolition of structures and roads and land clearing) includes, but is not limited to: asbestos wastes, garbage, corrugated container board, electrical fixtures containing hazardous liquids such as fluorescent light ballasts or transformers, carpeting, furniture, appliances, tires, drums and containers, and fuel tanks. Specifically excluded from the definition of construction and demolition debris is solid waste (including what otherwise would be construction and demolition debris) resulting from any processing technique, other than that employed at a construction and demolition processing facility, that renders individual waste components unrecognizable, such as pulverizing or shredding.

6. "County Facility" means a Solid Waste Management Facility owned or operated by the County of Allegany.

7. "Department" means the Allegany County Department of Public Works.

8. "Person" means any individual, educational institution or other institution, group of individuals, partnership, firm, corporation, not-for-profit organization, association, state, county, city, town, village, improvement district or any other entity.

9. "Recyclable Material" means any material designated, from time to time, by the regulations adopted pursuant to this local law or the Department which is separated from the waste stream and held for its material recycling or reuse value.

10. "Residential Waste" means solid waste generated from all houses, apartments, and other residential dwellings, including, but not limited to, all single family dwellings and multifamily dwellings in the County.

11. "Residential Waste Collector" means a waste collector who engages in the collection, pickup, transfer, removal and/or disposal of residential solid waste and/or recyclable material generated at the waste collector's dwelling and transports that residential solid waste or recyclable material to a Solid Waste Management Facility.

12. "Resource Recovery" means the separation, extraction and recovery of usable materials, energy or heat from solid waste through source separation, recycling centers or other programs, projects or facilities.

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

14. "Solid waste generated outside of the County of Allegany" means solid waste created outside of the geographic boundaries of the County of Allegany.

15. "Solid Waste Hearing Board" means the Board described in SECTION 13. of this Local Law.

16. "Solid Waste Management" means the purposeful and systematic collection, pickup, transportation, removal, storage, processing, recovery and disposal of solid waste and recyclable material.

17. "Solid Waste Management Facility" means any facility employed beyond the initial solid waste pickup and collection process including, but not limited to, transfer stations, baling facilities, rail haul or barge haul facilities, processing systems, including recycling facilities, resource recovery facilities or other facilities for reducing solid waste volume, sanitary landfills, facilities for disposal of construction and demolition debris, plants and facilities for compacting, composting or pyrolyzation of solid wastes, incinerators and other solid waste disposal, reduction or conversion facilities.

18. "Source Separation" means the segregation of recyclable materials from the solid waste stream at the point of generation for separate collection, sale or other disposition.

19. "Superintendent" means the Superintendent of Public Works of the County of Allegany.

20. "Waste Collector" means any person, including Commercial Waste Collectors and Residential Waste Collectors, so deemed by the Department engaged in the collection, pickup, transfer, removal and/or disposal of solid waste and/or recyclable material and transports that solid waste or recyclable material to a Solid Waste Management Facility.

SECTION 3. LEGISLATIVE AUTHORITY.

The Board of Legislators has the power to:

1. Formulate, adopt, promulgate, amend, modify and repeal rules and regulations in furtherance of this Local Law for controlling the storage, collection, recycling and disposal of solid waste and recyclable material in Allegany County.

2. Control the storage, collection, recycling and disposal of solid waste and recyclable material in accordance with the provisions of this Local Law, and of the rules and regulations promulgated pursuant hereto.

3. Hold hearings, subpoena and compel the attendance of witnesses and the production for examination of any book, paper or item relating to the matter under investigation; for this purpose, the Public Works Committee of the Board of Legislators is designated to hold hearings and issue subpoenas. The Board of Legislators, upon recommendation of the Chairman of the Board of Legislators, may designate any of its members or the Superintendent of Public Works to hold hearings and issue subpoenas.

4. Make findings of fact and determinations.

5. Make, modify, amend, repeal or cancel orders affecting the control of the storage, collection, pickup, transportation, recycling or disposal of solid waste and recyclable material.

6. Request the County Attorney to institute civil actions, proceedings or hearings to compel compliance with the orders of the Board of Legislators, and with the provisions of this Local Law and the rules and regulations promulgated pursuant hereto.

7. Prepare and issue or direct the preparation and issuance of criminal informations or otherwise institute criminal proceedings against persons found to be in violation of this Local Law.

8. By resolution or local law, fix, modify or change fees for the use of County Facilities or the disposal, storage, processing of solid waste and recyclable material and for permits and renewals thereof.

9. Delegate the issuance of permits and renewals thereof to the Superintendent of Public Works.

10. Cancel, suspend or revoke permits after a hearing.

11. Take such other action as it may deem necessary, proper or desirable to enforce the provisions of this Local Law, or any of the rules and regulations promulgated pursuant hereto.

SECTION 4. GENERAL FUNCTIONS, POWERS AND DUTIES OF THE DEPARTMENT AND THE SUPERINTENDENT.

1. It shall be the responsibility of the Department, in accordance with such existing provisions and limitations as may be by law and elsewhere set forth in law, by and through the Superintendent, to carry out the solid waste management and resource recovery policies of the County of Allegany. In so doing, the Superintendent, with the advice and consent of the Committee, shall have power to:

- a. Coordinate and develop policies, planning and programs related to the solid waste management and resource recovery of the County of Allegany.
- b. Prescribe the practices and procedures for use of County Facilities, including hours of operation and directing to which County Facility certain types of solid waste or recyclable material shall be delivered.
- c. Prescribe and recommend methods for the processing, recovery, recycling and reuse of solid waste or, where recycling and reuse are not possible, the disposal of solid waste, including domestic and industrial refuse, junk cars, litter and debris consistent with sound health, scenic, environmental quality, and land use practices, including but not limited to, solid waste offered for disposal at County Facilities, including, but not limited to, the types of solid waste acceptable for disposal at County Facilities, the limitation of disposal of such waste to solid waste generated solely within the County of Allegany except when solid waste generated outside of the County of Allegany is authorized for disposal at a County Facility by resolution or local law adopted by the Board of Legislators when it may from time to time determine it to be in the public interest to allow such outside solid waste to be so disposed.
- d. Encourage activities consistent with the purposes of this law by advising and assisting local governments, institutions, industries, and individuals.
- e. Undertake a public information and education program to inform and involve other public and private organizations and groups and the general public in the commitment to the principles and practices of Allegany County Solid Waste Management.
- f. Cooperate with the executive, legislative and planning authorities of the State of New York, neighboring counties and their municipalities in furtherance of the policies of the County of Allegany.
- g. Exercise and perform such other functions, powers and duties as shall have been or may be from time to time conveyed or imposed by law, including, but not limited to, all

the functions, powers and duties assigned and transferred to the Department by the Board of Legislators.

h. Recommend to the Public Works Committee such rules and regulations to implement this law, or other laws or resolutions of the Board of Legislators and the Committee, as well as assure compliance with the Environmental Conservation Law, the Rules and Regulations of the New York State Commissioner of Environmental Conservation and the United States Environmental Protection Agency.

SECTION 5. SOURCE SEPARATION IMPLEMENTATION.

1. Each Commercial Waste Collector shall submit a plan for approval to the Superintendent not more than 60 days after the adoption of this local law and any and all regulations pursuant to the local law to provide for collection of solid waste and recyclable material. Such plan shall include, but not be limited to, the description of the type of waste, frequency of collection, names and addresses of all persons whose solid waste will be collected, and provision for collecting and marketing recyclable material. Such a plan shall also propose a schedule of implementation which implementation shall take effect no later than January 1, 2005.

2. Any persons who dispose of solid waste, including recyclable material, at a Solid Waste Management Facility shall separate such solid waste and recyclable material in accordance with such rules and regulations as are adopted and promulgated by the Committee.

3. On or before March 1st of each year, all Commercial Waste Collectors shall submit a report to the Superintendent containing the total amount, broken down by type, of recyclable materials removed by such Commercial Waste Collector from the waste stream.

SECTION 6. PERMITTING OF WASTE COLLECTORS AND PERSONS.

1. Prior to disposing of solid waste or recyclable material at the County Landfill or other County Facility, all Commercial Waste Collectors, Resident Waste Collectors, Waste Collectors and Persons shall obtain a permit from the Department. Issuance of a permit to a Waste Collector or Person shall allow the holder of the permit to offer for disposal and dispose of, at a County Facility, solid waste or recyclable material generated solely within the County of Allegany, or generated outside the County of Allegany when authorized by the Board of Legislators in accordance with the provisions of section three of this local law, and acceptable for disposal pursuant to rules and regulations adopted and promulgated by the Committee.

2. No Waste Collector or Person shall offer for disposal or dispose of solid waste or recyclable material inconsistent with this local law, the rules and regulations promulgated pursuant to this local law or other local law or resolution of the Board of Legislators or the Environmental Conservation Law. Such inconsistent offering or disposal of solid waste or recyclable material shall constitute a violation of this local law.

3. Any Person who is a resident or taxpayer of the County of Allegany, operates a business in the County of Allegany or is specifically designated by the Board of Legislators shall be entitled to a permit hereunder.

SECTION 7. DISPOSAL OF SOLID WASTE.

1. All Waste Collectors and Persons shall deliver all Solid Waste generated within the County to a County Facility for disposal in accordance with this local law and applicable rules and regulations promulgated pursuant hereto. No Waste Collector or other Person shall dispose of Solid Waste at the County Landfill or any County Facility without a duly issued and valid permit.

2. Solid Waste generated outside the County will not be accepted at the County Landfill or at any other County Facility except pursuant to a specific contract approved by the Board of Legislators.

3. Anyone entering the County Landfill or any other County Facility to dispose of Solid Waste must adhere to the rules and regulations promulgated pursuant to this local law and must follow the instructions of the attendant on duty.

4. Nothing in this local law shall be construed at any time to restrict the ability of the Department to refuse to accept Hazardous Waste or other Prohibited Materials at the County Landfill or any other Facility.

5. No Waste Collector or other Person shall dispose of Solid Waste at the County Landfill or at any other County Facility unless such Person or entity shall pay the applicable disposal or user fee established by the Board of Legislators for the disposal of such waste.

6. All Solid Waste disposal requirements specified in this subsection, including, but not limited to, disposal or user fees or charges, may be imposed, changed, amended or adjusted at any time by resolution of the Board of Legislators or by the Committee or Department acting in accordance with this local law and rules, regulations and/or policies and guidelines adopted, promulgated or established pursuant to this local law.

SECTION 8. DISPOSAL OF RECYCLABLE MATERIAL.

1. All Waste Collectors and Persons shall deliver all Recyclable Material generated within the County to a County Facility. No Waste Collector or other Person shall dispose of Recyclable Material at a County Facility without a duly issued and valid permit.

2. All Persons generating Solid Waste and/or Waste Collectors collecting Solid Waste and/or Recyclable Material generated within the County, must separate such Recyclable Material from the Solid Waste stream into such categories and/or into such packages or containers as specified in this local law or as designated and prescribed by the rules and regulations promulgated pursuant to this local law or the Department, and all Waste Collectors and other Persons holding duly issued and valid permits must ensure that any such Recyclable Material be delivered to a County Facility. The Department will maintain an up-to-

date list of Recyclable Material, which may be modified from time to time by resolution of the Public Works Committee or by the Department acting in accordance with policies and/or guidelines established by the Committee that have been adopted, and that may be amended from time to time, by the Board of Legislators.

3. Solid Waste and other materials generated within the County that are not included in the list of Recyclable Material must be separately packaged or contained in proper containers as specified in this local law or as designated by the Department.

4. Customers of Commercial Waste Collectors must be provided the option of hiring full collection services for both Recyclable Material and Solid Waste, or for hiring collection of Solid Waste only, and opting to deliver their own Recyclable Material to a County Facility.

5. No disposal or user fee will be charged at any County Facility for the disposal of Recyclable Material except as specifically imposed by the Board of Legislators.

