Regional Solid Waste Management Plan

Columbia, Lycoming, Montour, Snyder & Union Counties

FINAL DRAFT

11/22/2024

REGIONAL SOLID WASTE MANAGEMENT PLAN
COLUMBIA, LYCOMING, MONTOUR, SNYDER & UNION COUNTIES

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REGIONAL SOLID WASTE MANAGEMENT PLAN
COLUMBIA, LYCOMING, MONTOUR, SNYDER & UNION COUNTIES

October 26, 2023

INTRODUCTION

Pennsylvania Act 101 of 1988: According to § 4000.303 of Act 101: "Each county shall have the power and its duty shall be to insure the availability of adequate permitted processing and disposal capacity for the municipal waste which is generated within its boundaries. As part of this power, a county:

PADEP Regulations: § 272.251 of the Commonwealth of Pennsylvania's Municipal Waste Regulations requires that counties submit a revised Plan to the PADEP at the earliest of the following events:

- at least three years prior to the expiration of the capacity assurances necessary to dispose or process the municipal waste generated in the county
- at least 3 years prior to the expiration of the term of the County's approved plan
- or, when otherwise required by the Department

Purpose and Intent of Plan Revision: The 5 County Region (the Region, herein) composed of Columbia, Lycoming, Montour, Snyder and Union Counties, has elected to update its Regional Solid Waste Plan. This Plan will update the current Regional Solid Waste Plan, and will be prepared under the guidelines required by Act 101.

This Plan was developed by a Team, consisting of the Regional Steering Committee, the Regional Solid Waste Advisory Committee (consisting of two Stakeholder Groups), and the Lycoming County Planning & Community Development staff. The Team's vision and approach in preparing this Regional Plan, and the understanding of the goals to be accomplished through this process were multifaceted:

- to assure adequate waste disposal capacity is available in the Region for at least the next 10 years (through December of 2033)
- to gather accurate waste generation and recycling data, and to make realistic projections of future growth in population and waste/recycling generation in the Region
- to identify current waste hauling and disposal patterns, and to evaluate the availability of services for the collection, transportation and disposal of waste and the recovery of recyclables within the Region
- to provide a professional assessment of available waste processing and disposal technologies that could be considered in conjunction with current public operations
- to assess the economics of waste management in the Region; to accurately reflect the Regional marketplace under which the five Counties operate; and to establish/confirm how to stay competitive in the marketplace
- to analyze ways to logically improve the quality of life and level of service to the Region's residents and businesses, including prospects for expanding recycling opportunities in the Region

- to identify improvements to the current waste management system, such as waste transfer, processing and waste diversion options, enhanced recycling, and voluntary fee collection and/or service options, that can improve the economics, level of service, and support for programs offered in the Region
- to encourage input and feedback from the municipal, business, recycling, waste industry, and citizens Stakeholder Groups throughout the planning process, and to develop consensus among the stakeholders for a preferred system of waste and recyclables management in the Region
- to develop a logical, practical, and implementable Regional Solid Waste Management Plan.

In addition, this revision also discusses the Regional recycling programs, including:

- review of current municipal recycling activities in each County
- methods for enhancement of recycling opportunities
- alternative approaches to waste reduction and minimization
- issues regarding household hazardous waste (HHW) collection programs

Potential Benefits to the Region for implementation of this Plan are numerous, and include:

- improved health through the reduction of illegal dumping of waste materials
- improved safety resulting from fewer tire piles and illegal dumps, which can lead to fires, dangerous runoff and promotion of vermin
- economic opportunities to the local residents through waste collection and recycling
- decreased liability associated with illicit disposal of waste materials or failure to comply with State and Federal requirements
- coordination of recycling within the Region, which will reduce the costs associated with landfill disposal and provide raw materials for innovative "green businesses"
- improved access to available grant funding
- improve access to waste disposal and recycling to portions of the Region that had been previously underserved
- Deterrence of West Nile Virus through the proper disposal of tires and other illegally dumped or stored waste material

EXECUTIVE SUMMARY

The 5 County Region (the Region, herein) composed of Columbia, Lycoming, Montour, Snyder and Union Counties, has elected to update their multi-county Regional Solid Waste Plan prepared under Act 101 and the planning guidelines developed by the Pennsylvania Department of Environmental Protection (PADEP).

Since this is a Regional Plan, it was developed by a Team, consisting of the Regional Stakeholder Committee, the Regional Solid Waste Advisory Steering Committee, and Lycoming County Planning & Community Development staff acting as the consultant for this Project. This is an update to the 2013 Regional Solid Waste Plan.

The Goal of the Plan Development was to:

- gather accurate recent data, and develop realistic projections of future Regional waste generation
- recommend improvements in the current waste management system
- develop a Logical, Practical, Implementable and Defendable Regional Solid Waste Plan that meets the needs of the 5 Counties
- have the 5 Counties execute 10-yr Disposal Capacity Agreements with landfills and/ or waste processing sites
- encourage expanded recycling where appropriate

The Plan development process was initiated by representatives of the 5 Counties in 2019, and initial Public Meeting held in August of 2019. A meeting was held in March of 2020 to determine a path forward for updates to the Regional Plan. During the planning process, over meetings were held to identify and discuss solid waste and recycling issues and solutions, and to solicit input and feedback on draft plan materials. A series of draft submittals were made to the various committees and municipalities, and the Final Draft submission was completed in October 2023. After this series of Public Meetings are held in each of the 5 host counties to solicit comments on the Draft Regional Plan, and responses to comments generated during this process are developed, the Final Regional Plan version will be presented to the County Commissioners of each of the 5 counties for approval in January/February 2024, with Municipal Ratification of the Regional Plan in each County anticipated by March 2024. After receipt of final approval of the Ratified Plan from the PADEP, a one-year implementation period will follow, during which the various forms and agreements will be signed.

Because of the large number of participants and to communicate the intent of the Regional Plan, and to solicit input from stakeholders a website is being maintained. The website is the most effective means of communication for a document of this size. The internet website was established to provide a location to share documentation developed in the planning process and at the meetings. The website locations is:

https://www.lyco.org/Departments/Planning-and-Community-Development/Environmental-Planning

This website includes copies of the following: general information regarding the project goals, a detailed history of the Plan development, description of the various Committees, copies of the latest versions of the Draft Plan, attendance records and notes from each meeting, and contact information for each Team member.

The Final Draft form has been submitted to the Regional Steering Committee, the Regional Stakeholder Groups, the municipalities within the 5 counties, the residents and businesses, and the PADEP for comment. In addition, this version has been posted on the website listed above. The Final Draft Plan includes the following:

- Description of Waste & Estimated Future Capacity Requirements
- Description of Recyclable Materials
- Selection and Justification of Municipal Waste Management Program
- Discussion of the Public Function
- Waste and Recycling System Options and Recommendations
- Description of Facilities/ Orderly Extension of Waste Management Systems
- Implementation Documents
- Description of Public Participation Activities
- Implementation Schedule

As part of the 2023 Plan development, the 2013 Regional Plan was reviewed. The majority of the analysis remains valid. Specific recommendations regarding: the collection of refuse and recyclables; and the handling of e-waste, construction & demolition waste, household hazardous waste, and pharmaceutical waste were also prepared and included in the Plan. Also, waste associated with Marcellus Shale drilling was considered, and illegal dumping and open burning issues were discussed. Recommendations regarding burning ordinances were included in the Plan, along with methods to promote recycling throughout the Region. Many of these items were either addressed, such as illegal dumping, pharmaceutical waste, and e-waste, however some of the items, such as e-waste and household hazardous waste, with the loss of funding, increases in expense for disposal, and the changes to the CDR Act (Computer, TV, Electronics) there have been difficulty in finding funding to expand or hold these events. A list of prospective measures to sustain integrated waste and recyclables management programs and potentially expand or improve service in the Region was developed for consideration and possible future action.

The 5 County Regional Plan Stakeholder Committee discussed whether sending out a Solicitation of Interest for waste disposal was necessary. The Committee decided that it was not needed.

Overall, the data collected regarding waste, population, recycling and future growth was analyzed and the Committee agrees that the while some growth is expected in various parts of the 5 County Region disposal tonnages will not significantly increase and depending upon the waste type will either stay static or decrease.

CHAPTER 1 – DESCRIPTION OF WASTE (per DEP § 272.223)

This section describes the types and quantities of Municipal Solid Waste (MSW) generated currently in the 5 County Region. These projections will allow the Region to best determine future waste projections, and assist in determining the best future management system through options that include, but are not limited to, recycling, composting, waste reduction, and landfilling remaining materials.

Estimates are based on the Regional waste destination reports provided by the Pennsylvania Department of Environmental Protection (PADEP), Municipal and County Recycling reports, Pennsylvania Statewide waste composition study, EPA National Generation rates, and data provided through conversations, data research and phone calls to various constituencies; including waste haulers, wastewater and water treatment plants, and other related entities. (see Appendix A).

1.1 Description of Waste

Solid waste is reported by seven categories, each with their own considerations for transport, processing, and disposal.

Municipal Waste is any household waste. These typically form the bulk of solid waste flow logistics and volume. Unsurprisingly, municipal waste amounts chart alongside population trends, with the largest municipal populations producing the most municipal waste.

Residual Waste is any nonhazardous waste produced through industrial operations. These often follow municipal waste in terms of volume for most counties.

Sewage Sludge is semi-solid waste produced as a byproduct of water treatment. Water processing organizations typically contract for this type of disposal.

Processed Medical Waste, also classified as **Regulated Medical and Chemotherapeutic Waste,** is waste produced during chemotherapeutic treatments at medical facilities. It requires specialized processing and handling prior to disposal.

Construction Waste is any kind of debris produced during construction, renovation, or demolition activities. Although less frequently produced than residual waste, it is volumetrically significant.

Waste-to-Energy Ash is the disposed remains of incineration. Wood burning and industrial incinerators are common producers.

Asbestos Waste is any asbestos requiring disposal; it is often produced alongside construction waste, but requires additional hazard precautions.

1.2 Background

Pennsylvania's Act 101, the "Municipal Waste Planning, Recycling and Waste Reduction Act" mandated that Pennsylvania's counties develop formal plans for management of all MSW generated within their boundaries, and review/update these plans every ten (10) years at a minimum. Each of the five counties represented in the Regional Solid Waste Management agreed to initiate a 5 County Regional Solid Waste Plan Update. The information developed in the 2013 Plan is summarized below:

Table 1.2-1 Summary of Previous County Solid Waste Plan Update

County	Columbia	Lycoming	Montour	Snyder	Union
Published Date	2/2013	2/2013	2/2013	2/2013	2/2013
Municipalities	33	52	11	21	14
Land Mass (square miles)	484	1,216	131	332	317
2010 Census Population	67,296	116,111	18,267	39,702	44,947
2020 Census Population	64,627	114,188	18,136	39,736	42,681
Total Waste Generated 2009 (tons)	75,796	120,459	13,042	23,499	33,357
- Municipal	52,160	77,407	7,872	15,999	21,878
- Residual	12,656	20,242	1,832	5,009	5,255
- Sewage/Sludge	4,152	10,545	12	1,299	3,755
- Infectious/ Chemotherapeutic	0	279	1,779	0	0
- Construction/Demolition	6,705	5,790	1,487	1,095	2,444
- Ash	12	4,099	0	50	14
- Asbestos	111	2,096	59	46	14
- Household Haz. Waste	not listed				not listed
Recycled Tons	77,203	197,823	4,987	29,855	30,033

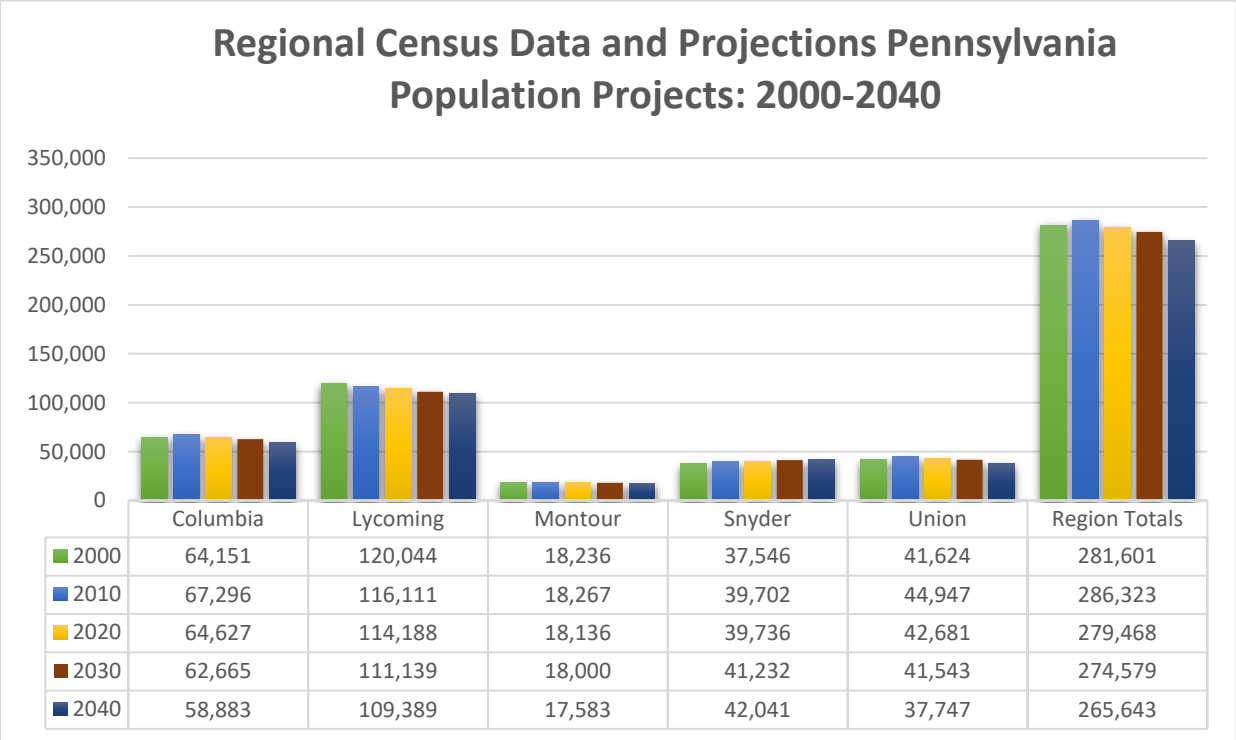
1.3 Population

Data for establishing population projections was obtained from a variety of sources, as noted below. Since 2020 was a Federal Census year, the data shown below has been adjusted to reflect the latest population information. Data was then projected from the 2020 census and other available information to 2040 and beyond. For this exercise, projections to 2040 (or 7 years beyond the Plan coverage date) were estimated.