6. All Recyclable Material disposal requirements specified in this subsection, including, but not limited to, disposal or user fees or charges, may be imposed, changed, amended or adjusted at any time by resolution of the Board of Legislators or by the Committee or Department acting in accordance with this local law and rules, regulations and/or policies and guidelines adopted, promulgated or established pursuant to this local law.

SECTION 9. UNLAWFUL DISPOSAL OF SOLID WASTE.

1. It shall be unlawful for any person to dump, throw, deposit, place or cause to be dumped, thrown, deposited or placed or allow to be thrown, dumped, deposited or placed in any location within Allegany County any Solid Waste or any noxious material, except upon or at a Solid Waste Management Facility, established, owned, operated, licensed, or contracted with, by the Board of Legislators or such other Solid Waste Management Facility constructed, owned or operated in compliance with the provisions of this Local Law.

2. It shall be unlawful for any person to dump, throw, deposit, place or cause to be dumped, thrown, deposited or placed or allow to be thrown, dumped, deposited or placed in any location within Allegany County any Solid Waste which has been previously disposed of in a Solid Waste Management Facility, treated, buried or altered in a Solid Waste Management Facility, except as specifically authorized by the Allegany County Board of Legislators.

3. It shall be unlawful for any person to intentionally dump, throw, deposit or place any Solid Waste upon any County Facility without possessing a duly issued and valid permit and paying any disposal or user fee as may be established by the Allegany County Board of Legislators, unless specifically authorized by the Allegany County Board of Legislators.

SECTION 10. SOLID WASTE MANAGEMENT FACILITY.

1. No person shall operate a Solid Waste Management Facility within the County, except in accordance with all applicable federal and state laws, rules and regulations and this Local Law.

2. The provisions of this Section are in addition to any rules and regulations required for Solid Waste Management Facilities by federal and state regulations, including, but not limited to, 6 NYCRR Part 360.

3. Industrial hazardous waste facilities, as defined and regulated in 6 NYCRR Part 361, are prohibited in the County.

4. Industrial hazardous waste management facilities, as defined and regulated in 6 NYCRR Part 373, are prohibited in the County.

5. Low-level radioactive waste disposal facilities, as defined and regulated in 6 NYCRR Part 382, are prohibited in the County.

SECTION 11. PROMULGATION OF RULES AND REGULATIONS.

The Public Works Committee of the Allegany County Board of Legislators shall have the power to adopt and promulgate rules and regulations pursuant to this local law. The Superintendent shall cause a proposed rule or regulation to be posted conspicuously in the Department in a place maintained for that purpose and on the official bulletin board for notices located in the Allegany County Courthouse at Belmont, New York, where it is accessible to members of the general public, and shall cause a copy of the proposed rule or regulation to be provided to the members of the Committee at their mailboxes maintained at the County Office Building, Belmont, New York; such posting and depositing to be at least twenty (20) days prior to offering the proposed rule or regulation for adoption at a regular or special meeting of the Committee. A member of the general public requesting a copy of the posted proposed rule or regulation from the Department shall be provided one copy without charge. A copy of the proposed rule or regulation shall be filed with the Clerk of the Board of Legislators who shall cause a summary of such proposed rule or regulation and notification of its filing in such Clerk's office to be published once in the official newspapers at least ten (10) days prior to offering the proposed rule or regulation for adoption at such regular or special meeting of the Committee. Prior to the vote on the question of adoption of the proposed rule or regulation at such meeting of the Committee, an opportunity to be heard shall be given to the public. Adoption of the rule or regulation shall be upon the affirmative vote of a majority of all regular members of the Committee. Upon adoption, a copy of the rule or regulation shall forthwith be transmitted to the Clerk of the Board of Legislators for filing and shall be binding as law on the tenth (10) day after such filing, excluding the day of filing.

SECTION 12. HEARINGS.

1. All hearings held pursuant hereto shall be upon not less than five (5) days notice to the Waste Collector or Person involved, and shall be held at a time and location specified by the Board of Legislators, or if designated by the Board of Legislators, the Public Works Committee of such Board, the Solid Waste Hearing Board, any ad hoc committee appointed by the Chairman of the Board, or the Superintendent of Public Works.

SECTION 13. ENFORCEMENT.

1. Civil Sanctions:

a. The Superintendent may suspend or revoke a permit for violation of the provisions of this Local Law, or of the rules and regulations adopted and promulgated hereunder.

b. Suspension or revocation of a permit shall become final five (5) days after service of a notice thereof upon the holder of a permit.

c. The holder of the permit or other aggrieved party affected by such suspension or revocation may request a hearing by the Solid Waste Hearing Board to consider the action of the Superintendent of Public Works by serving upon the Clerk of the Board of Legislators, a request for a hearing within five (5) days following the service of the notice of suspension or revocation. The requested hearing shall be held no later than five (5) business days after the receipt of such request.

d. Such suspension or revocation shall continue in effect pending determination by the Solid Waste Hearing Board.

e. The Superintendent of Public Works, or the Superintendent's designee, may deny access to a County Facility for just cause.

f. Appeal of this denial may be made to the Solid Waste Hearing Board in the same manner as set forth in paragraph 1.c. of this section.

g. The denial of access shall continue in effect pending determination by the Solid Waste Hearing Board.

h. A permit which has been revoked or suspended shall be surrendered forthwith to the Superintendent of Public Works.

i. Service of any notice, order or decision upon a Person shall be made as follows:

1. by mailing a copy of such notice, order or decision by ordinary mail in a postpaid envelope directed to the person affected thereby at the person's residence or business address as set forth in the permit application on file in the Department, or

2. by leaving a copy of such notice, order or decision with the person, or the person's agent.

3. service of any notice shall be made upon the Board of Legislators, Public Works Committee of such Board or Superintendent of Public Works by mailing

the notice in a postpaid envelope directed to the Clerk of the Board of Legislators and the Superintendent of Public Works.

4. the Solid Waste Hearing Board shall consist of three (3) legislators to be appointed by the Chairman of the Board of Legislators on an annual basis and shall serve a term of one (1) year. The Chairman of the Public Works Committee shall be one (1) of the members of the Solid Waste Hearing Board and the other two (2) members of the Board shall not be members of the Public Works Committee. The Chairman of the Board of Legislators shall also appoint two (2) alternate members to serve in the place of a regular member in the event of the inability of such regular member to serve. The Chairman of the Public Works Committee shall designate a member of the Public Works Committee to serve as an alternate member of the Hearing Board in the event that the Chairman of the Public Works Committee is unable to serve. After hearing, the Solid Waste Hearing Board may sustain, modify or cancel any suspension or revocation of a permit made by the Superintendent. Each member of the Board of Hearing may designate an individual to serve in his or her place and stead for such period as shall be reasonably necessary. The Committee's Chairperson may designate a third member of the Committee to serve in the Chairperson's place and stead, and upon such designation the Board of Hearing may waive the Committee Chairperson's attendance and participation.

2. Criminal Sanctions:

a. The Allegany County Sheriff's Department, New York State Police, New York State Department of Environmental Conservation Officers and all local law enforcement agencies shall be empowered to initiate proceedings against violators hereof in the name of the County in addition to any other remedies available under State or local law.

b. Any Person violating the provisions of this local law or any applicable rules, regulations or requirements of the Department shall be guilty of a violation, which shall be punishable upon conviction by a fine of up to \$500.00. Each day during which a violation continues shall be deemed to be a separate violation.

c. The Court may also order community service in lieu of, or in addition to, a fine. Any fines shall be directed to be payable to the County of Allegany and shall be transmitted to the County Treasurer.

d. Failure to pay any fine may result in imprisonment as prescribed in the Criminal Procedure Law.

3. Enforcement Guidelines:

The Department or Committee may establish and modify from time to time enforcement guidelines that have been adopted, and that may be amended from time to time, by the Board of Legislators with regard to any provision of this local law, including but not limited to enforcement guidelines for any provision of this local law that has not been in effect prior to January 1, 2005.

4. In addition to or in lieu of criminal penalties under this Section, the County of Allegany may maintain an Action or Proceeding in a Court of competent jurisdiction to compel compliance with and/or prohibit any violation of the provisions of this law, including injunction, temporary restraining order or other legal remedy available under the laws of the State of New York.

5. In addition to the above remedies, any collector, person, corporation, partnership or other entity violating this Law shall forthwith remove from the County any material imported or deposited in violation of this Law and shall also be responsible for any direct, or indirect, costs associated with correcting the violation.

6. A third violation of any of the provisions of this Local Law may result in permanently barring the collector or person from using any county facility at the discretion of the Superintendent of Public Works.

SECTION 14. APPLICABILITY.

The County of Allegany recognizes that pursuant to Environmental Conservation Law Section 27-0711, this Local Law shall not be in effect with respect to any new Solid Waste Management Facility located in any city, village or area of any town, located within the County of Allegany, during the time that such city, village or town has in effect any local law, ordinance or regulations promulgated pursuant to Environmental Conservation Law Section 27-0711, provided that such local law, ordinance or regulations are not inconsistent with the New York State Environmental Conservation Law. In the event that any city, village or town repeals or ceases to have any local law, ordinance or regulations described in this subsection, this Local Law shall thereupon automatically take effect in such city, village or town.

SECTION 15. SEVERABILITY.

If any provision of this Local Law, or the application thereof to any person or circumstance, shall be held invalid, the remainder of such Local law, or the application of such provision to any other person or circumstances, shall not be affected thereby.

SECTION 16. REPEAL OF LOCAL LAW NO. 2 OF THE YEAR 2000.

1. Local Law No. 2 of the year 2000 and any amendments thereto, are hereby repealed as of the effective date of this Local Law.

SECTION 17. EFFECTIVE DATE.

This local law shall take effect immediately.

Appendix C

Existing Educational Material

Household Hazardous Waste Day Scheduled for September

The Allegany County Department of Public Works is announcing their 20th annual Household Hazardous Waste Collection Day to be held September 7, 2019. The collection will be held from 8:00 a.m. to 12 noon at the Belmont Transfer Station. Some of the items accepted include oil based paints, insecticides, poisons, pesticides, solvents and pool chemicals.

Pre-registration is required and only Allegany County residents can participate. Common household products with warning labels that read danger, poison and caution are considered potentially hazardous and should not be casually thrown the garbage.

For questions on household hazardous materials or to register for this year’s event give Tim Palmiter a call at 585-268-7282 or email palmitt@alleganyco.com



Department of Public Works
7 Court Street, Room 210
Belmont, New York 14813
585-268-9230 ph
585-268-9648 fax
www.alleganyco.com

Issue
01
March
2019

2019 HOLIDAY CLOSURE SCHEDULE

~ Every Monday~

July 4
(Independence Day)

November 28– 29
(Thanksgiving)

December 25
(Christmas)

January 1, 2020
(New Year’s Day)



Landfill/Transfer Stations

(585) 268-5400

Recycling

(585) 268-7282
Tim Palmiter
palmitt@alleganyco.com

www.alleganyco.com

The ReSource

ALLEGANY COUNTY DEPARTMENT OF PUBLIC WORKS



2019 Fees for Residents

Residential Permit Fees (Cash, Check or Credit Card)	
Residential Hang Tag (April 1—March 31) (Tags are non-transferable and must be displayed at all times)	\$200/Year
Lost Tag Hang Fee	\$100
Disposal Tickets (Pay Per Bag)	
Price Per Bag:	
13 gallon or smaller	\$1.00
30 gallon	\$3.00
55 gallon bag or barrel	\$5.00
Other Residential Fees (Cash or Check only)	
Pay per Load (County Scales— Belmont only)	\$50/Ton
Minimum Scale Fee for Weighing In	\$20
Construction & Demolition (C&D) Debris	\$50/Ton
-May dispose of small amounts using the Residential Hang Tag each visit to the Transfer Station. A small Amount is equal to what the resident can physically Carry from the vehicle to the hopper in one trip per Day equal to a 55 gallon container.	
CFC (Freon) Containing Appliances (Belmont Only)	\$10
*Doors must be removed from Refrigerators/Freezers	
White Goods— Washers, Dryers, Stoves, etc. (Belmont Only)	No Charge
Mattress/Box Springs (1 set per visit)	No Charge
Used Tire Disposal— Must be removed from rims (Belmont Only)	
-Passenger/Light Truck	\$2.50
20" or 24.5"	\$15.00
Larger then 24.5"	\$200/Ton
Tires up to 24.5" in loads of 20 or more-	\$200/ton



Allegany County Recycle Guide 2019



Accepted: Newspapers, magazines, paper, junk mail, envelopes

How to Prepare: Keep Dry

Not Accepted: Any paper product with wax or contaminated with food (please discard)



Accepted: Cereal boxes, shoe boxes, corrugated cardboard, brown paper bags, etc...

How to Prepare: Flatten all boxes, Keep Dry

Not Accepted: Padded mailing envelopes, detergent boxes, wax coated containers, manila folders



Accepted: Plastic containers, bottles, and jugs with #1—#7 on the bottom including items such as milk jugs, water bottles, laundry detergent, shampoo, yogurt and butter tubs.

How to Prepare: Clean with lids removed

Not accepted: Black plastic, Styrofoam, food and candy wrappers, toys, non-containers



Accepted: All glass containers, bottles, jars that are clear, green or brown

How to Prepare: Clean. Remove and discard metal rings and lids. Labels do not need to be removed.

Not Accepted: Glass containing lead, such as auto glass and window glass cannot be recycled.



Accepted: Most metal cans we use everyday can be recycled. Recycle steel, tin and aluminum cans.

How to Prepare: Clean

Not accepted: Aerosol cans, aluminum foil, pie tins or trays



Lead Acid Batteries— These are found in motor vehicles, lawn mowers, Power Wheel-type ride on toys and other applications.



Scrap Metal- Accepted at all County Transfer Stations during normal business hours.

Tim Palmiter, Recycling Coordinator 585-268-7282 palmitt@alleganyco.com

Residential Electronics Recycling Events

Covered Electronic Equipment, as defined by the NYSDEC will be accepted at the quarterly collection events at the Belmont Transfer Station from 9:30 a.m. to 12:30 p.m. each event.



April 13, 2019
August 17, 2019
October 19, 2019

What to bring to E-Waste Events:

Televisions / Computer Monitors of all types

Computer Peripherals (any cable, cord, wiring or accessory that plugs into a computer)

Small Electronic Equipment

VCR's, DVR's, DVD Players, Cable Boxes, Digital Music Players

Game Consoles

Small Scale Servers

To participate in the events, County Residents will need to present on arrival any of the following:

1. Current Allegany County Solid Waste Residential Disposal Permit a.k.a. "Hang Tag" (or)
2. Allegany County Solid Waste Disposal Ticket a.k.a. "Mark Off Ticket" (or)
3. Allegany County Recycling Permit, (Available free of charge to all County Residents)

2019 Monthly Television Collection Dates:

January 5 -	Caneadea Transfer Station
February 2-	Canaseraga Transfer Station
March 2-	Friendship Transfer Station
April 6-	Alfred Transfer Station
May 4 -	Bolivar Transfer Station
June 1-	Wellsville Transfer Station
July 6-	Caneadea Transfer Station
August 3-	Canaseraga Transfer Station
September 7-	Friendship Transfer Station
October 5-	Alfred Transfer Station
November 2	Bolivar Transfer Station
December 7	Wellsville Transfer Station



*****Limit of 2**

www.alleganyco.com

What Do I Do With:

Please Note: Disposal of Residential Waste at any Allegany County Transfer Station requires either a Residential Disposal Permit or Disposal Tickets. In addition, Commercial and Residential Waste may be brought to the Belmont Transfer for Disposal, and paid for by weight. Recycling is free of charge.

Antifreeze (Used) - No Fee

Accepted at our annual Household Hazardous Waste Collection Day; which is held the first Saturday after Labor Day.

Appliances- No Fee

Accepted for recycling at the Belmont Transfer Station

Appliances (Containing CFC (Freon))-

Accepted at Belmont Transfer Station - \$10 fee

Agricultural Plastic-

Ag-Plastic can also be disposed of as Commercial Waste at the Belmont Transfer Station, disposal fee required.

Ashes, Burn Barrels-

Ashes are not accepted at any Allegany County Waste Facility. Ashes may be used for "sanding" driveways or disposed of/buried on owner's property.

Empty burn barrels may be recycled at all county transfer stations during normal operating hours.

Batteries (Lead, Rechargeable, Alkaline)-

Lead Acid: May be recycled at any County Transfer Station during normal operating hours

Household non-rechargeable (AA, AAA, C, D, 9v, etc...)- These batteries no longer contain hazardous waste and are safe to be disposed of with household waste.

Household Chargeable (AA, AAA, C, D, 9v, etc...)- These are accepted at our Annual Household Hazardous Waste Collection Day, first Saturday after Labor Day.

Cordless Tool Batteries- May be returned to any retail store that sells like items.

What Do I Do With:

Please Note: Disposal of Residential Waste at any Allegany County Transfer Station requires either a Residential Disposal Permit or Disposal Tickets. In addition, Commercial and Residential Waste may be brought to the Belmont Transfer for Disposal, and paid for by weight. Recycling is free of charge.

Corrugated Cardboard/Cereal Boxes- No Fee

Accepted at any County Transfer Station for recycling during normal operating hours. Please **Flatten All** Boxes.

Electronics-

Covered Electronic Equipment, as defined by the NYSDEC <http://www.dec.ny.gov/chemical/66872.html>, will be accepted at quarterly collection events at the Belmont Transfer Station. In addition, **Televisions only** will be accepted for recycling at the Wellsville Transfer Station, on the first Saturday of every month, during normal operating hours.

Cell Phones- May be returned to retailer for recycling.

Other electronics not listed above:

If over 50% metal, may be recycled as scrap metal at any Allegany County Transfer Station during normal operating hours.

If less than 50% metal may be disposed of as household waste.

*E-Waste Collection Events (no fee) - Contact Tim Palmiter, Recycling Coordinator for scheduled dates.

Fluorescent Bulbs-

Accepted at our annual Household Hazardous Waste Collection Day, first Saturday after Labor Day.

Fuel Tanks-

Metal Fuel Tanks- May be recycled at any Allegany County Transfer Station, during normal operating hours. **Tanks MUST Be EMPTY with AT LEAST 4-½" holes punctured in the bottom of the tank.**

Plastic Fuel Tanks- These may be brought to the Belmont Transfer Station and disposed of as Commercial Waste. **Tanks MUST Be EMPTY with AT LEAST 4-½" holes punctured in the bottom of the tank.**

What Do I Do With:

Please Note: Disposal of Residential Waste at any Allegany County Transfer Station requires either a Residential Disposal Permit or Disposal Tickets. In addition, Commercial and Residential Waste may be brought to the Belmont Transfer for Disposal, and paid for by weight. Recycling is free of charge.

Furniture (Including Mattresses/Box Springs)-

Disposable as household waste at all Allegany County Transfer Stations, during normal business hours. Maximum of one (1) Mattress/Box Spring per day.

Household Hazardous Waste- No Fee

Accepted at our annual Household Hazardous Waste Collection Day, first Saturday after Labor Day.

Motor Oil/Filters-

Used motor oil is accepted for recycling at many local service locations and retailers, <http://www.dec.ny.gov/chemical/8786.html>. Used oil filters must be thoroughly drained and may then be disposed of with household waste.

Newspaper- No Fee

Accepted for recycling at any County Transfer Station during normal business hours.

Paint/Paint Cans- No Fee

Latex Paint- Disposable at all Allegany County Transfer Stations, MUST BE HARDENED/SOLIDIFIED (no liquids) prior to disposal. This may be accomplished by mixing in an absorbent material such as floor dry or kitty litter.

Oil-Based Paints- Accepted at our Annual Household Hazardous Waste Collection Day, first Saturday after Labor Day

Empty Paint Cans- May be disposed of as household waste.

Paper, Magazines, Junk Mail and Office Paper: No Fee

Accepted for recycling at any County Transfer Station during normal operation hours.

Pharmaceutical Waste- No Fee

There are several locations throughout Allegany County that offer drop boxes for disposal. <https://ppaccentral.org/pill-drop-locations/>

Propane Tanks- No Fee

Accepted for recycling at any County Transfer Station during normal operating hours.

Scrap Metal- No fee

Accepted for recycling at any County Transfer Station during normal operating hours.

What Do I Do With:

Please Note: Disposal of Residential Waste at any Allegany County Transfer Station requires either a Residential Disposal Permit or Disposal Tickets. In addition, Commercial and Residential Waste may be brought to the Belmont Transfer for Disposal, and paid for by weight. Recycling is free of charge.

Sharps/Syringes- No Fee

Sharps may be brought, in approved containers, for disposal to any County Transfer Stations during normal business hours. Approved Sharps Disposal Containers are available, free of charge, to Allegany County residents at all Allegany County Transfer Stations during normal business hours. **LOOSE SYRINGES WILL NOT BE ACCEPTED**

Tires:

Used tires, removed from the wheel/rim, may be brought to the Belmont Transfer Station for disposal, disposal fee required. IF an Allegany County Residential Disposal Permit is purchased, this purchase includes the free disposal of up to four passenger size tires.

Plastic- No Fee

Accepted for recycling at all Allegany County Transfer Stations. All plastic containers, bottles, and jugs with #1 - #7 on the bottom including items such as milk jugs, water bottles, laundry detergent, shampoo, yogurt and butter tubs. **All containers must be clean with lids removed.**

Plastic Bags-

Accepted for recycling at most area grocery stores/retail stores.

Televisions- No Fee

Televisions **ONLY** are accepted for recycling at the Wellsville Transfer Station, on the first Saturday of every month during normal operation hours. They will also be accepted at the quarterly Electronics Events at the Belmont Transfer Station.

Textiles/Clothes- No Fee

Good condition new and used clothes and shoes may be recycled at many locations throughout the county. There are drop off boxes also located at each Allegany County Transfer Station.

Appendix D

Alternative Technology Evaluation

Alternative Technology Evaluation
Allegany County
Local Solid Waste Management Plan 2020-2029

Implementation Item: 1

Title: Promote Waste Reduction Programs

Administrative/Technical Impacts:

Quantitative/Qualitative Impacts on Waste Stream:

The Waste Reduction Program is expected to reduce select MSW waste volumes by <5%.

Types and Sizing of Facilities or Program:

This program would not affect sizing of current facilities and there would be no infrastructure required by the County. Waste reduction allows the facilities within the planning unit to stay the same size; additional space for waste processing is not anticipated to be necessary.

Summary of Cost Data for Evaluation:

Waste reductions efforts are not expected to have a measurable cost to the County or residents.

Impact on Natural Resource Conservation, Energy Production and, Employment:

MSW reduction is expected to conserve natural resources. Energy production and job creation is not anticipated.

Jurisdictional Impacts:

Interest in Participation by Neighboring Planning Units:

Cattaraugus, Livingston, Steuben, and Wyoming Counties could potentially participate with Allegany County in the Waste Reduction Program. A consistent method between planning units could be useful in education efforts in communities near the county borders.

Alternatives Available with Participation by Neighboring Planning Units:

Activities associated with this program are not dependent on the participation of neighboring planning units.

Recommendations from Neighboring Planning Units:

N/A

Assessment of Environmental Justice Impacts:

According to the NYSDEC Environmental Justice Area Mapper, there are three potential environmental justice areas located in Allegany County, in the Towns of Centerville, Hume, Granger, Grove, and Alfred. There is no known or expected environmental justice impact in Allegany County associated with waste reduction.

Selected Alternatives Identification:

Reasons for Being Chosen:

This alternative is a low-cost method for promoting waste reduction in accordance with the hierarchy of waste management identified in the State SWMP.

Expected Quantitative and Qualitative Impacts On:

Waste Reduction:

Expected to reduce MSW volumes by <5%.

Reuse:

Expected to enhance reuse by <5%.