Table 1.3-1 Regional Census Data and Populations
Pennsylvania Population Projections: 2000 - 2040

County	2000 Census	2010 Census	2020 Census	2030 Projection	2040 Projection	% Change 2010-2020	% Change 2020-2030	% Change 2030-2040
Columbia	64,151	67,295	64,727	67,695	68,474	-3.8%	4.6%	1.2%
Lycoming	120,044	116,111	114,188	111,771	110,503	-1.7%	-2.1%	-1.1%
Montour	18,236	18,267	18,136	18,000	17,583	-0.7%	-0.8%	-2.3%
Snyder	37,546	39,702	39,736	41,232	42,041	0.1%	3.8%	1.9%
Union*	41,624	44,947	42,681	45,646	46,877	-5.0%	6.9%	2.7%
Region Totals	**281,601**	**286,322**	**279,468**	**284,344**	**285,477**	**-2.4%**	**1.7%**	**0.4%**

Notes: The above information was obtained from the Federal Census Data, with 2030-2040 projections based on County % estimates.
**Federal Prison population relocations during COVID Pandemic may have skewed the projections of Union County's overall population as reported in the 2020 Census.*



1.4 Waste Tonnage Landfilled

Table 1.3-1 shows the amount of waste produced within the Region, and deposited in landfills. The totals have been subdivided into primary categories, with the totals obtained

from the PADEP using data supplied by the Counties. These tonnages do not include material that were recycled, deposited at Captive Industrial Landfills (landfills owned by the generator of the waste and used solely for the disposal of that waste) or land applied (sewage sludge), just material disposed at municipal waste landfills.

Comparison of 2013 Plan vs 2023 Plan:

Overall the 5 County Region saw waste disposal stay fairly static or a reduction in tonnage except for Residual Waste which saw an increase in tonnage disposed. Also, recycled materials saw a significant increase even though population for the region is slightly decreasing.

The Region sees typical disposal rates across special categories for the State and Nation. Municipal Solid Waste unsurprisingly charts along population trends. Sewage sludge is uniquely stable as a reported disposal category, with relatively little variation year to year, or even across decades. This is in part due to the fact that landfill disposal of sewage sludge consistently outpaces land spreading, the alternative to landfill disposal. Land spreading remains burdensome for sewage processing facilities, as permitting for this disposal method is relatively arduous. Construction and demolition waste fluctuate with construction activity, and residual waste increases with industrial development. The recent development of industrial facilities along the I-80 and SR 15 corridors within the Region in part is fueling the increased rates of residual waste disposal and may increase before stabilizing. The increased sparsity of Processed Medical waste and WTE Ash waste in more recent years also follow national trends. Ash is less frequently disposed of as natural gas continues to replace coal fired power generation facilities, as is reflected over the decade's disposal decline*. Medical Waste is increasingly handled by hospital networks themselves through specialized contractors better equipped and trained for the field, and trained within the context of the specific network in question. This is a trend unlikely to reverse, as hospital networks overtake more fragmented models of care systems.

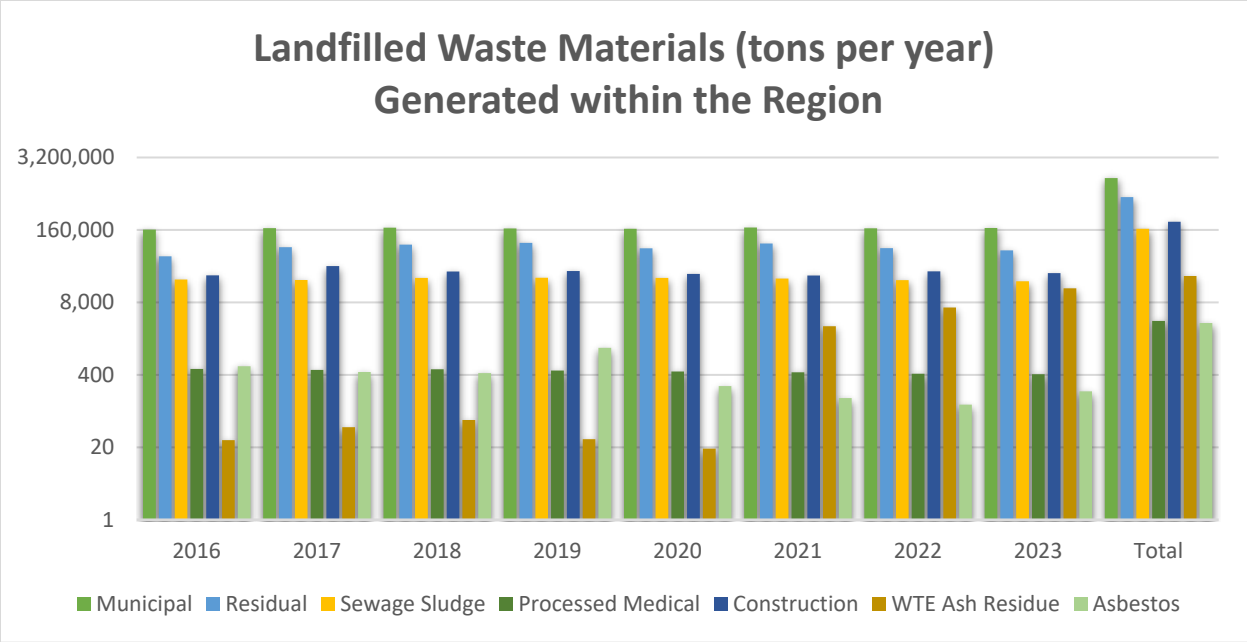
It is notable that no disposal rate appears to be on track to reach rates of disposal seen within the 10 year span that the previous plan covered. Reported disposal rates give no suggestion of overtaking landfill capacity demands.

* The relatively drastic volume of WTE Ash generated in the Region in 2021-2024 is an anomaly. In those years, the Boral Resources Landfill was excavated by Eco Materials in Montour County for fly ash to be processed as a cement component. The by-product of this processing, which amounted to over a decade's worth of coal burning refuse in the Boral Landfill, was finally disposed of at the Lycoming County Landfill in 2021-2024 and classified as WTE Ash by DEP definitions. This particular instance of WTE Ash influx is unlikely to be repeated as the facility no longer burns coal and has switched to natural gas.

Table 1.4-1
Landfilled Waste Material (tons per year) Generated within the Region

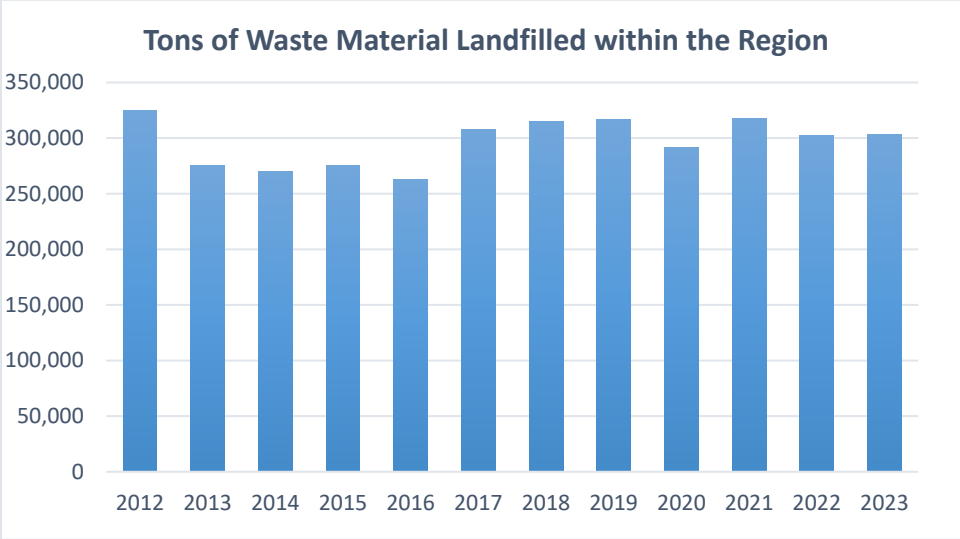
	Municipal	Residual	Sewage Sludge	Processed Medical	Construction	WTE Ash Residue	Asbestos	Total
2016	162,639	53,800	20,651	510	24,473	27	573	262,672
2017	172,297	78,607	20,274	490	35,872	46	450	308,036
2018	175,625	87,210	22,052	504	28,646	62	429	314,529
2019	169,736	93,523	22,237	479	29,191	28	1,223	316,416
2020	168,009	74,882	22,092	459	26,051	19	252	291,763
2021	176,872	91,053	21,515	444	24,389	2,980	153	317,403
2022	170,683	75,390	20,012	420	28,848	6,463	117	301,933
2023	173,416	68,547	19,110	410	26,863	14,293	203	302,843
8-Year Total	1,369,277	623,012	167,942	3715	224,330	23,919	3,400	2,415,595
8-Year Avg.	171,160	77,877	20,993	464	28,041	2990	425	301,949

According to PADEP definitions, the MSW portion consists of waste generated by residences, businesses, institutions, government facilities, offices, cafeterias, shopping areas, and similar facilities. Construction and Demolition (C&D) waste includes "all solid waste resulting from the construction or demolition of buildings and other structures, including but not limited to, wood, plaster, metals, asphaltic substances, bricks, blocks and un-segregated concrete." It does not include waste from land clearing (trees, brush, stumps, and vegetative matter) and uncontaminated soil, rock, stone, gravel, bricks and blocks. ICW represents Infectious/Chemotherapeutic Waste, primarily from hospitals and clinics. Residual, Sewage Sludge and Ash waste material tonnages are typically reported by industries or treatment plants within the Region, and Asbestos tonnages are a special category generally associated with C&D waste. This Regional Solid Waste Plan deals primarily with the "municipal" portion of the waste stream. Below is a tabular presentation of the various types of waste.



The following table shows the total tonnage of material, generated within the Region, and disposed in permitted municipal waste landfills over the past 10 year period, as obtained from a different PADEP database. This data was obtained directly from the landfill companies, but note that the totals below agree quite well with the totals shown in Table 1.3-1.

Table 1.4-2
Tons of Waste Material Landfilled by the Region



A more comprehensive table showing the total Landfilled Waste Material tonnage disposed of by each County is shown in Appendix A (Table A.1). Further information regarding landfills used for disposal of Regional waste is included in Section 2.2.

As shown on the above graphics, the tonnage of material disposed at permitted municipal landfills within the Region has been holding fairly steady over the past 5 years. However, the average of the total landfilled waste is within 15% of the maximum for the 5-year period, indicating the trend is not dramatic. This is typical of National and State-wide trends noted over the past 10 years.

Note that the above discusses only that material that was generated in the Region, and disposed in permitted municipal landfills. The total waste generated within the Region is a function of this material, plus that portion of the waste that has been recycled, plus the portion that has been produced and disposed at industrial or agricultural facilities. For this Plan, we will focus on material disposed at permitted municipal waste landfills and that which is recycled. For a summary of the recycled materials, see Chapter 4, Section 4.1.

1.5 Residential, Commercial, and Institutional Fraction of the Municipal Waste Stream

The typical municipal waste portion of the Region's solid waste stream consists of waste generated by residential (homes, apartments), commercial (offices, retail stores, restaurants, industrial lunchrooms and offices, etc.), and institutional sources (municipal buildings, libraries, schools, etc.) and community events. This material does not include sewage sludge generated by on-lot septic systems and wastewater treatment plants (WWTPs), regulated medical waste (RMW) generated mainly from hospitals and other medical institutions, ash material generated from municipal waste incinerators and other industrial processes, asbestos material generated from industrial processes and demolition projects, and construction and demolition material from building development and/or demolition projects.

Each County in the Region maintains a listing of the residential, commercial, institutional and municipal properties within their respective County. These are often maintained through tax assessments and the tax departments of each respective County. The method in which the tax office classifies these entities varies between the Counties.

Tables 1.5-1-1 through 1.5-3 provide a breakdown of these establishments in each County. These establishments are accurate as of the 2023 tax assessment for each County.

Table 1.5-1
Estimated Number of Residential, Commercial, Municipal and Institutional Establishments in the Region

County	Residential	Commercial	Municipal	Institutional
Columbia	25,465	1,552	38	204
Lycoming	41,301	2,588	-	722
Montour	7,946	578	135	26
Snyder	15,978	879	21	9
Union	14,172	993	14	9
Regional Total	**104,862**	**6,590**	**208**	**970**

Table 1.5-2
Estimated Number of Mobile Home, Restaurant, and Hotel Establishments in the Region

County	Mobile Homes	Restaurant	Hotel
Columbia	41	66	10
Lycoming	48	315	58
Montour	4	17	16
Snyder	11	78	6
Union	9	185	10
Regional Total	**113**	**661**	**100**

Table 1.5-3
Estimated Number of Hospital, Clinic, Doctor, Dentist, Funeral Home, and Veterinarian Establishments in the Region

County	Hospital	Clinics	Doctor	Dentist	Funeral Home	Veterinarian
Columbia	1	7	22	18	8	5
Lycoming	5	69	80	56	17	19
Montour	1	7	4	3	3	3
Snyder	1	-	10*	11	4	2
Union	1	189	112	47	60	3
Regional Total	**9**	**272**	**228**	**135**	**92**	**32**

** combines doctors and clinics in the same category*

Table 1.5-4 shows the total quantities of residential, commercial, and institutional waste processed or disposed of and recyclables diverted from Regional sources from the years 2012 through 2023, as reported in the PADEP Waste Destination Reports.