Materials Recovery:

Expected to enhance materials recovery by 3% to 5%.

Participation in Recovery Opportunities:

Expected to enhance participation by <5%.

Product Stewardship:

No anticipated impact on product stewardship.

Economic, Administrative, or Partnership Benefits:

Expected to reduce expenses <5%.

Identification of Administrative, Contractual, and Financial Requirements for Implementation:

The existing administrative, contractual, and financial structure is sufficient to support ongoing and proposed waste reduction activities.

Identification of New or Modified Local Laws, Ordinances, or Regulations Required for Implementation:

None at this time.

Alternative Technology Evaluation
Allegany County
Local Solid Waste Management Plan 2020-2029

Implementation Item: 2

Title: Promote Reuse Programs

Administrative/Technical Impacts:

Quantitative/Qualitative Impacts on Waste Stream:

The Promotion of Reuse Programs is expected to reduce select MSW waste volumes by <5%.

Types and Sizing of Facilities or Program:

This program would not affect sizing of current facilities and there would be no infrastructure required by the County. Reuse programs allow the facilities within the planning unit to stay the same size; additional space for waste processing is not anticipated to be necessary.

Summary of Cost Data for Evaluation:

Anticipated costs associated with this program are for additional educational efforts.

Impact on Natural Resource Conservation, Energy Production and, Employment:

Reuse of materials is expected to conserve natural resources. Energy production and job creation is not anticipated.

Jurisdictional Impacts:

Interest in Participation by Neighboring Planning Units:

Cattaraugus, Livingston, Steuben, and Wyoming Counties could potentially participate with Allegany County in the promotion of the Reuse Program. A consistent method between planning units could be useful in education efforts in communities near the county borders.

Alternatives Available with Participation by Neighboring Planning Units:

Activities associated with this program are not dependent on the participation of neighboring planning units.

Recommendations from Neighboring Planning Units:

N/A

Assessment of Environmental Justice Impacts:

No known or expected environmental justice impact within Allegany County associated with promoting reuse programs.

Selected Alternatives Identification:

Reasons for Being Chosen:

This alternative is a low-cost method for promoting reuse in accordance with the hierarchy of waste management identified in the State SWMP.

Expected Quantitative and Qualitative Impacts On:

Waste Reduction:

Expected to reduce MSW volumes by <5%.

Reuse:

Expected to enhance reuse by <5%.

Materials Recovery:

Expected to enhance materials recovery by 3% to 5%.

Participation in Recovery Opportunities:

Expected to enhance participation by <5%.

Product Stewardship:

No anticipated impact on product stewardship.

Economic, Administrative, or Partnership Benefits:

Expected to reduce expenses <5%.

Identification of Administrative, Contractual, and Financial Requirements for Implementation:

The existing administrative, contractual, and financial structure is sufficient to support ongoing and proposed reuse promotion activities.

Identification of New or Modified Local Laws, Ordinances, or Regulations Required for Implementation:

None at this time.

Alternative Technology Evaluation
Allegany County
Local Solid Waste Management Plan 2020-2029

Implementation Item: 3

Title: Expand Accepted Materials

Administrative/Technical Impacts:

Quantitative/Qualitative Impacts on Waste Stream:

If markets are available to add materials to the County's recycling program, the quantity of materials diverted due to increased availability of local outlets is expected to increase. This program may result in the diversion of toxic/hazardous components from the waste stream.

Types and Sizing of Facilities or Program:

Additional facility space for added materials is the only sizing criteria associated with this program. Educational programs may be implemented to educate the public on the additional recyclable materials.

Summary of Cost Data for Evaluation:

Anticipated costs associated with this program would be potential additional facility space and potential additional labor for processing materials. These costs will vary based on the type and quantity of additional materials, and could be significant.

Impact on Natural Resource Conservation, Energy Production and, Employment:

An increase of materials accepted at the transfer stations is expected to enhance natural resource conservation. No energy production or job creation are anticipated as a result of this proposed program.

Jurisdictional Impacts:

Interest in Participation by Neighboring Planning Units:

Cattaraugus, Livingston, Steuben, and Wyoming Counties could potentially participate with Allegany County in the proposed program, but is unlikely due to separate recycling programs operated by each planning unit.

Alternatives Available with Participation by Neighboring Planning Units:

Activities associated with this program are not dependent on the participation of neighboring planning units.

Recommendations from Neighboring Planning Units:

N/A

Assessment of Environmental Justice Impacts:

There is no known or expected environmental justice impact in Allegany County associated with the proposed expansion of accepted materials at the transfer stations.

Selected Alternatives Identification:

Reasons for Being Chosen:

This selection of this alternative is based on economics. Additional materials can be integrated into the County's existing recycling program only if markets exist for the sale of collected materials.

Expected Quantitative and Qualitative Impacts On:

Waste Reduction:

Expected to increase recycling volumes by 5%.

Reuse:

Expected to enhance reuse by <5%.

Materials Recovery:

Expected to enhance materials recovery by <5%.

Participation in Recovery Opportunities:

Expected to enhance participation by <5%.

Product Stewardship:

No anticipated impact on product stewardship.

Economic, Administrative, or Partnership Benefits:

Expected to increase operating costs for processing materials as well as revenues from selling additional recyclables.

Identification of Administrative, Contractual, and Financial Requirements for Implementation:

The existing administrative, contractual, and financial structure is sufficient to support the proposed reuse program.

Identification of New or Modified Local Laws, Ordinances, or Regulations Required for Implementation:

None at this time.

Alternative Technology Evaluation
Allegany County
Local Solid Waste Management Plan 2020-2029

Implementation Item: 4

Title: Participate in Agricultural Plastics Recycling

Administrative/Technical Impacts:

Quantitative/Qualitative Impacts on Waste Stream:

Expected to increase recycling efforts by <5% and reduce burial of agricultural waste in-place.

Types and Sizing of Facilities or Program:

Additional facility space is the only anticipated sizing criteria associated with this program. Educational efforts may also be pursued to increase participation in the program.

Summary of Cost Data for Evaluation:

Anticipated costs associated with this program are for additional facility space and educational efforts.

Impact on Natural Resource Conservation, Energy Production and, Employment:

The addition of agricultural plastics to the County's recycling program is expected to enhance natural resource conservation and potentially create new jobs, although minimal. No energy production is anticipated as a result of this program.

Jurisdictional Impacts:

Interest in Participation by Neighboring Planning Units:

Cattaraugus, Livingston, Steuben, and Wyoming Counties could potentially participate with Allegany County in the proposed program.

Alternatives Available with Participation by Neighboring Planning Units:

Activities associated with this program are not dependent on the participation of neighboring planning units, but may become more economically feasible with increase participation from other planning units.

Recommendations from Neighboring Planning Units:

N/A

Assessment of Environmental Justice Impacts:

No known or expected environmental justice impact within Allegany County associated with the agricultural plastics program is expected.

Selected Alternatives Identification:

Reasons for Being Chosen:

The County is largely rural with a significant agricultural community for participation in this program, if funding mechanisms and markets become available.

Expected Quantitative and Qualitative Impacts On:

Waste Reduction:

Expected to increase recycling volumes by <5%.

Reuse:

Expected to enhance reuse activities by <5%.

Materials Recovery:

Expected to improve recovery of select materials by <5%.

Participation in Recovery Opportunities:

Expected to increase participation by <5%.

Product Stewardship:

No measurable impact on product stewardship is anticipated.

Economic, Administrative, or Partnership Benefits:

Administrative and partnership benefits are likely for this proposed program. Partnerships with neighboring planning units and other organizations would improve the development of this program. There are not any quantifiable economic benefits associated with this program.

Identification of Administrative, Contractual, and Financial Requirements for Implementation:

Existing administrative, financial, and contractual structure is sufficient to support the proposed program, if partnerships can be developed to share the administrative and financial burdens.

Identification of New or Modified Local Laws, Ordinances, or Regulations Required for Implementation:

No new local laws, ordinances, or regulations are identified as necessary at this time.

Alternative Technology Evaluation
Allegany County
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Implementation Item: 5

Title: Increase Recycling at County Facilities & Events

Administrative/Technical Impacts:

Quantitative/Qualitative Impacts on Waste Stream:

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

Types and Sizing of Facilities or Program:

There is no foreseen additional infrastructure needed to support this program. Minor items such as collection bins or educational materials could be required.

Summary of Cost Data for Evaluation:

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

Impact on Natural Resource Conservation, Energy Production and, Employment:

Increasing recycling efforts at County facilities and events is expected to enhance natural resource conservation. No energy production or job creation is anticipated as a result of this program.

Jurisdictional Impacts:

Interest in Participation by Neighboring Planning Units:

No participation by neighboring planning units is anticipated.

Alternatives Available with Participation by Neighboring Planning Units:

Activities associated with this program are not dependent on the participation of neighboring planning units.

Recommendations from Neighboring Planning Units:

N/A

Assessment of Environmental Justice Impacts:

No known or expected environmental justice impact within Allegany County associated with increased recycling efforts is expected.

Selected Alternatives Identification:

Reasons for Being Chosen:

This program strategy was chosen as a relatively low-cost way for the County to lead by example in reducing waste generated and promoting recycling. This strategy can also act as a public education tool, to encourage County employees and residents to change purchasing and consumption behaviors.

Expected Quantitative and Qualitative Impacts On:

Waste Reduction:

Expected to increase recycling volumes by <5%.

Reuse:

Expected to enhance reuse activities by <5%.

Materials Recovery:

Expected to improve recovery of select materials by 5-10%.

Participation in Recovery Opportunities:

Expected to increase participation by <5%.

Product Stewardship:

No measurable impact on product stewardship is anticipated.

Economic, Administrative, or Partnership Benefits:

This program is expected to reduce direct expenses by >1%.

Identification of Administrative, Contractual, and Financial Requirements for Implementation:

Existing administrative, financial, and contractual structure is sufficient to support the proposed program.

Identification of New or Modified Local Laws, Ordinances, or Regulations Required for Implementation:

No new local laws, ordinances, or regulations are identified as necessary at this time.

Alternative Technology Evaluation
Allegany County
Local Solid Waste Management Plan 2020-2029

Implementation Item: 6

Title: Adopt Product Stewardship Framework

Administrative/Technical Impacts:

Quantitative/Qualitative Impacts on Waste Stream:

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

Types and Sizing of Facilities or Program:

There is no foreseen additional infrastructure needed to support this program.

Summary of Cost Data for Evaluation:

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

Impact on Natural Resource Conservation, Energy Production and, Employment:

Natural resource conservation, energy production, and job creation in the County is not anticipated as a result of this program.

Jurisdictional Impacts:

Interest in Participation by Neighboring Planning Units:

No participation by neighboring planning units is anticipated.

Alternatives Available with Participation by Neighboring Planning Units:

Activities associated with this program are not dependent on the participation of neighboring planning units.

Recommendations from Neighboring Planning Units:

N/A

Assessment of Environmental Justice Impacts:

No known or expected environmental justice impact within Allegany County associated with product stewardship initiatives is expected.

Selected Alternatives Identification:

Reasons for Being Chosen:

Allegany County has little to no influence over manufacturing, but could join other counties who have adopted this framework to pressure state lawmakers into further action on a state level. Additionally significant cost savings could occur with producers being responsible for the cost of disposal on items that municipalities were historically responsible for.

Expected Quantitative and Qualitative Impacts On:

Waste Reduction:

None anticipated.

Reuse:

None anticipated.

Materials Recovery:

No direct impacts to material recovery is anticipated, however, the end goal of supporting product stewardship measures could have significant impacts on material recovery.

Participation in Recovery Opportunities:

None anticipated.

Product Stewardship:

An increase in product stewardship initiatives could occur as a result of this program strategy.

Economic, Administrative, or Partnership Benefits:

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

Identification of Administrative, Contractual, and Financial Requirements for Implementation:

Existing administrative, financial, and contractual structure is sufficient to support the proposed program.

Identification of New or Modified Local Laws, Ordinances, or Regulations Required for Implementation:

No new local laws, ordinances, or regulations are identified as necessary at this time.

Alternative Technology Evaluation
Allegany County
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Implementation Item: 7

Title: Promote Backyard Composting

Administrative/Technical Impacts:

Quantitative/Qualitative Impacts on Waste Stream:

Promoting backyard composting through education and training programs and/or subsidizing compost bins for residents could increase organics diversion by several thousand tons per year.

Types and Sizing of Facilities or Program:

There are no foreseen additional infrastructure needs for this program. Educational programs will be implemented to teach the public how to properly backyard compost and the benefits of this program.

Summary of Cost Data for Evaluation:

Costs associated with the program include public educational and training programs and some or all of the cost for a bulk purchase of compost bins for residents to purchase.

Impact on Natural Resource Conservation, Energy Production and, Employment:

The proposed program is expected to provide for natural resource conservation. Energy production and job creation is not anticipated to be affected by the proposed program.

Jurisdictional Impacts:

Interest in Participation by Neighboring Planning Units:

Cattaraugus, Livingston, Steuben, and Wyoming Counties could potentially participate with Allegany County in the proposed program by sharing educational materials and/or bulk purchase of backyard composting bins for sale to residents at cost.

Alternatives Available with Participation by Neighboring Planning Units:

Activities associated with this program are not dependent on the participation of neighboring planning units.

Recommendations from Neighboring Planning Units:

N/A

Assessment of Environmental Justice Impacts:

No known or expected environmental justice impact in Allegany County associated with this program.

Selected Alternatives Identification:

Reasons for Being Chosen:

Allegany County has the potential to partner with other organizations to improve educational programs and promote residential backyard composting to reduce organic waste disposal by up to 3,000 tons per year at minimal cost to the County.

Expected Quantitative and Qualitative Impacts On:

Waste Reduction:

Expected to reduce waste volumes by <5%.

Reuse:

Expected to enhance reuse <5%.

Materials Recovery:

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

Participation in Recovery Opportunities:

Expected to enhance participation <5%.

Product Stewardship:

No measurable impact on product stewardship is anticipated.

Economic, Administrative, or Partnership Benefits:

These programs are not expected to result in economic or administrative benefits, although partnership with neighboring counties or local organizations could potentially reduce program costs.

Identification of Administrative, Contractual, and Financial Requirements for Implementation:

Existing contractual structure is sufficient to support the proposed program. Partnerships will be sought out for the minor financial and administrative requirements that would be needed to support education and training programs.

Identification of New or Modified Local Laws, Ordinances, or Regulations Required for Implementation:

No new local laws, ordinances, or regulations are identified as necessary at this time.

Alternative Technology Evaluation
Allegany County
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Implementation Item: 8

Title: Support Yard Waste Composting Efforts

Administrative/Technical Impacts:

Quantitative/Qualitative Impacts on Waste Stream:

Supporting yard waste composting efforts could increase diversion from the County's solid waste management system by up to 500 tons per year.

Types and Sizing of Facilities or Program:

There are no foreseen additional infrastructure needs for this program. Educational programs will be implemented to teach the public how to properly handle yard waste at home and the benefits of doing so.

Summary of Cost Data for Evaluation:

Costs associated with the program include public educational and training programs.

Impact on Natural Resource Conservation, Energy Production and, Employment:

The proposed program is expected to provide for natural resource conservation. Energy production and job creation is not anticipated to be affected by the proposed program.

Jurisdictional Impacts:

Interest in Participation by Neighboring Planning Units:

No participation by neighboring planning units is anticipated.

Alternatives Available with Participation by Neighboring Planning Units:

Activities associated with this program are not dependent on the participation of neighboring planning units.

Recommendations from Neighboring Planning Units:

N/A

Assessment of Environmental Justice Impacts:

No known or expected environmental justice impact in Allegany County associated with this program.

Selected Alternatives Identification:

Reasons for Being Chosen:

Allegany County has the potential to partner with other organizations to improve educational programs and promote residential yard waste composting to reduce organic waste disposal at minimal cost to the County.

Expected Quantitative and Qualitative Impacts On:

Waste Reduction:

Expected to reduce waste volumes by <5%.

Reuse:

Expected to enhance reuse <5%.

Materials Recovery:

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

Participation in Recovery Opportunities:

Expected to enhance participation <5%.

Product Stewardship:

No measurable impact on product stewardship is anticipated.

Economic, Administrative, or Partnership Benefits:

These programs are not expected to result in economic or administrative benefits, although partnership with local organizations could potentially reduce program costs.

Identification of Administrative, Contractual, and Financial Requirements for Implementation:

Existing contractual structure is sufficient to support the proposed program. Partnerships will be sought out for the minor financial and administrative requirements that would be needed to support education and training programs.

Identification of New or Modified Local Laws, Ordinances, or Regulations Required for Implementation:

No new local laws, ordinances, or regulations are identified as necessary at this time.

Alternative Technology Evaluation
Allegany County
Local Solid Waste Management Plan 2020-2029

Implementation Item: 9

Title: Evaluate Pay-As-You-Throw Program

Administrative/Technical Impacts:

Quantitative/Qualitative Impacts on Waste Stream:

Positive impacts due to financial incentives for waste reduction efforts are expected to increase material recovery. Negative impacts in the form of illegal dumping and potential contamination of recycling streams could occur with a PAYT program.

Types and Sizing of Facilities or Program:

Since the County currently operates a hybrid PAYT, in which residents can currently opt into an incentive-based waste disposal fee structure, the existing system is anticipated to accommodate a PAYT program.

Summary of Cost Data for Evaluation:

Minimal costs may be incurred from the switchover to a PAYT system from the current hybrid fee structure.

Impact on Natural Resource Conservation, Energy Production and, Employment:

This program has the potential to conserve natural resources due to incentivized waste reduction and diversion.

Jurisdictional Impacts:

Interest in Participation by Neighboring Planning Units:

No participation by neighboring planning units is anticipated.

Alternatives Available with Participation by Neighboring Planning Units:

Activities associated with this program are not dependent on the participation of neighboring planning units.

Recommendations from Neighboring Planning Units:

N/A

Assessment of Environmental Justice Impacts:

PAYT programs have the potential to impact poor communities who cannot afford to pay for the amount of waste they dispose of. This will be factored into the analysis for switchover to a PAYT program.

Selected Alternatives Identification:

Reasons for Being Chosen:

Significant abuses of the County's permit tag system have become evident and have led to the need to explore other options to redistribute the cost burden of the solid waste system to those who use it most.

Expected Quantitative and Qualitative Impacts On:

Waste Reduction:

Expected to increase waste reduction by >5%.

Reuse:

Expected to increase product reuse by >5%.

Materials Recovery:

Expected to increase material recovery by up to 20% but could increase recyclables contamination by <10%.

Participation in Recovery Opportunities:

No measurable impact on participation is expected.

Product Stewardship:

No measurable impact on product stewardship is expected.

Economic, Administrative, or Partnership Benefits:

Minor economic benefits may result from increased recyclables recovery.

Identification of Administrative, Contractual, and Financial Requirements for Implementation:

Additional administrative, contractual, and/or financial structure may be required to convert the County's existing hybrid system to solely PAYT. It will also be more difficult to predict revenues for budgeting.

Identification of New or Modified Local Laws, Ordinances, or Regulations Required for Implementation:

No new local laws, ordinances, or regulations are identified as necessary at this time.

Alternative Technology Evaluation
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Implementation Item: 10

Title: Improve Education and Outreach

Administrative/Technical Impacts:

Quantitative/Qualitative Impacts on Waste Stream:

Continuation and improvement of current education and outreach efforts are anticipated to help maintain and enhance diversion efforts.

Types and Sizing of Facilities or Program:

No foreseen additional infrastructure is needed to support this program.

Summary of Cost Data for Evaluation:

Minor administrative costs are anticipated with increased education and outreach.

Impact on Natural Resource Conservation, Energy Production and, Employment:

No impacts to natural resource conservation, energy production, or employment are anticipated.

Jurisdictional Impacts:

Interest in Participation by Neighboring Planning Units:

Cattaraugus, Livingston, Steuben, and Wyoming Counties could potentially participate with Allegany County in the proposed program.

Alternatives Available with Participation by Neighboring Planning Units:

Activities associated with this program are not dependent on the participation of neighboring planning units.

Recommendations from Neighboring Planning Units:

N/A

Assessment of Environmental Justice Impacts:

There is no known or expected environmental justice impact in Allegany County associated with this program.

Selected Alternatives Identification:

Reasons for Being Chosen:

In the County's vast solid waste management experience, education and outreach efforts are more effective in adjusting behaviors and compliance with the local solid waste and recycling law than enforcement actions.

Expected Quantitative and Qualitative Impacts On:

Waste Reduction:

Expected to increase waste reduction by <5%.

Reuse:

Expected to increase product reuse by <5%.

Materials Recovery:

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

Participation in Recovery Opportunities:

No measurable impact on participation is expected.

Product Stewardship:

No measurable impact on product stewardship is expected.

Economic, Administrative, or Partnership Benefits:

Minor economic benefits may result from increased recyclables recovery, but increased costs may result from expenses related to education efforts. Partnerships with other agencies, private companies, and/or citizen groups may be levied to assist with education and outreach.

Identification of Administrative, Contractual, and Financial Requirements for Implementation:

Additional administrative, contractual, and/or financial structure may be required to support additional education and outreach programs.

Identification of New or Modified Local Laws, Ordinances, or Regulations Required for Implementation:

No new local laws, ordinances, or regulations are identified as necessary at this time.

Alternative Technology Evaluation
Allegany County
Local Solid Waste Management Plan 2020-2029

Implementation Item: 11

Title: Improve Solid Waste and Recycling Data Collection

Administrative/Technical Impacts:

Quantitative/Qualitative Impacts on Waste Stream:

Improved data collection will aid the County in determining where to enhance recycling or diversion efforts that could ultimately help the County achieve diversion goals by providing accurate information on current waste generation and diversion.

Types and Sizing of Facilities or Program:

No additional infrastructure is required. However, administrative staff may experience increased work load due to the additional data that is generated.

Summary of Cost Data for Evaluation:

Costs associated with the program include administrative labor for data gathering and analysis.

Impact on Natural Resource Conservation, Energy Production and, Employment:

No impacts to natural resource conservation, energy production, or employment are anticipated.

Jurisdictional Impacts:

Interest in Participation by Neighboring Planning Units:

Data sharing within neighboring planning units could improve understanding of the current management of solid waste in the region and potentially be useful for program development within neighboring counties.

Alternatives Available with Participation by Neighboring Planning Units:

Activities associated with this program are not dependent on the participation of neighboring planning units.

Recommendations from Neighboring Planning Units:

N/A

Assessment of Environmental Justice Impacts:

There is no known or expected environmental justice impact in Allegany County associated with this program.

Selected Alternatives Identification:

Reasons for Being Chosen:

The County does not currently have available all of the data on waste generated in the Planning Unit, only data from County-run facilities. Collection of additional data will better inform the County on actual diversion rates and the potential for additional program implementation.

Expected Quantitative and Qualitative Impacts On:

Waste Reduction:

This program is not expected to reduce waste volumes.

Reuse:

No impact.

Materials Recovery:

No impact.

Participation in Recovery Opportunities:

This program is expected to increase the County's knowledge of current participation in recovery options provided in the County.

Product Stewardship:

No measurable impact on product stewardship is expected.

Economic, Administrative, or Partnership Benefits:

Additional administrative efforts will be required for data gathering and analysis. Partnerships with other agencies, private companies, and/or citizen groups may be levied to assist with data collection needs.

Identification of Administrative, Contractual, and Financial Requirements for Implementation:

Additional administrative resources will be required to implement the program.

Identification of New or Modified Local Laws, Ordinances, or Regulations Required for Implementation:

No new local laws, ordinances, or regulations are identified as necessary at this time.