Table 1.5-4
Regional Residential, Commercial and Institutional Waste
and Recyclables Quantities for 2012 – 2023 (in Tons)

	Year											
	2012	**2013**	**2014**	**2015**	**2016**	**2017**	**2018**	**2019**	**2020**	**2021**	**2022**	**2023**
Typical MSW Tonnage*	190,435	157,011	154,718	162,454	162,639	172,297	175,625	169,736	168,009	176,872	170,683	173,417
Recycling Tonnage**	72,398	69,404	83,742	84,306	106,607	106,102	94,912	106,825	91,465	91,827	80,563	-
Total	**262,833**	**226,415**	**238,460**	**246,760**	**269,246**	**278,399**	**270,537**	**276,561**	**259,474**	**268,699**	**251,246**	**-**

** Tonnages include typical MSW and C&D material taken to in-state landfills. In-state tonnages were obtained from PADEP Waste Destination Reports.*

*** Tonnages obtained from Re-TRAC Reports for the Region.*

1.5.1 Biosolids and Septage Waste

The following is a list of sewage treatment plants/facilities located in each respective County.

Columbia County:

1. Benton Foundry Sewage Treatment Plant
2. Benton Municipal Water and Sewer Authority
3. Berwick Area Joint Sewer Authority
4. Bloomsburg Municipal Authority
5. Boro of Catawissa
6. Briar Creek Park STP
7. Brookside MHP
8. Camp Victory
9. Central Columbia School District
10. Columbia-Montour VoTech School
11. Country Manor Apartments
12. Country Terrace Estates MHP
13. Greenwood Township Municipal Authority STP
14. Hemlock Municipal Sewage COOP
15. J&D Campground WWTP
16. Lake Glory Campground WWTP
17. Madison Estates MHP
18. Madison Township Municipal Authority
19. Millville Borough
20. Montour Township STP
21. Orange Township WWTP
22. Orangeville Boro
23. PADOT Rest Area 38 I-80 West
24. Patriot Treatment Plant
25. Pleasant View MHP
26. Slabtown WWTP
27. South Centre Township WWTP
28. Southern Columbia Area School District
29. Springbrook Family Campground
30. Susquehanna Valley RV
31. Veolia Water PA Inc.
32. Village of Numidia Sewer System
33. Wonderview Sanitary Facility
34. Woods Edge Estates

Lycoming County:

1. Beaver Lake WWTP
2. Brady Township WWTF
3. Cogan Valley Farms
4. Diversified TRMT Alternative CTR – Nisbet Elementary School
5. Franklin Township Lairdsville WWTP
6. Hepburn Elementary School
7. Hidden Valley Mobile Home Park
8. Hughesville Wolf Township JT Municipal Authority
9. Jersey Shore Area School District
10. Keystone APT LLC
11. Mifflin Manor STP
12. Montoursville REG SEW SYS STP
13. Pinecrest Village MHP SEW SYS
14. Tiadaghton View MHP
15. Tiadagton Valley Municipal Authority WWTP
16. Timberend Estates MHC
17. West Branch Regional Authority WWTP
18. Williamsport SANI AUTH Central STP
19. Williamsport Sanitary Authority-West STP

Montour County:

1. Danville BORO STP
2. Great Dane LP
3. Mooresburg Wastewater Treatment Plant
4. PA DOT – Rest Area 35 – I-80 East
5. PA DOT – Rest Area 36 – I-80 West
6. Washingtonville MUNI AUTH

Snyder County:

1. Beavertown Municipal Authority Sewage Plant
2. Eastern Snyder County Regional Authority STP
3. Freeburg Borough Municipal Authority
4. Kissimmee Village Sewer System
5. Kreamer Municipal Authority Sewer STP
6. McClure Municipal Authority Sewer System STP
7. Middleburg Municipal Authority STP
8. Penns Creek Municipal Authority
9. Perry Township Municipal Authority
10. Spring Township Sewage
11. Union Chapman Regional Authority Treatment Facility

Union County:

1. Gregg Township Municipal Authority STP
2. Hartleton Borough
3. Hartley Township Municipal Authority WWTP
4. Kelly Crossroads Sanitary Sewer System
5. Kelly Township Municipal Authority
6. Lewis Township WWTP
7. Lewisburg Joint Authority East Buffalo
8. Mifflinburg WWTP
9. New Berlin Municipal Authority WWTP
10. Pine Valley Park MHP
11. Village of Mazeppa STP
12. White Deer Township Municipal Authority

The following is a list of septage haulers that operate in each respective County. This list was obtained from PADEP in September 2024.

Table 1.5-5

Columbia County Septage Haulers (as of 2024)

Company	Mailing/Location Address
Beaver Valley Farms	714 Beaver Valley Rd., Bloomsburg, PA 17815
Biros Septic and Drian Cleaning, Inc	1365 State Road, Zion Grove, PA 17985
Brown's Septic	E. First St., Box 256, Mifflinville, PA 18631
Fought's Septic Services	2705 Snyder Ave.., Bloomsburg, PA 17815
Franklin Barnes	239 Yost Hollow Rd., Berwick, PA 18603
JLB Systems	250 Riverview Ave., Bloomsburg, PA 17815
Ridge Investment Corp.	6009 Columbia Blvd., Bloomsburg, PA 17815
Roto-Rooter Sewer & Drain	P.O. Box 147, Lightstreet, PA 17839-0338
Scott J. Smith Plumbing & Heating	37 Rarig Rd., Catawissa, PA 17820
Starr Portables LLC	134A Morehead Ave., Millville, PA 17846

Table 1.5-6

Lycoming County Septage Haulers (as of 2024)

Company	Mailing/Location Address
A-Portable Toilet	RR#2, Box 263, Cogan Station, PA 17728
B and E. Septic Company	8281 Rt. 14 HWY, Trout Run. PA 17771
Berger Sanitation Service	815 Berger Rd., Muncy, PA 17756
Berger Septic (2019) Inc.	921 Westminister Drive Suite 1, Williamsport, PA 17701
Billtown Portable Toilet, Inc.	2109 Central Ave., Williamsport, PA 17701
Caddy Shack Portable Restrooms	378 Factory Rd., Cogan Station, PA 17728

Cogan Valley Farms/Septic Service	394 & 480 Rt. 973 West, Cogan Station, PA 17728
Gotta Go Inc. T/A A-1 Septic and Sandmound SVC	1611 Princeton Ave., Williamsport, PA 17701
Honey Dippers	5198 Rt. 654 Highway, Williamsport, PA 17702
J.L. Rishel Co.	1131 W. Front Street, South Williamsport, PA 17702
John Braim & Son	1429 Cemetery St., Jersey Shore, PA 17740
Jordan's Construction	RR#4, Box 153, Muncy, PA 17756
Kremser Bros.	1300 Jordan Avenue, Montoursville, PA 17754
L.A. Honeywagon Septic Service	1585 Brion Road, Liberty, PA 16930
Lycoming County Resource Management Services	447 Alexander Drive, P.O. Box 187, Montgomery, PA 17752
Lycoming Portable Toilets	RR#1, Box 201, Montgomery, PA 17752
Mowery Farms	1489 Rt 54, Montgomery, PA 17752
Robert E. Laudig Septic Tank Service	523 Broad Street, Montoursville, PA 17754
Ron Braim Septic Cleaning Service	1477 Allegheny St., Jersey Shore, PA 17740
Stallion Oilfield Construction	297 Beautys Run Road, Williamsport, PA 17701

Table 1.5-7

Montour County Septage Haulers (as of 2024)

Company	Mailing/Location Address
Betz Liquid	28 California Rd., Watsontown, PA 17777
Chip Adams Sewer & Drain Cleaning	RR#1, Box 357, Bloomsburg, PA 17815
JZ Services, LLC	1084 County Line Road, Turbotville, PA 17772
Preferred Portables Inc.	340 East Mahoning Street, Danville, PA 17821

Table 1.5-8

Snyder County Septage Haulers (as of 2024)

Company	Mailing/Location Address
Classic Services	RR 3, Box 132, Selingsgrove, PA 17870
DeLosier Pumping Service	RD#2, Box 192, Selingsgrove, PA 17870
Harry's Septic Cleaning	1 South Old Trail, Shamokin Dam, PA 17876
John Rinehart's Septic Service	88 Salem Manor Court, Selinsgrove, PA 17870
Kreamer Construction, Inc.	Route 522 North, Middleburg, PA, 17842
Middleburg Precast, LLC	Route 522 N., Middleburg, PA 17842
Port-A-Throne	RD#1, Box 59 Kratzerville Rd., Winifield, PA, 17889
R & R Septic	58 Salem Manor, Selinsgrove, PA 17870
Richard's Portable Toilets & Septic Service	2425 Quarry Road, Beavertown, PA 17813
Valley Septic Service	38B Salem Manor Ct., Selinsgrove, PA 17870
Wendt Excavating	RR#2, Box 76, Mt. Pleasant Mills, PA 17853
Wolfley Septic Pumping	7718 Stage Rd., McClure, PA 17841
Zook's Septic Services	117 Daves Lane, Middleburg, PA 17842

Table 1.5-9
Union County Septage Haulers (as of 2024)

Company	Mailing/Location Address
Hurst's Liquid Hauling	P.O. Box 13, Vicksburg, PA 17883
Jim Foresman Septic Pumping	RR#2, Box 443, Montgomery, PA 17752
Mark Cromley's Hauling & Septic	RD#3, Box 555, Lewisburg, PA 17837
Richard L. Reaser	724 Reber Road, Mifflinburg, PA 17844
Stoney Ridge Restrooms	239 Kenwood Drive, Allenwood, PA 17810
Turtle Head Toilets	307 North Fourth Street, Mifflinburg, PA 17844
Wolfe's Liquid Hauling	990 Col. John Kelly Rd., Lewisburg, PA 17837-9705
Zook's Liquid Hauling	RR#2, Box 370, Lewisburg, A 17837

1.6 Special Collection Events

Special collection events on both a County and Municipal level are constrained by a lack of funding options. The loss of the landfill administration fee limited resources for collection events, and no other source of funding has yet filled that need. The rural setting of the Region further complicates collection efforts of this type by increasing the transportation costs by both residents and contractors. The COVID pandemic further complicated special event arrangements, outright cancelling Montour's planned electronics recycling event in 2020. Unless a grant was obtained the cost of the event has been placed upon the residents. Snyder County held an e-waste collection event and charged a fee per unit. Union County used limited grant funds for an e-waste event in 2022 and was overwhelmed with attendance and exceeded their capacity for collection. The cost of this event was over $120,000.

1.7 Large Community Events and Recycling Efforts

The following is a list of large community events that take place in each respective County. These events typically attract greater than 200 people.

Columbia County:

- Bloomsburg Fairgrounds – Multiple Events throughout the year
    - Covered Bridges Festival
    - Bloomsburg Fair
    - Winter Fest
    - 4-Wheel Jamboree
    - Farmers Market
    - Early Birds Sports Expo
    - Susquehanna RV Show
    - Central PA Pretzel Festival
    - Mac N Cheese Festival
    - Eagle Arms Gun Show
- Bloomsburg Legion – Easter Egg Hunt and multiple events throughout the year

- Millville Carnival
- Catawissa Borough – Halloween Parade
- Catawissa Fire Company Carnival
- Millville Borough 4th of July Parade
- Lightstreet Fire Company – Carnival, Roast Beef dinner, Easter Egg Hunt
- Orangeville Carnival
- Town of Bloomsburg
    - Renaissance Jamboree
    - Parade of Lights
    - Homecoming Parade
    - Pet and Toy Parade
- Bloomsburg Firehall – Carnival, breakfasts, etc.
- Caldwell Consistory
    - Tree Fest
    - Taming of the Brew
    - Local Proms, etc.
- Central Columbia High School
    - Football games
    - Local carnival
    - Other events
- Bloomsburg High School – Football gases
- Southern Columbia High School – Football games
- Vo-Tech High School – Football games and multiple other events
- Bloomsburg University
    - Football games
    - Soccer tournaments
    - Multiple other events
- Bloomsburg University Haas Center for the Arts – Multiple events
- Bloomsburg Theater Ensemble – Multiple plays and events throughout the year
- Bloomsburg Town Park – Multiple events
- Benton Rodeo Grounds
    - Benton Rodeo
    - Panted Pony Intertribal Pow Wow
- Benton Carnival
- Camp Lavigne – Boy Scout Camp events and wine festival
- Berwick Test Track – Blues Festival and other multiple events
- Berwick Borough Run for the Diamonds
- Ber Vaugh Park – Easter Egg Hunt
- Bloomsburg YMCA – Easter Egg Hunt, Trunk or Treat Event
- Briar Creek Lake – Multiple Events
- Briggs Farm – Multiple farmer markets, Blues Festival
- Farmfest Bloomsburg
- Montour Preserve – Environmental Education, Music and Arts Festival
- Columbia Montour Sweets and Spirits Trail
- Berwick Boulevard Light Show

Montour County:

- Spring Fling
- Memorial Day Parade
- Fall Festival
- Montour Count Fair
- East End Fireman's Carnival
- Geisinger Children's Telethon (on campus with venders)
- Halloween Parade

Lycoming County:

- Williamsport Community Arts Center (events)
- Liberty Arena (events)
- Farrington Place (events)
- Little League Complex (events)
    - Little League World Series
- Historic Bowman Field (events)
    - Williamsport Cross Cutters Baseball team
- Community Theatre League (events)
- Apple Butter Festival
- Antique Tractor Show
- Lycoming County Fairgrounds (events)
    - Lycoming County Fair
- Annual Mummer's Parade
- Annual Veteran's Parade
- Annual Little League World Series Parade
- Annual Williamsport Welcomes the World Street Fair
- Annual Victorian Christmas Celebration
- 1st Fridays – Williamsport
- Annual 9/11 Memorial and Motorcycle Ride
- Lycoming College
- Pennsylvania College of Technology
- Jersey Shore School District Auditoriums & Stadium
- Loyalsock Township School District Auditoriums & Stadium
- Montoursville Area School District Auditoriums & Stadium
- South Williamsport Area School District Auditoriums & Stadium
- Montgomery Area School District Auditoriums & Stadium
- East Lycoming Region Area School District Auditoriums & Stadium

Snyder County:

- Snyder County Night Out
- Middleburg Carnival
- Fremont Strawberry Festival
- Selinsgrove Halloween Parade
- Selinsgrove Raceway

- McClure Bean Soup
- Dog Show
- Beaver Fair
- Selinsgrove BrewFest
- Snyder County Tractor and Truck Pulls
- Beaver Springs Drags
- Selinsgrove Area School District
- Midd-West School District
- Susquehanna University

Union County:

- Mifflinburg
    - Buggy Days / Fest
    - Apple Butter Festival
    - Blueberry & Bluegrass Festival
    - Octoberfest
    - Christkindl
- Lewisburg
    - Ice Festival
    - Arts Festival
    - Woolly Worm
- New Berlin
    - Fireman's Carnival
    - New Berlin Heritage Days
- Winfield Fire Company – Fundraising Dandelion Meal
- Bucknell University
    - Campus Theatre
    - Bucknell Pavilion
    - Weis Center for the Performing Arts
    - Football Stadium
    - Golf Course
- Hartley Township – West End Fair

The Counties will continue to actively engage the municipalities and the organizations that hold these events to discuss options with the municipalities and organizations to increase recycling over the ten year planning period.