Alternative Technology Evaluation
Allegany County
Local Solid Waste Management Plan 2020-2029

Implementation Item: 12

Title: Enforce Local Hauler Licensing Program

Administrative/Technical Impacts:

Quantitative/Qualitative Impacts on Waste Stream:

This program could aid the County in data collection efforts described in Implementation Item No. 11 as well as provide the potential for an additional revenue source.

Types and Sizing of Facilities or Program:

No additional infrastructure is required for this program.

Summary of Cost Data for Evaluation:

Costs associated with this program include administrative labor for permit tracking and enforcement.

Impact on Natural Resource Conservation, Energy Production and, Employment:

No impacts to natural resource conservation, energy production, or employment are anticipated.

Jurisdictional Impacts:

Interest in Participation by Neighboring Planning Units:

No participation by neighboring planning units is anticipated.

Alternatives Available with Participation by Neighboring Planning Units:

Activities associated with this program are not dependent on the participation of neighboring planning units.

Recommendations from Neighboring Planning Units:

N/A

Assessment of Environmental Justice Impacts:

There is no known or expected environmental justice impact in Allegany County associated with this program.

Selected Alternatives Identification:

Reasons for Being Chosen:

Enforcement of the Local Hauler Licensing Program could provide additional revenue to the County as well as waste generation data with minor cost and effort.

Expected Quantitative and Qualitative Impacts On:

Waste Reduction:

This program is not expected to reduce waste volumes.

Reuse:

No impact.

Materials Recovery:

No impact.

Participation in Recovery Opportunities:

No impact.

Product Stewardship:

No measurable impact on product stewardship is expected.

Economic, Administrative, or Partnership Benefits:

Actions are expected to increase revenues by >5%. Some additional administrative efforts will be required for permit tracking and enforcement.

Identification of Administrative, Contractual, and Financial Requirements for Implementation:

Some additional administrative resources will be required for enforcement of this program.

Identification of New or Modified Local Laws, Ordinances, or Regulations Required for Implementation:

May require clarification or minor revision to the existing local law governing hauler licensing.

Alternative Technology Evaluation
Allegany County
Local Solid Waste Management Plan 2020-2029

Implementation Item: 13

Title: Improve C&D Debris Reduction

Administrative/Technical Impacts:

Quantitative/Qualitative Impacts on Waste Stream:

This program could result in the diversion of C&D debris from disposal facilities.

Types and Sizing of Facilities or Program:

Due to the prohibitive cost, a County-run C&D processing facility is unlikely to be pursued. The contemplation of including C&D recovery requirements in municipal bids would not require additional County-run facilities, since there is a private C&D processor located in Allegany County.

Summary of Cost Data for Evaluation:

The cost to implement a C&D recycling facility would be upwards of \$1 million. Operational costs have the potential to be very high due to the need for manual labor. Markets for materials are currently unknown. Costs on municipal bids may increase with the inclusion of a C&D debris recovery goal.

Impact on Natural Resource Conservation, Energy Production and, Employment:

Conservation of natural resources would be realized through reuse of natural materials.

Jurisdictional Impacts:

Interest in Participation by Neighboring Planning Units:

Participation by neighboring planning units would likely be required to make such a facility economically feasible; however, due to the large geographical size of the counties, interest by neighboring planning units is unlikely, making a centrally located facility infeasible.

Alternatives Available with Participation by Neighboring Planning Units:

Activities associated with this program are not dependent on the participation of neighboring planning units.

Recommendations from Neighboring Planning Units:

N/A

Assessment of Environmental Justice Impacts:

There is no known or expected environmental justice impact in Allegany County associated with this program.

Selected Alternatives Identification:

Reasons for Being Chosen:

The County will contemplate the inclusion of a C&D waste reduction policy into its municipal bids, provided that the program is not cost-prohibitive.

Expected Quantitative and Qualitative Impacts On:

Waste Reduction:

This program is anticipated to reduce C&D disposal by <5%.

Reuse:

This program is expected to enhance C&D reuse by <5%.

Materials Recovery:

Expected to enhance C&D recovery by <5%.

Participation in Recovery Opportunities:

Not expected to impact participation.

Product Stewardship:

No measurable impact on product stewardship is expected.

Economic, Administrative, or Partnership Benefits:

Actions are expected to increase the costs of municipal bids by an unknown amount.

Identification of Administrative, Contractual, and Financial Requirements for Implementation:

Additional administrative and financial resources will be required for implementation of this program.

Identification of New or Modified Local Laws, Ordinances, or Regulations Required for Implementation:

No new local laws, ordinances, or regulations are identified as necessary at this time.

Alternative Technology Evaluation
Allegany County
Local Solid Waste Management Plan 2020-2029

Implementation Item: 14

Title: Identify Private Sector Management and Coordination Opportunities

Administrative/Technical Impacts:

Quantitative/Qualitative Impacts on Waste Stream:

This program could result in the diversion of additional material streams not currently included in the County's recycling program.

Types and Sizing of Facilities or Program:

No additional infrastructure is required for this program.

Summary of Cost Data for Evaluation:

Partnering with other organizations will relieve some cost burden from the County for implementing LSWMP program strategies. More in-depth analysis of additional partners and funding sources will be explored during the planning period.

Impact on Natural Resource Conservation, Energy Production and, Employment:

MSW reduction and recycling is expected to conserve natural resources. Energy production and job creation is not anticipated.

Jurisdictional Impacts:

Interest in Participation by Neighboring Planning Units:

No participation by neighboring planning units is anticipated.

Alternatives Available with Participation by Neighboring Planning Units:

Activities associated with this program are not dependent on the participation of neighboring planning units.

Recommendations from Neighboring Planning Units:

N/A

Assessment of Environmental Justice Impacts:

There is no known or expected environmental justice impact in Allegany County associated with this program.

Selected Alternatives Identification:

Reasons for Being Chosen:

Due to continued reductions in available state funding, the County must look elsewhere for financial and administrative support in order to expand its current recycling programs and implement LSWMP program strategies.

Expected Quantitative and Qualitative Impacts On:

Waste Reduction:

Expected to reduce waste by <5%.

Reuse:

Expected to enhance reuse by <5%.

Materials Recovery:

Expected to enhance material recovery by <5%.

Participation in Recovery Opportunities:

Expected to increase participation by <5%.

Product Stewardship:

If the County identifies partners in industry or manufacturing, improvements to product stewardship are possible with this program.

Economic, Administrative, or Partnership Benefits:

Actions are expected to increase operational costs, but may be offset by partnering with the private sector to provide full or partial funding for additional programs.

Identification of Administrative, Contractual, and Financial Requirements for Implementation:

Additional administrative and financial resources will be required for implementation of this program.

Identification of New or Modified Local Laws, Ordinances, or Regulations Required for Implementation:

No new local laws, ordinances, or regulations are identified as necessary at this time.

Alternative Technology Evaluation
Allegany County
Local Solid Waste Management Plan 2020-2029

Implementation Item: 15

Title: Continue Landfilling as Primary Disposal for Non-Recyclable/Non-Recoverable Waste

Administrative/Technical Impacts:

Quantitative/Qualitative Impacts on Waste Stream:

No impacts are expected.

Types and Sizing of Facilities or Program:

There is no foreseen additional infrastructure needed to support this program.

Summary of Cost Data for Evaluation:

The County will continue to collect fees from the disposal of waste at the County-owned transfer stations and the sale of recyclable material in order to pay for the disposal of waste at a non-County-owned facility.

Impact on Natural Resource Conservation, Energy Production and, Employment:

Natural resource conservation, energy production, and job creation are not anticipated.

Jurisdictional Impacts:

Interest in Participation by Neighboring Planning Units:

The waste generated in Allegany County will require disposal through contracts with landfills in neighboring planning units and/or the in-county privately-owned landfill.

Alternatives Available with Participation by Neighboring Planning Units:

Contracts with out-of-County landfills will facilitate continued disposal of Allegany County waste.

Recommendations from Neighboring Planning Units:

N/A

Assessment of Environmental Justice Impacts:

There is no known or expected environmental justice impact in Allegany County associated with this program.

Selected Alternatives Identification:

Reasons for Being Chosen:

With the small amount of waste generated in Allegany County, there is no economically viable option for landfill expansion or alternative technology. As such, disposal at privately-owned or out-of-County facilities is the safest and most economical waste disposal option.

Expected Quantitative and Qualitative Impacts On:

Waste Reduction:

No quantifiable impacts are anticipated.

Reuse:

No quantifiable impacts are anticipated.

Materials Recovery:

No quantifiable impacts are anticipated.

Participation in Recovery Opportunities:

No quantifiable impacts are anticipated.

Product Stewardship:

No measurable impact on product stewardship is expected.

Economic, Administrative, or Partnership Benefits:

Expenses could increase under this scenario, as the cost for waste disposal will be impacted by markets rather than controlled by operational costs.

Identification of Administrative, Contractual, and Financial Requirements for Implementation:

Existing administrative, financial, and contractual structure is sufficient to support the proposed program.

Identification of New or Modified Local Laws, Ordinances, or Regulations Required for Implementation:

No new local laws, ordinances, or regulations are identified as necessary at this time.

Appendix E

Implementation Schedule

Allegany County - Implementation Schedule

[illegible]

Allegany County - Implementation Schedule

Program Strategy	Year									
	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
	1	2	3	4	5	6	7	8	9	10
6) Support Product Stewardship Framework	Reach out to the New York Product Stewardship Council to learn more about Product Stewardship and Extended Producer Responsibility (EPR).	Review other NY communities that have passed a Product Stewardship resolution showing their support. Determine if passing a similar resolution in Allegany County would be beneficial. Work with the NY Product Stewardship Council to draft a resolution that would fit the needs of Allegany County.		Educate County staff and the County Legislature on the benefits of supporting the product stewardship initiative.If supported by the Legislature, pass a Product Stewardship resolution.	Support the NY Product Stewardship Council and remain educated on product stewardship initiatives.		Update tasks for new 10 year planning period depending on progress.			
7) Promote Backyard Composting	Identify training materials available on the NYSDEC and Cornell Cooperative Extension websites for assistance in developing training courses or locating backyard composting demonstration sites. Place links on Allegany County's website for these training course materials.			Enhance food waste diversion by developing a partnership with with an organization that provides backyard composting demonstration sites and educational events and resources. Consider a program with the County's partner(s) to provide subsidized compost bins for residents.				Update and modify the Plan to reflect successes and challenges.		Update tasks for new 10 year planning period depending on progress.
	Continuously research and apply for grants that could help fund composting education and/or the purchase of compost bins.									
	Promote food donation to local food banks on the County's website and explore partnership opportunities with local food banks.									
8) Support Yard Waste Composting Efforts	Collect data on current programs offered by different municipalities within the County.		Provide a summary of findings collected and post to Allegany County website for residents to use.	Continue to support educational and training partners and monitor existing educational and collection programs.				Enhance yard waste composting education efforts by developing new potential partnerships (Task 13).		Update tasks for new 10 year planning period depending on progress.
				Update and modify the Plan to reflect successes and challenges.						
	Promote the proper management of residential yard waste, such as backyard composting or "grass-cycling" initiatives, on the County's website.									
9) Pay-As-You Throw Program	Conduct a study into PAYT programs to determine the best option to fit Allegany County's needs. Evaluate and determine if PAYT is feasible.		Develop educational materials for the transition to PAYT. If deemed appropriate, conduct an informal survey of residents to determine potential interest or issues.	Implement chosen PAYT program and work with local haulers to promote the PAYT program to customers.	Monitor waste disposal numbers, customer behaviors, and other metrics to evaluate the effectiveness of the PAYT program.					Update tasks for new 10 year planning period depending on progress.
10) Education and Outreach	Evaluate current and potential education methods for promoting Allegany County recycling and diversion programs.		Work with the partners (Task 14) to establish and implement a recycling educational outreach program. The plan should expect the initial audience to include: residents and local public schools.	Evaluate the feasibility of adding recycling education at public events.	Team with local companies and not for profit agencies to encourage recycling at public events.	Assess the effectiveness of the education plan and make necessary alterations.	Expand the educational plan to local public schools as well as colleges and universities, and attendees at public events.	Expand the education plan to include other groups, such as, municipalities, libraries, jails, institutions, and nursing homes. Add details related to product reuse and organics management to the education plan that would be most beneficial for these additional audience members		Update tasks for new 10 year planning period depending on progress.

Allegany County - Implementation Schedule

Program Strategy	Year									
	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
	1	2	3	4	5	6	7	8	9	10
11) Improve Solid Waste & Recycling Data Collection	Consider a program to increase data collection. Assess what types of data and facilities will be targeted to best support the County's Implementation Tasks. Examine potential partnerships with interested citizen groups and/or local universities to assist with data collection.	If deemed necessary, prepare a survey template for distribution to waste generators.	Prepare and distribute surveys to schools and institutions .	Report survey results and recommendations. Utilize to implement other tasks or modify tasks. Follow up with interested generators to improve their waste diversion programs.	Prepare and distribute surveys to libraries, jails, nursing homes, and the public sector (municipalities) .	Report survey results and recommendations. Utilize to implement other tasks or modify tasks. Follow up with interested generators to improve their waste diversion programs.	Prepare and distribute surveys to retail businesses (groceries, restaurants, stores).	Report survey results and recommendations. Utilize to implement other tasks or modify tasks. Follow up with interested generators to improve their waste diversion programs.	Prepare and distribute surveys to industries and agricultural facilities .	Report survey results and recommendations. Utilize to implement other tasks or modify tasks. Follow up with interested generators to improve their waste diversion programs.
		If deemed necessary, prepare a survey template for distribution to facilities or haulers that manage MSW, biosolids, C&D, processed scrap metal, and industrial waste.	Prepare and distribute surveys.	Report survey results and recommendations. Utilize to implement other tasks or modify tasks.	Prepare and distribute surveys.	Report survey results and recommendations. Utilize to implement other tasks or modify tasks.	Prepare and distribute surveys.	Report survey results and recommendations. Utilize to implement other tasks or modify tasks.	Prepare and distribute surveys.	Evaluated effectiveness of survey and update tasks for new 10 year planning period depending on progress.
12) Enforce Local Hauler Licensing Program	Conduct internal review of Local Hauler Licensing requirements to determine if any revisions need to be made. Specific items to address include enforcement, data collection, and fees.		Update Local Hauler Licensing law if deemed necessary.	Monitor and gather data related to hauler licensing enforcement, waste collection, and revenues, if any, from the local hauler licensing program.						
13) Improve C&D Debris Reduction	Monitor C&D generation and processing quantities available through facility reporting and on County projects.					Assess the potential for inclusion of a C&D Debris Reduction requirement as part of County bids.	If deemed appropriate, attempt a "pilot program," and test out such a requirement on one or more County bids.	Assess the results of the pilot program and determine if it is feasible to implement on other County projects.	If appropriate, develop a County-wide policy for C&D Debris reduction on County projects.	Update tasks for new 10 year planning period depending on progress.

Allegany County - Implementation Schedule

Program Strategy	Year									
	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
	1	2	3	4	5	6	7	8	9	10
14) Identify Private Sector Management and Coordination Opportunities	Investigate potential partnerships or similar programs with other organizations such as Soil & Water Conservation District, Cornell Cooperative Extension, universities, private solid waste management companies, and community organizations as other implementation items progress and needs for assistance are identified.									
	Review P2I's Organics Resource Locator for organic facilities in Allegany County.	Continue to monitor P2I's Organics Resource Locator and investigate potential partnerships.								
15) Continue Landfilling as Primary Disposal for Non-Recyclable/Non-Recoverable Waste			Review alternative waste disposal technologies and explore feasibility of implementation, provided resources are available.			Review alternative waste disposal technologies and explore feasibility of implementation, provided resources are available.			Review alternative waste disposal technologies and explore feasibility of implementation, provided resources are available.	Update tasks for new 10 year planning period depending on any new information and resources available.
Optimal MSW Recycling Diversion Goals	8%	8%	9%	10%	10%	10%	12%	12%	13%	14%
Optimal C&D Diversion Goals	27%	29%	29%	29%	30%	31%	31%	32%	33%	33%
Notes: 1. The above implementation schedule includes tasks and subtasks. Details related to required resources to achieve the projected results can be found in each implementation task description in Chapter 5. The bulk of the tasks are expected to be undertaken in the earlier years of the planning period, and more detail will be added through compliance reports for all impending tasks as the planning period progresses. 2. It should be understood that these recycling diversion projections are intended for use as a planning tool only and as such are not a commitment of achievement by the County. As programs progress and new information becomes available, these projections are expected to evolve and require revision over time. Accordingly, to remain a valuable planning tool, it is expected these optimal rate projections will be updated or revised in each biennial compliance report along with the implementation schedule, as necessary.										

Appendix F

Example Biennial Compliance Report Outline

Allegany County
Local Solid Waste Management Plan

Compliance Report

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

April 20XX

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Appendices

Appendix A – 20XX Allegany County Solid Waste and Recyclables Inventory

Appendix B – 20XX Allegany County Solid Waste and Recyclables Inventory

Appendix G

Allegany County Landfill Closure and Post Closure Care Cost Estimates

**Allegany County Landfill
Closure and Post Closure Care
Cost Estimates**

(All Estimates are annual 2019 dollars)

I. Water Quality and Gas Monitoring:

Based on all current monitoring locations

Yearly Contract with Labella Associates

\$66,600.00

Number of Wells Sampled & Analyzed

22 wells, 4 surface water stations & 4 sediment stations
are sampled and analyzed on a quarterly basis (4x year)

Cost of ~\$168 per well for sampling only

Four Sampling Events per year

Landfill Gas Monitoring – done quarterly

II. Leachate Collection System Operation and Maintenance

Leachate

The Final Cap Project was completed in October of 2018

Leachate generated during calendar year 2019 - 1,537,710 Gallons

Leachate disposal including Treatment and Transportation:

1,537,710 gallons at \$.07 per gallon \$107,640

Leachate Basin, Pond and Collection Pipe Maintenance

a. Basin – Annual cleaning and resealing

Materials \$2,100

Labor \$2,900 \$ 5,000

*(Based on current pricing for materials
& 96 hours at current labor rates)*

b. Semi-Annual leachate pipe flushing

2019 Actual Costs \$22,700

Total for Basin and Pipe Maintenance \$27,700

Total Cost for Item II – Leachate Collection System

\$135,340.00

III. Landfill Gas Control System

Annual cost of maintenance and report to gas vents and
monitoring probes

\$ 3,420.00

IV. Facility Maintenance

The following items are included on an as needed basis:

1. Maintenance of final cover: mowing, maintaining vegetation cover, repair of settlement or erosion
2. Maintenance of monitoring wells, grates and fences
3. Under drain system maintenance
4. Maintenance of roads and buildings \$1,000
5. Maintenance of storm water control features
6. Utilities

Electricity	\$4,000
Gas	<u>\$3,000</u>
	\$8,000

7. Equipment Costs: include the annual costs for maintenance and repair, fuel and replacement for the following:

- a. 4 x 4 Pickup with plow
- b. Tractor with mower and various attachments
- c. 50-100 hp crawler dozer

Total Equipment Costs	\$14,300
Repair parts & fuel	<u>\$ 7,150</u>
	\$21,450

8. Labor Costs:

All of the above duties will be performed by:

Supervisor ~ 520 hours per year (\$30 per hour plus 42.75% benefits)	\$22,500
Employee ~ 520 hours per year (\$22.00 per hour plus 42.75% benefits)	\$16,500
Seasonal Employee ~ 240 hours per year (\$11.80 per hour plus 10% benefits)	<u>\$ 3,150</u>
	\$42,150

Total Cost for V – Facility Maintenance

\$71,600.00

V. Reports, Inspections and Engineering

This item includes the following:

- a. Quarterly and annual reports for water quality, leachate and gas control
(These items are included in Item I)
- b. Quarterly Facility Inspections and post storm event inspections
(Performed by Supervisor in IV.8)
- c. Five Registration Renewals (360.215(I))

Total Cost for V – Reports, Inspections and Engineering

\$ 8,500.00

Total Annual Cost	\$ 285,460.00
Annual Cost with 15% Contingency	\$ 328,279.00

Total 30 Year Cost	\$8,563,800.00
30 Year Cost with 15% Contingency	\$9,848,370.00

Appendix H

Allegany County LSWMP Public Comments and Responses

Deborah Bigelow
5792 Tuckers Corners Rd.
Friendship NY 14739

Jan. 18, 2021

Comment on Allegany County Draft LSWMP

Appendices D and E

First, I understand that this work was initiated in 2019, so that 2018 figures in tables are used and will be updated to 2019 or 2020 for the final draft.

Implementation Program Strategy 1 - projecting less than 5% increase for all expected impacts, Why so conservative?

Same for Program Strategy 2 - don't we assume that we are not scrapping current programs? Not at all sure why this needs to be enumerated unless it's a DEC requirement. Activity on the GLOW-sponsored materials exchange (mat-ex.org) could be promoted via the Public Works Dept. website and using the other outreach and education strategies enumerated on p. 41-42

I suggest using Program Strategy 10 as Program Strategy 1 - our residents know there are recycling options in place, the trick is to get more people to use them by linking their participation to the cost to them of disposal of landfilled items.

The first priority under Promotion of existing programs is to use the County's website to its fullest possibilities!! This is not being done currently. There are guides on the Public Works website to what's acceptable for recycling, but nothing on how to reduce the amount of recycling that a household has to handle. (i.e., pay attention to your packaging, and here's how to reduce it Posters on how to reduce food waste, how to plan meals and use leftovers, making recycling easier etc). This is not complicated - there are wonderful resources available for the asking and posting.

Program Strategy 3 - expansion of materials, for example styrofoam. Why is there no mention of the coming ban on expanded polystyrene and loose fill? The County should look into a styrofoam crushing machine, foam densifiers for making ingots - there are equipment manufacturers and dealers in NJ, buyers in downstate NY and in Ohio.

This strategy should include an ongoing periodic review of available technologies to weigh feasibility of the County taking up the processing itself of already-diverted wastes or additional types of waste.

Program Strategy 4 - Agree with the first implementation steps - this is urgent. The 2021 schedule should include a target date by which all surrounding counties are contacted for information, including making progress on the 2022 and 23 schedule during 2021. Since conversations will be pursued, why not ask at the same time what options for becoming a regional collection point are being considered, or have been considered, and sound out the surrounding jurisdictions for all of their input?

Program Strategy 5 - The first step in this implementation should be to research and pursue grant opportunities in order to fund subsequent steps. The 2020 - 2022 action item here should set a goal for measurement of progress, and a frequency. I suggest a semi-annual measuring and reporting. Sponsors must plan for incorporation of the recycling component and require

appropriate measurements for data collection. BEFORE annual events are renewed for 2021 and going forward.

Program Strategy 7 - Since composting and food waste diversion run along the same tracks, there is no rationale for separating a food waste reduction effort in 2023 - 2026 from promotions of backyard composting, or large-scale municipal composting beginning 2021. Together they are a priority for reasons that immediately impact our residents in ways that the usual recycling efforts do not: A) reducing food waste reduces methane generation to the atmosphere which we all share, regardless of which landfill it occurs in; B) substituting composting for a good portion of current food waste furnishes a cost-free and almost effortless fertilizer and soil amendment to use at home, give away or sell; C) reducing food waste saves consumer dollars immediately.

The implementation schedule for the food waste component *for households* should be integrated with the backyard composting component and moved to this year. It's low-hanging fruit. As is mentioned in the text (p. 52) many residents are already composting household organic waste. The further task includes linking them with each other for information sharing via a robust electronic presence.