CHAPTER 2 – DESCRIPTION OF FACILITIES (per DEP § 272.224)

2.1 Introduction

Currently, there are a total of 15 landfills and one waste-to-energy facility that have accepted at least 400 tons of municipal waste from the 5 County Region between 2012 and 2023. The Five County Region primarily utilizes The Lycoming County Landfill for the disposal of solid

waste. Other facilities accept the region's waste in smaller amounts, with The Clinton County SWA Wayne Township Landfill being the second highest accepting more than 1,000 tons of solid waste from the region. A complete list of those landfills, the tonnages of the various types of waste received from the region, and the average intakes from the Region for years 2012-2023 are presented in Appendix A.

2.2 Current Facilities in the Region for Management of Waste and Recyclables

The facilities and infrastructure in or near the 5 County Region that serve the waste management and recycling needs of the Region include a combination of landfills, transfer stations, drop-off sites and material recovery facilities (MRFs). These facilities are geographically located on Exhibits 1 and 2.

Table A.2 in Appendix A lists the municipal and non-municipal wastewater treatment plants in the Region that generate biosolids requiring disposal, and identifies the methods and locations of sludge disposal. Current disposal methods include land application on approved farm fields and disposal at landfills. A survey was sent to public sewer and water entities with the 5 County Region to determine how much sludge is produced and how it is disposed.

The Lycoming County Landfill is the sole landfill within the five county region and currently accepts the significant majority of waste originating from Montour, Northumberland, Snyder, Columbia and Union Counties as well as Lycoming. It is operated and managed by the Lycoming County Resource Management Services, a Department of Lycoming County Government.

The site totals 360.1 acres owned by Lycoming County (The County purchased 1067 acres from the FBOP, including the area currently permitted for the landfill) in Brady Township 9.5 miles south of Williamsport, at 447 Alexander Drive Montgomery, PA 17752. This purchase occurred in August 2023. The purchase of this acreage assures that the 5 Counties participating in the Regional Plan will have sufficient area for expansion well into the future.

The landfill's current average daily volume is 1,039 tons a day, mostly comprised of municipal solid waste. Other accepted materials for disposal include Special Handling Wastes that require additional approval prior to handling and disposal. These are classified as Sewage Sludge, Construction and Demolition waste, Ash, Asbestos, and Infectious Chemotherapeutic Waste. Industrial waste is accepted and classified as Residual Waste when it is nonhazardous. Hazardous and radioactive waste is not accepted or processed; incoming waste to the facility is weighed and screened for radioactivity prior to disposal. A total of 248,790 tons of total waste across all categories was accepted from the Region in 2023 at the Lycoming County Landfill.

Table 2.2-1
Waste Disposed of by the Region at the Lycoming County Landfill, 2012-2023

County	Municipal	Residual	Sewage Sludge	Processed Medical Waste	C&D	WTE Ash	Asbestos	Total Tonnage
Columbia	560,141	132,388	89,369	0	107,194	0	712	889,803
Lycoming	691,432	175,733	104,208	1,140	42,700	4,085	280	1,019,577
Montour	100,514	51,348	2,075	6,483	19,503	23,692	377	213,992
Snyder	131,506	49,159	11,755	0	13,941	251	1,711	208,324
Union	266,436	161,917	44,274	0	39,321	133	573	512,653

Table 2.2-2
Regional Contracted Disposal Facilities in Pennsylvania[1]

	PADEP Permit Number[1]	Permitted Capacity[1]	Remaining Capacity[1]	Available Capacity Through Expansion[1]	C&D Material Accepted	Recyclable Materials Accepted at On-Site Drop-Off[2]
Lycoming County Landfill	100963	18,913,900 CY	3,410,195 CY	NA	Yes	Comingled Recyclables Fiber/Papers: magazines, newspapers, chipboard, office paper, junk mail, and cardboard Plastic Bottles 1 & 2/metal cans: plastic bottles/jars #1&2 only, tin/steel cans, and aluminum cans Glass Bottles/Jars: clear, brown and green glass/jars – separated by color

CY = Cubic Yards
[1] Data obtained 2024

2.3 Existing Waste Transfer Stations

There are currently two (2) permitted waste transfer stations located in the Region, the Millville Transfer Station in Columbia County and the Lycoming County Transfer Station in Lycoming County. The services they provide are shown in Table 2.2-3.

Table 2.2-3
Existing Permitted Transfer Stations in the Region

Transfer Station	Description of Services Provided	Residential Access
Millville Transfer Station RR 1 Box 208 Millville, PA 17846 Columbia County	Provides a drop off location for trash, bulky waste, and construction waste. In regards to recyclables, it accepts automotive batteries, clear/brown/green glass, aluminum/steel/tin cans, cardboard and newspaper, and tires.	Yes
Lycoming County Transfer Station 1475 W. 3rd Street Williamsport, PA 17701 Lycoming County	Provides a drop-off location for trash and bulky waste for contractors and residents. In regards to recyclables, the Transfer Station accepts scrap metal and tires.	Yes

2.4 Sites for Agricultural Utilization of Biosolids

Section 1.5 of this Plan Revision summarized the current biosolids management practices in the Region. There are no known land application sites for biosolids generated within Columbia, Lycoming, Montour, Snyder and Union Counties.

Columbia County Land Application Sites

- Spiece Farm
- Fritz Farm
- Esposito Farm
- Evert Farm Bloomsburg Municipal Authority
- Edwards Farm
- McDowel Farm
- Haddon Craftsman
- Savage Farm

Lycoming County Land Application Sites

- DM Grimm Inc / Red Run Mountain Wildlife
- F & S Sanitary Facility
- Dunlap Farm Jersey Shore Borough
- Kremser Brothers (Cannon Hole Site)
- Harer Farm

- Mowery Farm

Montour County Land Application

- Sidler Farm
- Charles Rine Farm Danville Municipal Sewer Authority
- Stahlnecker R C (Pritchard Farm)

Snyder County Land Application

- Albert & David Heimbach Farm
- Dunkleburger Kline Farm Middleburg Municipal Authority
- Rhoads Farm
- Heimbach Farm Selinsgrove Municipal Authority
- GW Robinson Farm Kreamer Freeburg Municipal

Union County Land Application

- Fester Farm
- Hauck Farm
- Erdley Farm
- Ritzenthaler Farm

2.5 Consideration of Existing Facilities

PA Code 25 Section 272.224 mandates that the Plan must consider facilities which meet the definition of "existing facility". The selection and justification of the municipal waste program is outlined in Section 5 of this Plan Revision. In order to minimize the effect of reserving space for Regional waste on landfill capacity and to allow for flexibility for backup capacity, the Region has decided to utilize multiple disposal facilities. This action is also expected to help maintain competition in the area. The Regional Plan is intended not to interfere with any existing facility's effort to find other customers or to expand their facilities.

2.6 Collection Event Notification and Education

Columbia, Lycoming, Montour, Snyder and Union Counties notify their residents of collection events through several outreach methods. These methods include:

- Advertisements in local papers
- Facebook posts on the Planning Department’s Page
- County staff are encouraged to share this information on their own personal Facebook pages
- Twitter posts
- Flyers posted in the County Courthouses
- Flyers distributed to all County Departments
- Notifications to each municipality for sharing with residents

CHAPTER 3 – ESTIMATED FUTURE CAPACITY (per DEP § 272.225)

3.1 Required Tonnage Capacity

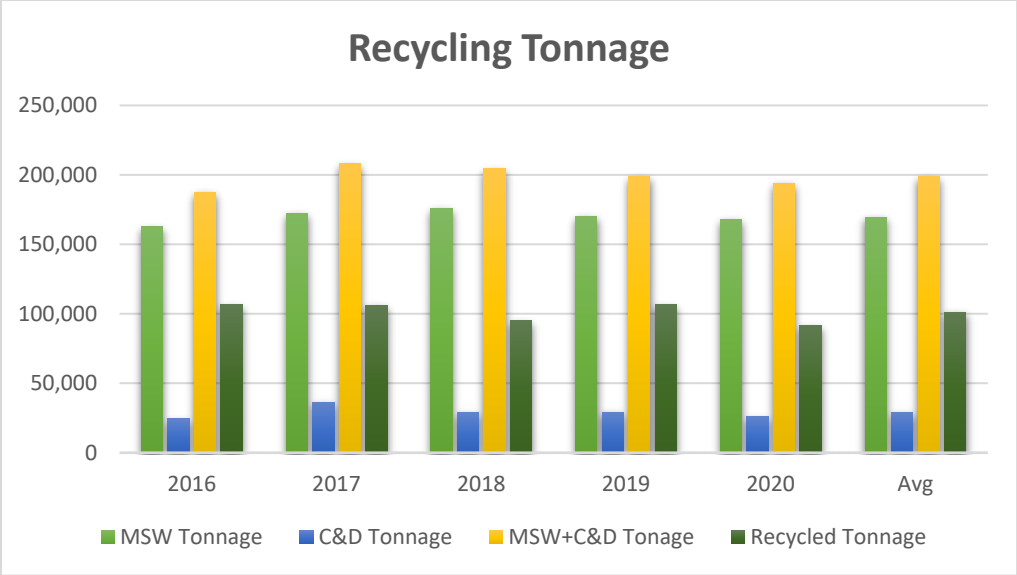
The tonnage of waste material generated in the Region that will ultimately require disposal is a function of recycling percentages. Ignoring the waste disposed by industry and agriculture at captive facilities or on-farm (as previously discussed), the landfilled tonnage has been a function of the total "gross discards" minus recycled material tonnage. As noted in Section 4.1, the Region has recycled an average of 97,000 tons annually, since 2016.

To determine the anticipated tonnage of material that will require disposal at an approved municipal landfill over the next 10 years, the projected total "gross discards" will need to be adjusted to account for the tons of recycled material anticipated over that same period.

In order to estimate the recycled tonnages, the 7 waste constituents discussed in Table 1.3-1 (MSW, residual, sewage sludge, ICW, C&D, ash and asbestos) must be reduced to reflect only those waste streams that typically have recycling components. Typically, the majority of recyclables come from the MSW and C&D waste streams, and the other 5 streams have no or minimal recycling. As such, only the MSW and C&D values for the 5-year period are used to compute the recycling percentages, as shown in the following (Table 3.1-1).

Table 3.1-1
Regional Recycling Percentage

	Regional MSW Tonnage	Regional C&D Tonnage	MSW+C&D Tonnage	Recycled Tonnage	MSW+C&D +Recycling Tonnage	% Recycled
2016	162,639	24,473	187,112	106,607	293,719	36%
2017	172,297	35,872	208,170	106,102	314,272	34%
2018	175,625	28,646	204,271	94,912	299,183	32%
2019	169,736	29,191	198,927	106,825	305,752	35%
2020	168,009	26,051	194,059	91,593	285,652	32%
2021	176,872	24,386	201,258	91,827	293,085	31%
2022	170,683	28,848	199,531	80,563	280,094	29%
2023	173,416	26,863	200,279	--	--	--
Avg.	**171,160**	**28,041**	**199,201**	**96,918**	**295,965**	**33%**



The landfilled and recycled material can also be shown on a per capita basis using the population estimates for this same 7-year time period, as presented below (Table 3.1-2).

Table 3.1-2
Regional Per Capita Landfilled and Recycled Waste

	Regional Population	MSW+C&D Tonnage	MSW+C&D Tons/capita	Recycled Tonnage	Recycling tons/capita	MSW+C&D +Recycled	MSW+C&D +Recycling tons/capita
2016	285,143	187,112	0.66	106,607	0.37	293,719	1.03
2017	283,099	208,170	0.74	106,102	0.37	314,272	1.11
2018	282,856	204,271	0.72	94,912	0.34	299,183	1.06
2019	281,788	198,927	0.71	106,825	0.38	305,752	1.09
2020*	279,468	194,059	0.69	91,465	0.33	285,652	1.02
2021	278,839	201,258	0.72	91,827	0.33	293,085	1.05
2022	278,517	199,530	0.72	80,563	0.29	359,080	1.29
2023	282,234	200,279	0.71	--	--	--	--
Avg.	**281,493**	**199,201**	**0.71**	**96,900**	**0.34**	**307,249**	**1.09**

*US Census Population Estimates

Using these average per capita estimates, and the projected regional populations (as shown in Table 1.2), it is possible to predict the tonnage of MSW and C&D that will require disposal in a municipal landfill.

As discussed above, the total tonnage of material that will require landfilling is a function of the "gross discards" within the region, minus the tons of material recycled. In order to predict this for future years, the following approach is used:

- assume that the total MSW+C&D+Recyclable tonnage will continue to be a function of the average per capita tonnage estimated in Table 3.1-2

- assume that the tonnage of landfilled material associated with the other four waste streams (sewage sludge, ICW, ash and asbestos) will continue at the same average as shown in Table 1.3 for the next ten years – these will be referred to in the following section as "4 waste streams" (note that the data collected do not show a correlation between population and these 4 waste streams – as such, and given that each of these waste streams, except for residual, generally showed a steady drop or static in tonnage, this would appear to be a conservative assumption. Each of these waste streams (other than sewage sludge) are more closely linked to industrial activities rather than municipal, so are not so closely linked to population changes and more related to market trend, renovations of older structures, and changes in energy production. While sewage sludge would seem to be linked to population, the data showed a steady decline in tonnage from 33,513 tons in 2005 to 19,762 tons in 2009 and now 19,110 in 2023. This reflects the increase in the number of persons being served by public sewer. While population is overall decreasing in the region, the number of persons connected to a public sewer service is increasing, which does not correspond to the approximate -1.00% decrease in population over the 11-year data period. However, the push to improve water quality correlates with the increase in sewer treatment facilities. Also, it is expected that with more municipalities requiring mandatory pumping of on-lot septic tanks that the tonnage of sewage sludge disposal will continue to average about the same in the future. With that in mind, it was conservatively assumed that the average total of these 4 waste streams will continue for the next 20 years.
- the sum of these items will represent the total "gross discards" for the region
- the recycling tonnage will continue at the same average per capita rate as computed in Table 3.1-2
- the projected annual landfill tonnage will equal the "gross discards" minus the recycled tonnage

Table 3.1-3 estimates the landfill disposal tonnage capacity needed by the Region between 2025 and 2040.

Table 3.1-3
Projected Regional Per Capita Landfilled/Recycled Waste

	Population	M+C+R tons/capita	M+C+R tonnage	4 Waste Streams	"Gross Discards"	Recycling tons/capita	Recycled tons	Landfilled Tons
2020	279,468	1.02	285,525	22,822	308,347	0.33	91,465	216,882
2025	284,026	1.09	309,588	24,685	334,273	0.34	96,569	237,704
2026	284,090	1.09	309,658	24,685	334,343	0.34	96,591	237,752
2027	284,155	1.09	309,729	24,685	334,414	0.34	96,613	237,801
2028	284,221	1.09	309,801	24,685	334,486	0.34	96,635	237,851
2029	284,288	1.09	309,874	24,685	334,559	0.34	96,658	237,901
2030	284,344	1.09	309,935	24,685	334,620	0.34	96,677	237,943
2031	284,433	1.09	310,032	24,685	334,717	0.34	96,707	238,010
2032	284,522	1.09	310,129	24,685	334,814	0.34	96,737	238,077
2033	284,613	1.09	310,228	24,685	334,913	0.34	96,768	238,145
2034	284,705	1.09	310,328	24,685	335,013	0.34	96,800	238,213
2035	284,788	1.09	310,419	24,685	335,104	0.34	96,828	238,276
2040	285,478	1.09	311,171	24,685	335,856	0.34	97,063	238,793

*Average Population and waste from Table 3.1-2 and Population Estimates from Table 1.2
** M = Municipal Solid Waste, C = Construction & Demolition Waste, R = Recycling

Please note that the goal for the Region is to continue to increase recyclables toward the PADEP goal of 35%, which the Region has nearly met when using the 7 year average, and if the average recycling rate were to increase during this 10-year period, the total tonnage of landfilled material will decrease. As an example, if the recycling percentage were to increase from the Table 3.1-1 average of 33.0% of the MSW and C&D waste to 40.0%, the above table would change to that shown in Table 3.1-4, below. (Note that if 0.34 tons/capita represents 33.0% of the MSW/C&D, then 40% would represent roughly 0.41 tons/capita recycled).

Table 3.1-4
Projected Regional Per Capita Landfilled/Recycled Waste with Assumptions

	Population	M+C+R Tons/Capita	M+C+R Tons	4 Waste Streams Tons	"Gross Discards"	Recycling Tons/Capita	Recycled Tons	Landfilled Tons
2020	279,468	1.09	285,525	22,822	308,347	0.41	114,210	194,137
2030	284,344	1.09	309,935	24,685	334,620	0.41	116,581	218,039
2040	285,478	1.09	311,171	24,685	335,856	0.41	117,046	218,810

3.2 National and Statewide Data Comparisons

According to the 2018 Advancing Sustainable Materials Management: Facts and Figures Fact Sheet, produced by EPA in 2020, the 2018 MSW generation amounts were 4.9 lbs/person/day. Of the MSW generated, approximately 32.1 percent is recycled or

composted, which is equivalent to 1.6 lbs/person/day. This results in a per capita disposal rate of approximately 3.3 lbs/person/day.

Table 3.1-5 shows the MSW disposed and recycling diverted by the Region between 2016 and 2022. This table demonstrates that on average, the Region is:

- Generating just over the national average of MSW, at 5.22 lbs/person/day.
- Disposing of MSW at the same rate as the national average, at 3.33 lbs/person/day.
- Recycling MSW just over the national average, at 1.89 lbs/person/day.

There are several factors that can account for the higher per capita generation of MSW in the Region, most notably the high rate of transient residents in the Region due to the Federal and State prisons located in the Region and various colleges located within the Region.

Worth noting from Table 3.1-5 is the year 2022 results for the Region align with the per capita rates from the EPA national report. The Region generated approximately 4.9 lbs/person/day, disposed of approximately 3.32 lbs/person/day of MSW and recycled or composted approximately 1.6 lbs/person/day.

Table 3.1-5
Per Capita MSW Generation and Recycling Rate for the Region

	Regional Population	Regional MSW Tonnage	Regional Recycled Tonnage	MSW+ Recycling Tonnage	Regional MSW Generation Rate	Regional MSW Disposal Rate	Regional Recycling Rate	% Recycled
2016	282,243	162,639	106,607	269,246	5.23	3.16	2.07	40%
2017	281,572	172,297	106,102	278,399	5.42	3.35	2.06	38%
2018	280,903	175,625	94,912	270,537	5.28	3.43	1.85	35%
2019	280,236	169,736	106,825	276,561	5.41	3.32	2.09	39%
2020	279,468	168,009	91,593	259,602	5.09	3.29	1.80	35%
2021	280,379	176,872	91,827	268,699	5.25	3.46	1.79	34%
2022	281,302	170,683	80,563	251,246	4.89	3.32	1.57	32%
Avg.		**170,683**	**96,918**	**267,756**	**5.22**	**3.33**	**1.89**	**36%**

**Rates are in lbs/person/day*

In 2021, PADEP commissioned an update to the Pennsylvania Statewide Waste Composition Study. Table 2-6 of the 2021 report breaks down the Residential Waste Disposal Rate for urban, suburban and rural areas in Pennsylvania. Since the Region is made up of all three of these areas, an average was taken for comparison in this SWMP. The average of the 2021 tonnage-weighted residential waste disposal rates was calculated to be 0.96 tons/household/year. Converting this results in 2.10 lbs/person/day for a per capita disposal rate, assuming the average household contains 2.5 persons.

When compared with the Regional numbers, the disposal rate from the PA Waste Composition Study is lower than the Regional average disposal rate over the past seven (7)

years. This rate is also slightly lower than the 2018 National Disposal Rate calculated by EPA. It's worth noting that the PA Waste Composition Study did not provide a statewide averaged per capita generation, disposal or recycling/composting per capita rate, therefore the assumptions made to compare the National EPA study to the Statewide Waste Composition Study to the calculated values for the Region, may impact the comparison.

Overall, the generation, disposal and recycling/composting per capita rates of the Region closely follow the per capita rates of the EPA National Report in 2018.

3.3 Other Waste Streams

A list of permitted wastewater and water treatment plants and licensed septic haulers is included in Appendix A.
The tonnages shown in Table 1.3-1 for all waste streams have been reported by the PADEP from 2016 – 2021 under the Regional waste destination reports.

Biosolids/Sewage Sludge - A summary of total Biosolids/Sewage Sludge reported by the PADEP for the 5 County Region is shown below in comparison with the previous tonnages from the 2013 SWP:

Table 3.3-1
Regional Biosolids / Sewage Sludge Tonnages Landfilled
(tons/year)

2012	2013	2014	2015	2016	2017	2018	
23,455	22,959	22,617	22,451	20,651	20,274	22,052	

2019	2020	2021	2022	2023
22,237	22,091	21,515	20,012	19,110

It is clear that the Biosolids/Sewage Sludge generation has stabilized. A brief survey was sent out to the public sewer and water treatment entities to verify their yearly produced amounts of sludge per year and where they are disposing of the sludge. See Appendix A for the survey results.

Infectious/Chemotherapeutic Waste - A summary of total Infectious/Chemotherapeutic Waste reported by the PADEP for the 5 County Region is shown below in comparison with the previous tonnages from the 2013 SWP:

Table 3.3-2
Regional Infectious / Chemotherapeutic Waste Tonnages Landfilled
(tons/year)

2012	2013	2014	2015	2016	2017	2018	
1,290	913	856	849	510	490	504	

2019	2020	2021	2022	2023
479	459	444	420	409

It is clear that the Infectious/Chemotherapeutic Waste is not being sent to the landfill for disposal as was the previous practice. It is expected that the tonnages will either remain static or decrease further over the next 10 years.

CHAPTER 4 – DESCRIPTION OF RECYCLEABLE MATERIALS (per DEP § 272.226)

4.1 Amounts of Materials Recycled

Act 101 requires each municipality to submit to the county in which it is located a report "…describing the weight or volume of materials that were recycled by that municipal recycling program in the preceding calendar year." The data for those reports generally comes from three sources:

1. **Residential Curbside Programs** - from reports submitted to the municipality by the private sector hauling firms with whom the municipality or individual residents had contracted for recycling services.
2. **Residential Drop-Off Programs** – from reports submitted to the municipality or county by the recycling facility that receives and processes the material.
3. **Commercial/Institutional Programs** - from each individual establishment which had initiated a recycling program or from the private sector firm providing the recycling service.

Some of the residential recycling programs (primarily those in Mandated Communities, as further defined in Section 4.2) are directly controlled by municipal governments, thus assuring that the amount reported is fairly representative of the amount of material actually recycled. Others rely primarily on community drop-off locations, and the reports are provided mainly by the recycling facilities receiving the material, which again are considered very accurate. However, information regarding the amount of material actually being recycled in commercial, industrial, institutional and apartment complex programs may be inaccurately reported since a comprehensive record of recycling from those sectors requires that each individual establishment or the collector provide complete, accurate information. This is a problem that needs to be addressed by the municipalities and is a requirement that is difficult to enforce (see Section 7.2—Implementing Entity Identification-Local Governments).

The previous Solid Waste Management Plan developed by the five Counties in the Region included descriptions of recycled materials, and included a discussion of types and quantities of materials recycled, as well as a history of recycling operations between 2005 and 2009. The Plan discussed alternative commercial recycling processing facilities within the region. In the Plan, each County addressed recycling in a different manner (county-owned facility, as in Lycoming County; municipal facilities, as in Columbia and Union Counties; or reliance on both private sector and municipal facilities, such as in Montour, and Snyder Counties).

In the intervening years (since publication of the previous Regional County Plan), there have been a few alterations to those plans. While Lycoming County still relies on the County-owned Lycoming County Single Stream Materials Recovery Facility (MRF) to process material, the MRF also provides hauling and processing for much of Union and Snyder Counties. JAWS Recycling, a private waste company, previously hauled and processed some curbside and drop–off recyclable material in Montour County and also provided curbside collection for some municipalities and commercial establishments in other counties, such as Columbia. This facility closed in 2020. The Town of Bloomsburg processes material from their own municipality, as well as from surrounding areas, with anyone welcome to use their

drop-off facilities. This includes the curbside and drop services to Danville Borough, located in Montour County. Team Green Recycling offers services in Berwick, Columbia Co. For the 2023 Plan Update, the Region has decided to continue with this approach, to pursue collection and recycling services through a combination of County- or municipally-owned facilities, and the private sector.

The types and amounts of materials recycled during the five year period from 2016 to 2020 are presented in Appendix B.

A summary of that information is discussed below, with special reference to those recycled materials that have been targeted by the PADEP in Act 101, including: plastics, yard and leaf waste, aluminum and bi-metal cans, glass, and paper. Other recyclable materials are summarized below in the "non-Act 101 materials" category.

The tables and charts show a fluctuation in materials recycled throughout the five years, with 2019 having the highest reported recycling tonnages in this time frame, and 2020 having the lowest tonnages reported. The recycling tonnages for 2020 reflect a change in the type of trailers used at the collection sites and the effects of COVID. In order to cut down on contaminants being collected with the recyclables, the openings for the trailers were modified to prevent larger objects and disposal of full garbage bags, which in many cases included non-recyclable materials. The COVID Pandemic and the need to allow recyclables to be quarantined before handling, along with the short term closing of the drop off sites to modify the container openings to reduce contaminants accounts for the reduction in collected recyclables for 2020. Other years are fairly consistent, with the exception of 2018, which is due to, non- reporting of one commercial business, LCRMS discontinuing offsite tubgrinding operations and the extreme decrease of recycled materials being accepted by China. The table also shows that the Region has consistently recycled materials beyond those listed in Act 101, with the largest portion of this coming from Wood Waste. (For a breakdown of all recycled materials, by County, see Appendix B)

Using the data obtained from the PADEP website (see Table 1.3-1, in Section 1.3, above), the amount of municipal waste disposed in landfills between 2016 and 2020 varied from 262,672 tons (in 2016) to 316,419 tons (in 2019). However, with respect to recycling, the waste streams that offer a primary opportunity for recycling are typically considered MSW and C&D. Over this same period, these two waste streams had a minimum and maximum tonnage of 187,112 (2016) and 208,170 (2017) tons. We can assume that the total population responsible for generation of MSW and C&D material is the average of that from 2016 to 2020, or 282,471 people (see Table 3.1-2, in Section 3.1, above). This results in a municipal waste landfill disposal rate range of 0.74 to 0.66 tons per person per year, with an average of 0.70 over the 5-year span. (See Section 1.4 for a more detailed discussion of projected tonnages.)