In addition, a first step must be to research and apply for any grant money that may be available for educational purposes, compost bin purchases as mentioned in year 2023, construction of demonstration sites, etc. (I note that in the Chenango County Plan, also completed by B&L, applying for grant money is listed as a Year 1 Implementation Task for Organic Wastes Diversion. Why is Allegany County different?) Our Recycling Coordinator is well versed in the process and stays on top of opportunities.

Why is there no mention of the Food Donation and Food Scraps Recycling Law? Because there is currently no food scraps recycler within 25 miles? That can change within a matter of months, Do we not have an institution that generates an average of two tons per week of food scraps remaining after donation, or do we not have that data yet (Program Strategy #11)? Beginning as soon as possible this year departments and agencies should designate a person to attend the various webinars from the DEC to become an informed source on the regulations and to investigate support materials on the law. This represents another immediate opportunity to inquire of the neighboring counties what their possible plans are for organic waste combustion facilities, or their willingness to act as a regional collection point for an entrepreneurial individual who is considering building a facility.

Promotion of food donation will take much more than postings to the County's website. Efforts to establish partnerships with the areas food banks and food donation programs can begin immediately by utilizing our non-profits and their own publicity expertise. All we need to do is ask. They will tell us what they need and want and then options can be considered.

Program Strategy 8 - Why is the action item "Enhance yard waste composting education efforts by developing new potential partnerships" pushed out to 2027? This should be undertaken much sooner. Perhaps one or more of these partnerships would be willing and able to undertake the legwork of the 2020-21 data collection effort.

Program Strategy 9 - Immediately devise a survey-type instrument to be completed during the first 2 months of this year (current "hang tags" expire 3-31-21, so this is urgent) for all applications for a 2021 "hang tag" and for purchase of stickers all year. Make the online application usable only if the survey is completed, and require all personnel selling tags or stickers to get the survey completed by all applications/purchasers. Make it very short and to

Luann Meyer
Barton & Loguidice
11 Centre Park, Suite 203
Rochester, NY 14614

January 24, 2021

Dear Mrs. Meyer,

Thank you for the opportunity to comment on the draft Local Solid Waste Management Plan for Allegany County. I work in the agricultural education sector in Belmont, NY and am on the board of several nonprofit organizations in the county including Art for Rural America (Wellsville), the Alfred Farmers Market (Alfred), the Alfred Community Garden (Alfred), and the Concerned Citizens of Allegany County (Angelica). I am an alumna of both Alfred State College and Alfred University (2012-2016). Today I am writing my comments as a private unaffiliated citizen. Thank you in advance for taking the following input into consideration when creating the final version of the LSWM plan.

STATE PROGRAMS WORTH INCLUDING

- There is a Styrofoam ban in New York State that is set to start in January of 2022, less than a year away. This should be mentioned as part of our solid waste goals, or at least mentioned as relevant laws shaping our solid waste management.
- In June of 2019, a new Sustainability unit was created as required curricula in middle school Family and Consumer Science courses for each school district in NYS. This could be a good opportunity for collaboration.
http://www.p12.nysed.gov/cte/MiddleLevel/MiddleLevelDocs/Project_Based_2020/FACSSustMLCTELearningExpPackaging_508.pdf

CONFUSING OR INCORRECT SECTIONS

- This is mentioned a few times: Private haulers are legally obligated to bring recycling to the county because of revenue streams for our local government. What about Casella and their zero-waste recycling in Alfred? How are they able to bring their recycling to Buffalo for processing?
- Alfred also has yard waste collection services (p.7).
- Andover CSD, Cuba-Rushford CSD, and Bolivar-Richburg CSD compost food waste currently.
- In terms of school outreach, the plan states that some schools “participate” in recycling programming. I am not sure what this means. It would be helpful if the plan could provide a description of levels and amounts of what activities encompass participation for each district.
- I have never seen any county waste education presence at local farmers markets. I have been on the board of the Alfred Farmers Market for the last seven years, and since there are only three markets in the county, if this were a program of the county, I feel that I would have seen it by now.

- It is mentioned more than once that the cost of the program is burdensome on the county, so I would like at least mention of how much this actually costs to the taxpayer, otherwise this is simply conjecture.
- For outcomes in the implementation section, it seems as if the “<5%” change is arbitrary if there is no original information or local examples to base this goal off.

PROGRAM-SPECIFIC COMMENTS

MUNICIPAL COMPOSTING:

The County should create a plan to add composting systems at transfer stations. The transfer stations would be exempt from regulatory oversight if they each take in less than 1,000 pounds per week of food scraps. I highly doubt that any transfer station would incur more than that amount in a week, if even in a year. Creating small 3-4 bay systems at each station to take yard waste trimmings and source separated organics is a simple, cost effective (<\$1,000) solution to decreasing waste in the county. If these sites were promoted, more residents would compost and dump their buckets when they bring their other recycling and trash to the stations. The transfer stations even have staff on-site to manage the compost bins.

<https://www.dec.ny.gov/chemical/97488.html>

Implementation Item #1 - Promote Waste Reduction Programs: It seems as if this implementation item along with the second are going to cost the county substantial staff time and money for the promotion of services. The plan mentions waste reduction policies / laws for schools and county agencies and those should be listed here under the “Identification of New or Modified Local Laws” section.

Implementation Item #2 - Promote Reuse Programs: Please consider enforcing recycling laws, rather than ruling it out so quickly. The County does have the ability to enforce this law. Transfer station employees can do random bag checks and issue fines for easily recycled materials that were thrown in the trash. It can be a simple \$1-5 fine per bag, just a mild reprimand to increase recycling and not deter landfill patronage. Transfer station employees could be trained and required to flag and warn for a well-publicized period of time (six months) before they can be required to issue a payable ticket. If enforcement is not an option, another idea is, whoever is assigned to check tags or bag stickers could briefly look at what’s being brought in and if recyclables are spotted in the regular trash, a warning could be issued which records the tag # or sticker #s (for traceability). A follow up letter stating the requirements with a phone # for help, website for reference, other resources to encourage compliance.

Something must be done - it is an open secret that a vast majority of recyclable items are being thrown away for no apparent reason other than laziness. That is both lost revenue for the County by not selling our recyclable products, but also increased expenses that come from hauling our waste to outside landfills.

LSWMP Public Hearing Comments with Responses

Allegany County held a public meeting on December 14, 2020, to present the Draft Local Solid Waste Management Plan (LSWMP) to both County Board Members and any general public in attendance. Shortly following a short presentation of the LSWMP contents, the floor was opened to the public attendees to make comments and express concerns about the plan. The County Board members were also given the same opportunity. The list of commenters is as follows:

- Deborah Bigelow – Resident, 5792 Tuckers Corners Rd., Friendship, NY 14739
- Cassandra Bull – Resident, Belmont, NY

On behalf of Allegany County, Barton & Loguidice (B&L) offers the following information and responses to address the public comments regarding the County's Draft LSWMP. The original comments requiring a response are included as an attachment; Comments have been grouped with related comments below in italics, followed by a response to each grouping.

Grouping No. 1: Requested Inclusions:

- 1. New York State Styrofoam Ban*
- 2. NYS Food Donation and Food Scraps Recycling Law*
- 3. Addition of Sustainability Unit to NYS middle school required curricula*
- 4. A few school districts within Allegany County compost food waste*
- 5. Addition of small composting systems at all County-owned transfer stations*
- 6. Promote the GLOW – sponsored materials exchange program*
- 7. Expand the use of the County's website to include more outreach and education*
- 8. Source architecture/construction students at the colleges for C&D debris waste reduction ideas*
- 9. Use NYP21's resources now*

Response No. 1:

1. The foam packaging ban has been added to the list of focus areas for education and outreach efforts.
2. The NYS Food Donation and Food Scraps Recycling Law has been added to the list of focus areas for education and outreach.
3. Language was added to Section 5.8 of the LSWMP to communicate the County's intent to collaborate with schools in the sustainability unit.
4. Gathering data from school districts composting food waste continues to be a goal of the LSWMP (Implementation Item #11).
5. Due to the rural nature of Allegany County, backyard composting is more feasible than planning, constructing, and operating compost facilities at all of the transfer stations.
6. Language was added to Section 5.2 of the LSWMP to include promotion of the Western/Central New York Material Exchange program.
7. Language was added to Section 5.1 of the LSWMP to reflect expanded use of the County's website.

8. Implementation Item #14 – Identify Private Sector Management and Coordination Opportunities addresses potential partnerships with local college students. Should the opportunity to engage with architecture/construction students arise, Allegany County will react appropriately based on resources available.
9. NYSP21's Organic Resource Locator was used to identify facilities which may be impacted by the Food Donation and Food Scraps Recycling Law. A brief summary of these findings were added to Section 5.4.1. of the LSWMP.

Grouping No. 2: Requested Modifications:

1. *Tables, figures, and calculations based on 2018 data should be updated to 2019 or 2020 data.*
2. *Move action item “enhance yard waste composting education efforts by developing new potential partnerships” before 2027 in the implementation schedule*
3. *Target schools in the first round of education and outreach programs*

Response No. 2:

1. All Tables, figures, and calculations based on 2018 data will remain as such. The data will not change significantly between 2018 and 2019; in addition, 2020 data will not be available until March 2021 and will not be representative due to Covid19 impacts.
2. Schedule will remain as proposed.
3. The County plans to initially target schools with education and outreach programs. There is language in Section 5.8 of the LSWMP to express this notion.

Grouping No. 3: Requested policies/local laws:

1. *Enforce recycling laws at transfer stations with random checks and fines*
2. *Create a policy/local law for waste reduction/recycling at County facilities and events*
3. *Create a policy ceasing the purchase of unnecessarily disposable materials (i.e. single-use flatware and single-use water bottles)*
4. *Create a local law prohibiting the disposal of yard waste and enforce within private hauling practices and/or at transfer stations*
5. *Require agencies, funded by the County, to report specific waste generation and disposal/recycling data*
6. *Create a PAYT survey immediately and require residents to complete it prior to applying for a new hang tag (which are expiring 3/31/2021)*

Response No. 3:

1. As availability allows, transfer station staff inspects loads to ensure acceptable materials are in the loads. Should an infraction be identified, education is provided to correct the situation in the future. In its experience, the County has found that education and outreach are more effective strategies than enforcement.

2. Implementation Items #1 and #5 specifically address waste reduction program promotion (including at County facilities and events) and increased recycling at county facilities and events.
3. The County plans to supply compostable flatware wherever they supplied plastic flatware in the past. In addition, the County plans to install water bottle refill stations in their facilities, to encourage the use of reusable water bottles. Language has been added to Section 5.1 of the LSWMP to reflect these plans.
4. In its experience, the County has found that education and outreach are more effective strategies than enforcement.
5. The County proposes to focus on better data gathering as part of Implementation Item #11 and 12. The goal is to require agencies and haulers to report generation and diversion data to the County.
6. The schedule will remain as proposed.

Grouping No. 4: Necessary Clarifications:

1. *Flow control specifics*
2. *School participation in recycling programming*
3. *County's waste education presence at local farmer's markets*

Response No. 4:

1. Flow control is still enacted for recyclable materials generated within Allegany County, but it is not enforced.
2. Schools are incorporated the recycling programming proposed.
3. The County will review education opportunities at local farmer's markets and incorporate them into their future education programs.

Grouping No. 5: Feasibility concerns:

1. *Proposed programs will require an additional staff member to progress*
2. *Proposed programs will require grant funding*

Response No. 5:

1. Additional staffing will be reviewed during the planning period and contemplated as the need arises.
2. The County plans to remain up to date on and apply to relevant grant opportunities, to support the proposed programs. This plan is expressed in Section 5.9 of the LSWMP.

Grouping No. 6: General concerns with the LSWMP document itself:

1. *Not enough data was gathered for the LSWMP; private haulers and institutions would have released generation data if the consultant requested.*
2. *The wording and target goals are weak.*

Response No. 6:

1. Allegany County and the Consultant have made their best effort to gather as much relevant data as possible. Many solid waste generators are unable to accurately quantify the waste that they generate annually.
2. Comment acknowledged.

The experience to
listen
The power to
solveSM

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