As presented in Table 3.1-2, the recycling rate range (as a function of the MSW and C&D waste streams) in the Region can be computed to be between 0.33 tons per person per year in 2020, and 0.38 tons per person per year in 2019, with an average of 0.36 over the 5-year span.

Based on these same figures, and as defined in Table 3.1-1, the percentage of material recycled versus the landfilled MSW and C&D waste streams ranged from:

- 29% in 2020 (80,563 tons recycled versus 199,531 tons landfilled) to
- 35% in 2019 (106,825 tons recycled versus 198,927 tons landfilled).
- An average of 33.0% was noted for the 7-year period.

These amounts are significant and show a substantial effort placed on the Region's recycling programs to increase the percentage of materials recycled while dealing with reduced funding, higher costs and marketing issues.

Estimates from the Region show that all of the Act 101 designated materials are collected in various ways in each county. Newspapers, mixed paper, glass bottles and jars, plastic bottles, and aluminum and steel cans, along with various types of yard waste, are all collected both through curbside and drop-off programs.

In addition, the Region contains a small number of Act 101 mandated communities: three in Lycoming, three in Columbia, two in Union, and one in Snyder.

It is always a challenge to increase recycling, especially in areas of low population density. Much of the recycling in the region is done through a well-managed system of drop-off facilities, many of them staffed/operated by county or municipal government, often through a cooperative effort between the two. These drop-off facilities accept a wide variety of materials including; three colors of glass bottles, #1 and #2 plastic bottles, other types of plastics, newspapers, mixed paper, aluminum and steel cans, yard waste, and office paper and unwanted mail. Recycling processors comment on the high quality of incoming material, both curbside and drop-off. What the region may lack in numbers of curbside programs, it more than offsets with the high quality of collected recyclables from drop-offs. It will remain a constant challenge to maintain these same high standards as the amount of collected material increases, both through increased curbside and drop-off programs, and through single-stream or dual-stream recycling. Some drop-off locations have installed cameras, gated the drop-off area when closed, or man the drop-off site to catch individuals who continue to try to dispose of non-recyclables items or their trash in the recycling containers. This helps to maintain the quality of the recyclable materials. Single-stream recycling is growing in popularity, for example Union County calculated that single-stream recycling accounts for 65% of all residential recycling.

(For the purposes of this document, "dual-stream recycling" is defined as the collection of a defined list of recyclable commodities, with those materials being separated into two distinct groups. In this case, dual-stream would normally encompass recyclable containers (aluminum and bimetal cans, and plastic bottles) as Stream A (glass containers are sometimes included in this component of dual-stream programs); and fiber (newsprint, office paper, mixed paper, magazines, unsoiled cardboard and chipboard) as Stream B. These two streams of material would then be further sorted at a recyclable materials recovery facility (MRF). This is an alternative to traditional "source-separated" recycling collection (where the generator of the waste must sort each material type individually in separate containers) and "single-stream" recycling collection (where all recyclable materials on the list of accepted

commodities are combined in one container). Dual-stream collections could be either curbside or at drop-off locations, and other recyclable materials that are not included on the lists for curbside recyclables collection under any of these systems, would be collected at designated drop-off locations.)

In addition, some of the counties hold special collections for electronics, tires and textiles at various times throughout the year. They also provide education on recycling issues through websites, and other educational resources, notifying their residents when and where they can dispose of hard-to-recycle items throughout the year, such as motor oil, electronics, antifreeze, and other items.

Although all of these ideas may not work in each county, there needs to be a greater emphasis on cooperation, with an analysis of what can realistically be achieved. With decreased grant money to spend on programs, each county must decide what its achievable goals are, and take incremental steps toward realizing the desired end result.

Specific recommendations for future recycling efforts are included in Chapter 5.

4.2 Municipal Recycling Programs

For the most part, the Region has done a commendable job in following the mandates of Pennsylvania's Act 101 which requires curbside recycling by residents, businesses and institutions in Pennsylvania's larger communities.

Within the Region, there are a total of 132 municipalities (Columbia 33, Lycoming 52, Montour 11, Snyder 21, Union 14). (See Tables B.2 through B.6 in Appendix B.) Of these, only 9 municipalities have been designated as Mandated Recycling Communities, based on the criteria contained in Act 101, so much of the Region's recycling is done by non-mandated communities. The Act states that communities with populations of at least 10,000, or communities with populations between 5,000 and 10,000 and a population density greater than 300 persons per square mile, must implement curbside recycling programs. Each of the designated mandated municipalities has well defined recycling plans in place, often with a combination of curbside and drop-off programs, as well as sites for composting or grinding wood waste and yard waste.

In addition, most of the smaller communities in the Region have access to drop-off site recycling programs. Lycoming County offers curbside recycling to 3 mandated communities. Along with providing for recycling drop-off within their own community, there are also 35 active recycling drop-off centers located throughout the region. Although some of the locations accept recyclables from only their residents, many will take material from any customer. In addition, the materials collected vary from location to location. The active drop off centers will remain open until they are no longer feasible to maintain depending on funding and misuse of the site.

This region includes the Town of Bloomsburg, one of the Commonwealth's oldest and most successful recycling programs. Bloomsburg's first curbside collection began in 1977, and

became mandatory in 1983, five years before the passage of Act 101. Their drop-off site accepts material from anyone wishing to use the facility.

The municipalities within the 5 County Region have fulfilled the Act 101 yard waste collection requirements, with all mandated, and some non-mandated communities, operating compost sites, as well as sites for grinding wood and yard waste. These sites are shown on Exhibit 3.

The Region's residents recycled over 91,593 tons of material in 2020.

Each County within the Region educates its residents in different ways. Some maintain an internet website with important information regarding solid waste management throughout the county, as well as providing specific information for each municipality. For those Counties that do provide a website, a link to these recycling information locations is as shown below:

Lycoming County:
https://www.lyco.org/Departments/Resource-Management-Services/Recycling

Snyder County:
https://www.snydercounty.org/departments/solid-waste-management-authority/

Union County:https://unioncountypa.org/recycling/

Town of Bloomsburg Recycling Information:
www.bloomsburgpa.org/recycle-center/

A summary spreadsheet showing the current Municipal Waste Collection and Recycling Programs is included in Tables B.2 through B.6 in Appendix B, and a map of the recycling facilities throughout the Region is shown in Exhibits 2 and 3.

4.3 County Recycling Programs

All of the Counties still feel the effects of losing the landfill administrative fees. This fund loss, in conjunction with increased cost and difficulty of finding markets for materials continues to be a financial drain for the Counties and Municipalities of the Region. The following is a summary of the programs currently in place in each County:

Columbia County – Currently, the County does not directly operate any recycling programs but does provide advice and technical assistance to their municipalities, along with some educational programs. Many municipalities in the County, however, have closed their drop-off programs. There are 4 communities with recycling drop-off sites, and 6 with compost programs and 5 sites, as Scott Township has an intergovernmental agreement with the Town of Bloomsburg to allow their residents to use Bloomsburg's compost facility. The Town of

Bloomsburg accepts a wide variety of materials at its recycling center on Patterson Drive, from anyone in the County. (See section 6.1 for a more detailed description of the Bloomsburg facility.) Foughts, a private recycling company, offers services in Berwick, Columbia Co.

Lycoming County – The Lycoming County Resource Management Services (LCRMS) offers a wide variety of services to its County residents, as well as to residents in surrounding counties. (See section 6.1 for a more detailed description of the LCRMS facility and operations.)

Montour County – Montour County provides assistance to its 11 municipalities concerning recycling, composting and solid waste management whenever possible. However, it does not provide any County sponsored drop-off collections, although the Town of Bloomsburg operates the Danville Borough drop-off and curbside recycling program. The County works with individual groups and organizations to hold various special programs when funding is available, such as tire collections. The County recycling coordinator provides education to schools and community groups through a variety of programs and outreach programs.

Snyder County – In the past recycling within Snyder County had been under the jurisdiction of the Snyder County Solid Waste Management Authority; however that changed in September / October of 2021 with the disbanding of the Authority. Recycling is now be handled by the Snyder County Recycling Coordinator who works under the County Planning Department. Several Snyder County municipalities provide residents with drop-off recycling locations, along with education and periodic special event collection for "difficult-to-recycle" materials. The Snyder County Recycling Coordinator provides assistance to the municipalities with coordinating both education and special events. Collections at most of the recycling centers are served by the Lycoming County Resource Management Services (LCRMS), and Spring Township works with Cocolamus Creek Disposal.

With 21 municipalities in Snyder County only Selinsgrove Borough, with a 2020 population of 5,713 residents, is mandated to recycle. Selinsgrove provides curbside recycling as well as composting services to its residents. The majority of the County's recycling is done through drop-offs at 5 locations. Recycling on the western end of the county is limited as only Spring Township has a drop-off location with the next closest drop-off location being in Franklin Township at the Franklin Township municipal building. The remainder of the locations which include Selinsgrove Borough, Penn Township, and Monroe Township are on the eastern end of the county. Freeburg Borough is closed, however they are trying to find a location that is larger with better access to reopen. Currently Selinsgrove Borough, Penn Township, and Monroe Township are only open to their own residents. Penn Township and Selinsgrove Borough also have composting facilities which are only open to their residents. The Selinsgrove Center also accepts paper and cardboard by appointment only.

Filled bins are picked up or "pulled" by the collector for a fee to the municipality. With an increase in recycling participation these fees have become cost prohibitive to the municipalities without passing fees on to recyclers. Municipal leaders are exploring options such as fencing and gated recycling areas with a nominal fee for entrance to help defray costs. The Snyder County

Commissioners are in the process of putting together a package to pay for fencing, gates and camera systems to help the municipalities who recycle to be able to have gated facilities so they can collect fees and fine people that cause damage and / or leave non-recyclable garbage at these facilities so they can become self-sustaining.

Periodically Special Events are run by the County and local municipalities. Some of these events are coordinated by the HandUP Foundation. When these events occur, a list of items that can be recycled and any fees associated with the items can be found at both the drop-off location and on either the County's website or the coordinators website. The County and/or the municipalities will also occasionally hold a household hazardous waste collection. These collections are coordinated by the municipality, the County, and an agency that specializes in the collection, transport, and disposal of hazardous waste.

Union County – Union County has an excellent system of drop-offs, with Lewisburg Borough and East Buffalo Township also having curbside collection. However, since curbside collection includes only five items in Lewisburg (aluminum cans, three colors of glass containers, and newspaper), and four items in East Buffalo (aluminum cans and three colors of glass containers), most of the recycling in the County is done through the drop-offs. The nine drop-off sites are well maintained, with excellent signage and are conveniently located in the following areas: East Buffalo Township, Kelly Township, Hartley Township, Lewisburg Borough, Mifflinburg Borough, New Berlin Borough, Union Township, West End Recycling, and White Deer Township.

Lewisburg Borough also provides municipal collection for trash and recycling, and operates a yard waste drop-off where its residents can bring material during scheduled hours. Lewisburg also has a leaf collection service. Several other municipalities have arranged for yard waste collection and drop-off as well: East Buffalo Township has implemented leaf and yard waste collection programs; Mifflinburg Borough provides leaf collection; Union Township has a brush collection program for their residents; and New Berlin Borough collects yard waste each spring from its residents.

LCRMS transports all of the drop-off containers to their recycling center and returns them once emptied. Since many of the sites are either staffed or have security cameras, the material collected is of high quality. The permanent drop-off sites allow the LCRMS to haul high volumes of materials efficiently to the processing center. The drop-off locations all accept the same materials, including; aluminum and bi-metal cans, corrugated cardboard, chip board and junk mail (at some but not all of the drop-offs), glass containers, newspapers and magazines, and #1 and #2 plastic bottles. In addition, Lewisburg Borough, Mifflinburg Borough, and East Buffalo, Kelly and Union Townships accept office paper.

Union County would like to accept more items at the drop-off if the cost could be kept minimal. It has already expanded drop-off collections to include chip-board in Lewisburg Borough, East Buffalo and Kelly Townships, with others to follow in the near future. Kelly Township also accepts brush waste at their site.

The County would also like to increase special collections for a variety of materials as markets become available. On the website, it posts locations for used oil, antifreeze, and battery collection and electronics.

The County provides a recycling guide, pamphlet and website showing the location of County recycling facilities. (See items B.12 and B.13 in Appendix B)

Ideas for the Future:

- Expand and diversify educational outreach
- Expand education regarding the fire hazard issues that lithium batteries and pool chemicals are causing at facilities
- Expand security measures at drop-off locations to deter dumping of unacceptable materials and preserve the quality of the recyclables for better marketing
- Continue to advocate for additional grants to help cover costs associated with running the recycling programs
- Continue to advocate for additional funds for special cleanups
- Continue to advocate for revised language to the PA CDRA that addresses the gaps in cost, this is especially important as the costs for recycling covered devices is very high.

4.4 Changes in Act 101 and Impact of These Changes to the Region

Act 101 (P.L.556), originally enacted on July 28, 1988, was amended via the implementation of *Act 140* (House Bill No. 1902, session of 2005, as Amended on 9/27/06). This amendment created a series of changes (including extension of the sunset date for the PADEP recycling fee to January 1, 2012). Notable among the other changes, were specific changes to Section 2, with respect to Section 904 (a) and (b), regarding performance grants for municipal recycling programs. Among other requirements, the amendment expanded the level of documentation required to be included with the applicant's recycling and composting grant request submission, and this affected funding received by municipalities beginning in 2007. In addition, Act 101 was reauthorized in May of 2010, and the sunset date for the PADEP administrative fees was extended until 2020. (The PADEP administrative fee of $2/ton of waste disposed or processed at resource recovery facilities is used to establish a grant program within the Recycling Fund for recycling, planning and related purposes. This fee was set to expire in April of 2011, and no means of continuing to fund recycling grant programs had been established.)

Under Section 2(d)(4), the amendment noted that all mandated municipalities and any non-mandated municipality receiving more than $10,000 in funding must demonstrate to the Department's satisfaction that they "...have met the following performance requirements:

- requires, through ordinance, that all residents have waste and recycling service
- has an implemented residential recycling program and facilitates a commercial recycling program or participates in a similar county or multi-municipal program
- has a residential and business recycling education program
- has a program of enforcement that periodically monitors participation, receives complaints and issues warnings for required participants and provides fines, penalties, or both, in its recycling ordinance

- has provisions, participates in a county or multi-municipal program or facilitates a private sector program for the recycling of special materials
- sponsors a program, facilitates a program or supports an organization to address illegal dumping and/or littering problems
- has a person or entity designated as recycling coordinator who is responsible for recycling data collection and reporting recycling program performance in the municipality or municipalities."

Section 2(d)(5) goes on to say that "If the requirements of paragraph (4) are not satisfied by the municipality, then the grant funds awarded under this section shall be expended by the municipality only to satisfy the requirements of paragraph (4).", and Section 2(e) says that "The department may require budget documents or other expenditure records and may deny funding through this section if an applicant cannot demonstrate that funds have been expended on eligible activities."

In the previous Plan there was a notable decrease in the amount of funding awarded through Section 904 to mandated municipalities throughout the Commonwealth. It is felt that this reduction in funding awards and reductions that have occurred since then may be, in part, the result of a lack of municipal personnel to provide the services and prepare the documentation necessary to support the requirements of the Act. With that in mind, it is recommended that each County evaluate the role of their solid waste and recycling personnel, and consider expansion of their responsibilities to assist mandated (and non-mandated) municipalities with grant applications and Act 140 compliance issues.

Specifically, it appears that the principal issues associated with non-compliance have revolved around the following, each of which may arguably be best addressed with assistance from the appropriate County recycling and/or solid waste staff:

- A lack of commercial recycling and periodic public education
- A lack of commercial recycling ordinances
- A lack of an enforcement program

4.5 Costs Associated with Recycling

Other than the Town of Bloomsburg, none of the other municipalities with recycling collection programs market their own recyclables, so an increase in volume will not provide a significant cost benefit to the municipality, although it may benefit the resident if the hauler offers a “pay as you throw” trash collection option, where the resident or business pays a fee per bag/can for only the waste they produce.

Most of the collection and processing/sale of recycled items are conducted by the LCRMS, and the Town of Bloomsburg, or by contracted private haulers. Detailed costs for collection and processing, as well as potential recycling revenues are not readily available. However, costs and potential revenues have been estimated as part of the effort to establish Recycling Sustainability Needs for the Region. These estimates are discussed in more detail in Section 5.25, and a summary Table discussing “sustainability needs” is defined. In general, the marketing of materials by both LCRMS and the Town of Bloomsburg is accomplished through outreach to various

businesses/brokers that either use recyclable materials or purchase recyclable materials to sell to others. Requests for price quotes occurs on a periodic basis to ensure that the best price is being received for recyclable materials.

Municipal cost avoidance on recycled waste would most likely be offset by additional costs associated with increased collection, and any specific cost avoidance benefits would most likely be associated with commercial businesses, or by residents if the hauler instituted a fee per bag/can, or limited service option.

Minimal revenue is generated at special collections in order to fund that specific collection. New recycling programs are structured as partnerships to ensure that the hauler generates sufficient revenue to continue the program.

The LCRMS generates revenue associated with the landfill and recycling facility, but this revenue is used to partially offset the costs associated with operation of the facility.

Previously County(s) were forced to discontinue municipal recycling programs when they experienced revenue shortfalls from the loss of the landfill administrative fee. This is still causing issues currently. The cost for County(s) and municipalities is forcing some to reconsider the items recycled, whether to continue a drop-off site and fees charged. The Counties and municipalities could use additional revenue to cover operating costs, pay staff, and increase or maintain programs. Replacing the revenues previously generated through a fee on landfilled trash would assist counties in many ways including:

- Increased special collections
- Increased hours and materials accepted at drop-off locations
- Explore possibility of additional, permanent drop-off sites
- Fund regional education outreach programs such as websites and brochures
- Provide funding to municipal programs which were reduced or eliminated as a result of past revenue shortfalls, including the elimination of the administrative fee.

The level of recycling service in each County within the Region varies greatly, based on population, access to infrastructure and financial support. Upon conducting a financial analysis of each County's recycling program, the analysis shows the majority of Counties operate in the negative each year for their recycling programs. Table 4.5-1 through 4.5-5 shows the typical operating budget of each County and their net profits at the end of the year.

Many Counties have had to reduce or drop programs over the past several years due to the inflating costs of running/conducting the program and inability to find up front funding. Many of the Counties take advantage of the grant funding available through PADEP, but the issue heard most during the analysis was the reimbursement aspect of the grant funding makes it hard to conduct the program without upfront capital. Funding mechanisms for each County have been included in Chapter 5 to support these programs over the ten year planning period.

Table 4.5-1
Montour County Financial Analysis

	Revenue	Expenses	Net

Recycling Coordinator	$0	$1,200	-$1,200
Net Revenue			**($1,200)**

Table 4.5-2
Columbia County Financial Analysis

	Revenue	Expenses	Net
Recycling Coordinator	$0	$64,279	-$64,279
Landfill Testing	$0	$4,200	-$4,200
Section 903 Reimbursement	$4,000	$0	+$4,000
County General Fund Contributions	$64,279	$0	+$64,279
Net Revenue			**($200)**

Table 4.5-3
Union County Financial Analysis

	Revenue	Expenses	Net
Recycling Coordinator	$0	$66,765.80	-$66,765.80
Recycling Program	$0	$55,000	-$55,000
E-Waste Collection Event	$0	$83,000	-$83,000
Education 902 Grant	$13,500	$15,000	-$1,500
Section 903 Reimbursement	$28,378.19	$0	+$28,378.19
Section 904 Grant Funding	$10,000	$0	+$10,000
ARPA Funds for E-Waste	$83,000	$0	$83,000
Net Revenue			**($84,887.61)**

Table 4.5-4
Snyder County Financial Analysis

	Revenue	Expenses	Net
Recycling Coordinator		$23,358	-$23,358
Recycling Program (curbside, drop-off or both)		$8,600	-$8,600
Section 903 Reimbursement	$11,679		+$11,679
Net Revenue			**-$20,279**

Table 4.5-3
Lycoming County Financial Analysis

	Revenue	Expenses	Net

Recycling Coordinator		$84,120	-$84,120
Recycling Staff		$846,109	-$846,109
Recycling Program (Curbside, drop-off or both)		$1,821,980	-$1,821,980
E-Waste Collection Event	$7,251.30	$3,000	+$4,251.30
Spring/Fall Cleanup Event		$100	-$100
Education & Marketing		$2,262	-$2,262
Recycling Equipment Owned by County		$327,447	-$327,447
Education 902 Grant	$210,526		+$210,526
Section 903 Reimbursement	$38,769		+$38,769
Section 904 Grant Funding	$128,148		+$128,148
Recycling Fee	$745,188		+$745,188
Sale of Products	$1,855,717		+$1,885,717
Money the Landfill contributed to Recycling	$150,944.30		+$150,944.30
Net Revenue			**+$51,525.60**

4.6 Waste Composition Study

Act 101 requires each municipality to submit to the County in which it is located a report "…describing the weight or volume of materials that were recycled by that municipal recycling program in the preceding calendar year." The data for those reports generally comes from three (3) sources:

- Residential curbside programs – from reports submitted to the municipality by the private sector hauling firms with whom the municipality or individual residents had contracted for recycling services.
- Residential drop-off programs – from reports submitted to the municipality or County by the sponsoring entity, hauler who collects the material, and/or the recycling facility that receives and processes the material.
- Commercial/Institutional programs – from each individual establishment which had initiated a recycling program or from the private sector waste hauling firm providing the recycling service.

In 2021, PADEP retained MSW Consultants to perform a statewide municipal solid waste characterization study to understand the composition of solid waste being disposed in Pennsylvania. The study was designed to estimate the composition of disposed MSW generated in the commonwealth's six regions, as well as the statewide aggregate composition. The study

was finalized in September 2022 and that data was released to the public in early 2023. The northcentral regional data was utilized for the Plan Revision. The mean composition of each waste category was used to determine the amount of potentially recyclable material in the current Regional waste stream. It shall be noted that this research alone shall not be used as a basis to add a recyclable stream to a drop-off location or curbside collection program. This is simply showing one perspective based on an extensive statewide study. Other local factors shall be evaluated if the Region wants to make adjustments to their current programs.

Results from the study are shown in the pie graphs below. Each Figure indicates the tons of MSW material disposed of by the respective County in calendar year 2023, as well as the potential amount of recyclable material in the Counties waste stream based on the Statewide Waste Composition Study.

Figure 4.6-1
Columbia County Potential Recyclables in MSW Stream in Tons (%)

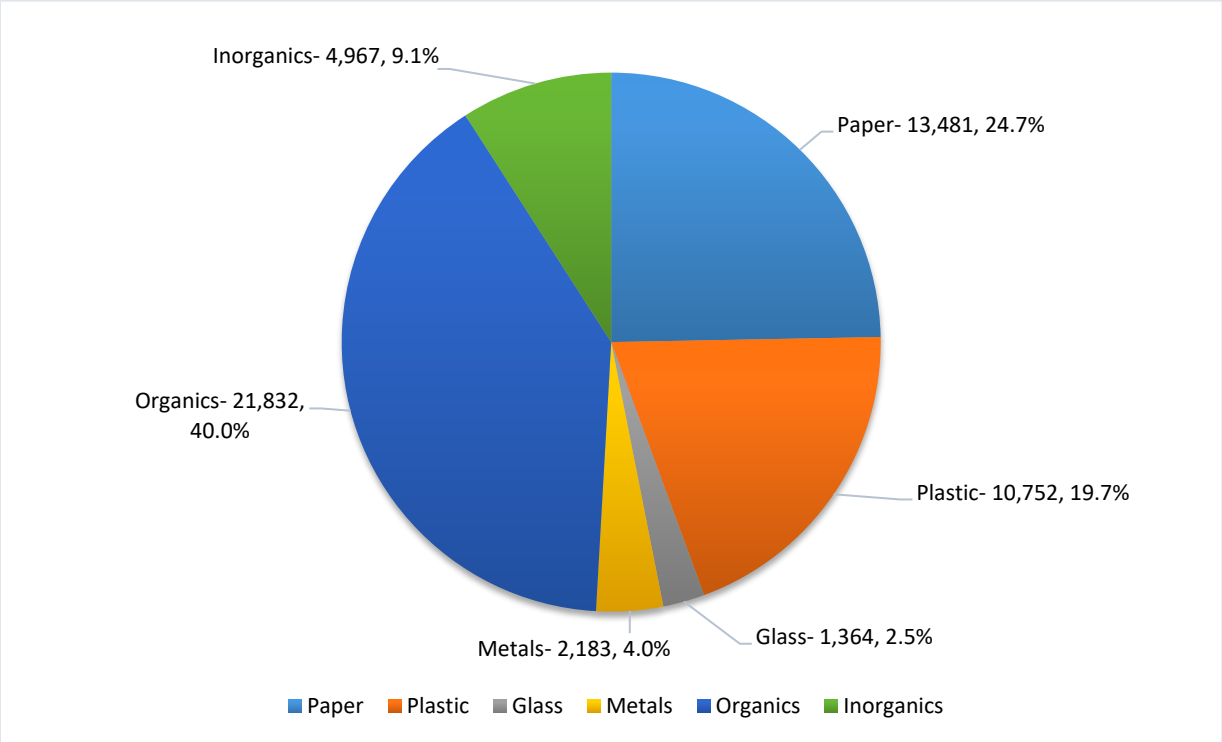


Figure 4.6-2
Lycoming County Potential Recyclables in MSW Stream in Tons (%)

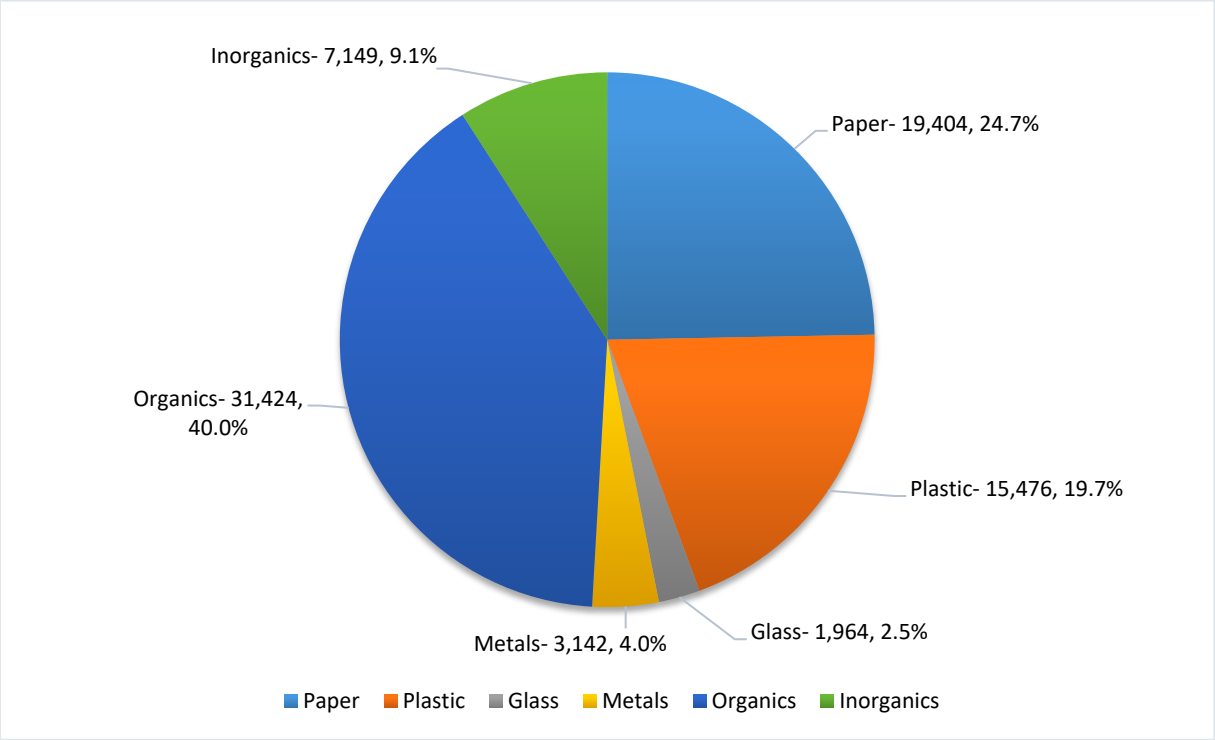


Figure 4.6-3
Montour County Potential Recyclables in MSW Stream in Tons (%)

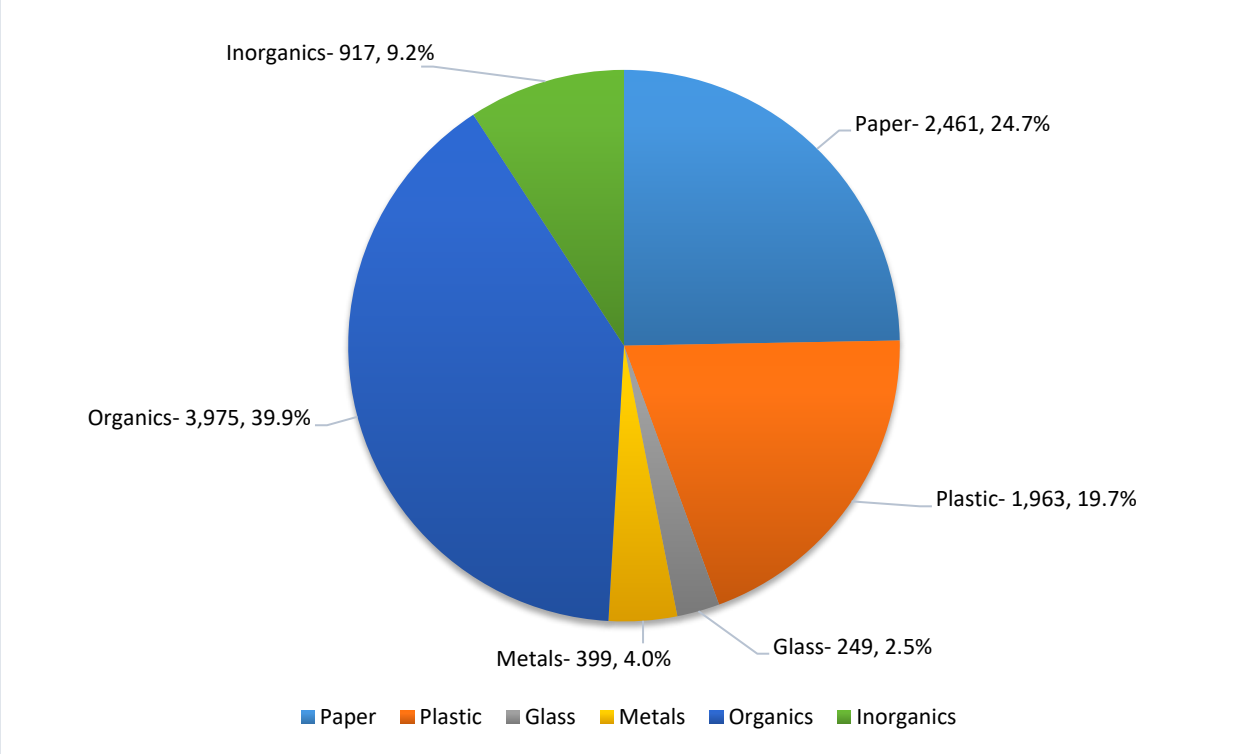


Figure 4.6-4
Snyder County Potential Recyclables in MSW Stream in Tons (%)

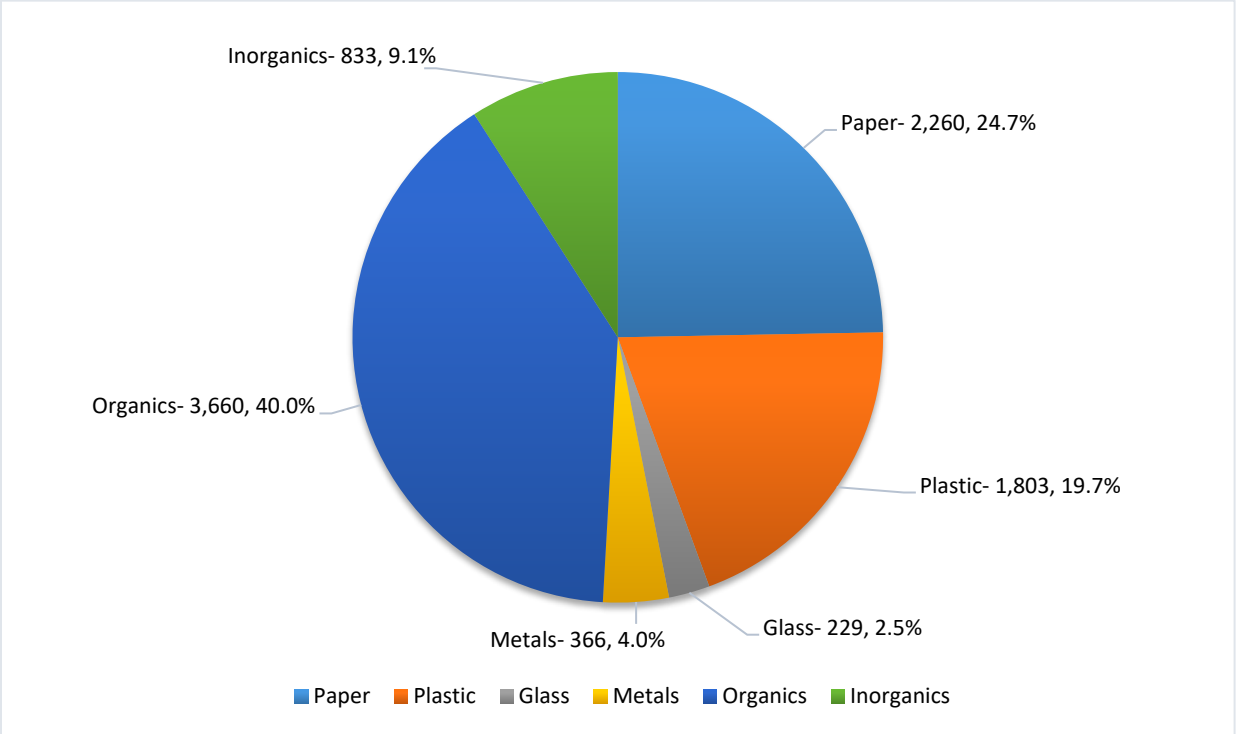
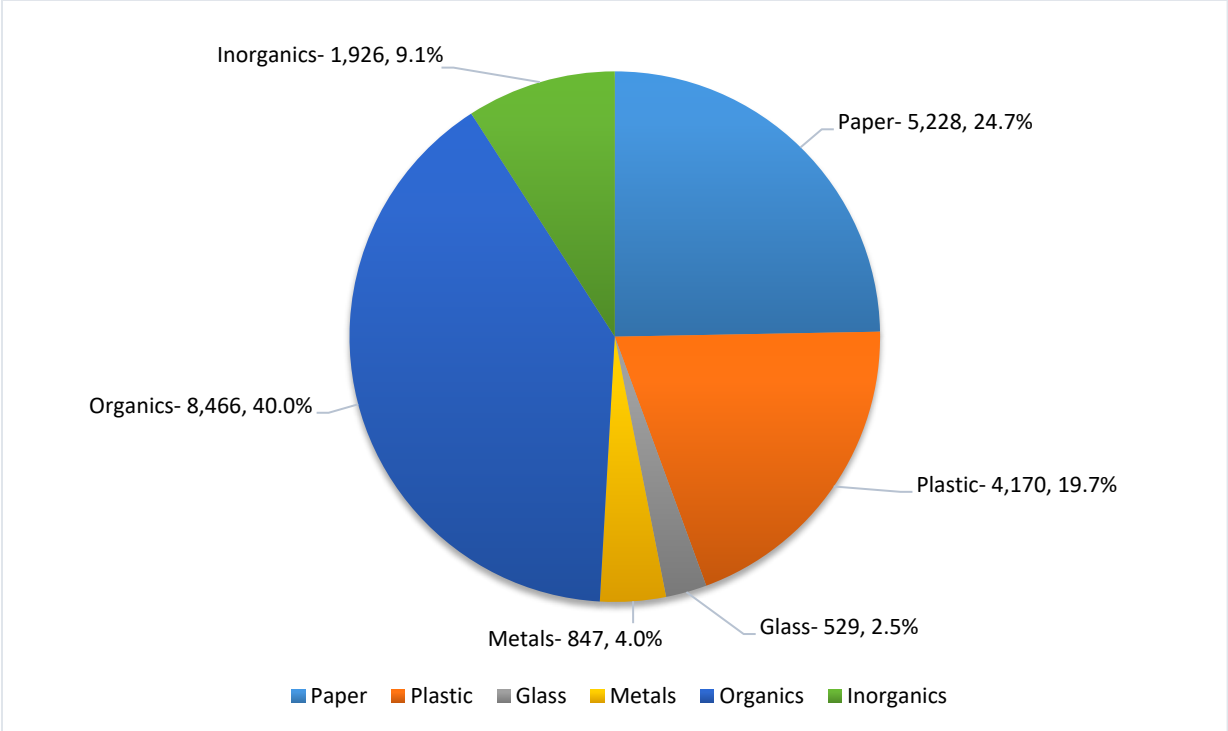


Figure 4.6-5
Union County Potential Recyclables in MSW Stream in Tons (%)



An examination of data from the statewide waste composition study, suggests that of the remaining municipal solid waste currently being disposed of in Pennsylvania, there is additional discarded waste that can potentially be recycled. However, there are many factors that determine which materials are actually removed from the waste stream. These factors include, but are not limited to:

- availability of markets for the materials;
- economics of a recovery system;
- competing options;
- the percentage of people that participate in recycling;
- how easily the materials can be segregated for recovery;
- how efficient people are in diverting the materials for recycling.

The table labeled "Pennsylvania Waste Composition Estimate" located in Appendix F, presents an estimate of the current composition of the discarded municipal waste stream (after source separation) by material as well as an estimate of the potential remaining tons of recyclables in the discarded waste stream, according to the 2022 Pennsylvania Statewide Waste Composition Study. The table labeled "National Waste Composition Estimate" located in Appendix F presents an estimate of the current composition of the discarded municipal waste stream (after recycling and composting) by material and an estimate of the potential remaining tons of recyclables in the discarded waste stream according to the EPA Advancing Sustainable Materials Management 2018 Fact Sheet, written in December 2020. These two composition studies are a good side-by-side comparison as to the amount of material potentially available for recovery in the discarded waste stream over the ten-year planning period.

This information shows that there is still room for improvement in recycling for certain commodities. For counties and municipalities to increase their recycling of those commodities, they first need to establish a sustainable funding source to support recycling programs and investigate available markets for the recyclable material.

4.7 Future Recycling Goals and Efforts

The 5 County Region not only extends over a significant geographic area (nearly 2,500 square miles), but also includes a wide variety of socio-economic conditions. Nevertheless, there are similarities among the counties:

- Each county has a central location with a higher population density; supported by smaller, more rural communities. People come to these central locations on a regular basis to shop, attend cultural and social events.
- The area also includes several colleges and universities within its boundaries.
- The Geisinger Medical Center, one of the Commonwealth's largest medical facilities, is also centrally located within the Region.
- The Region also has several large manufacturing and retail centers.

The Region has made great strides in recycling and composting. As defined in Table 3.1-1, the percentage of material recycled versus the landfilled MSW and C&D waste streams ranged from:

- 36% in 2016 (106,607 tons recycled versus 187,112 tons landfilled) to
- 29% in 2022 (80,563 tons recycled versus 199,531 tons landfilled).
- An average of 33.0% was noted for the 7-year period.

However, thirty plus years after the passage of Act 101, there is still room for improvement. The Region's level of success toward the goal of achieving and exceeding, in certain years, the 33% recycling recovery is encouraging and showcases how even with the loss of funds, COVID impacts and market changes that the goal is attainable. However it is still important to reassess strengths and weaknesses, and plan for future improvements in order to continue to maintain and eventually exceed this goal. Specific recommendations for future recycling efforts are further discussed in Chapter 5.

CHAPTER 5 – SELECTION AND JUSTIFICATION OF MUNICIPAL WASTE MANAGEMENT PROGRAM (per DEP § 272.227)

The purpose of this chapter is to describe the process used to select and recommend components to the overall waste management system for Columbia, Lycoming, Montour, Snyder and Union Counties, and to provide justification for the selections and recommendations. The Counties must ensure that the recommended system(s) provides the required capacity needed to properly process/dispose of all municipal waste generated within their boundaries over the next 10 years. This chapter examines processing and disposal alternatives for municipal waste from all five counties; determines the compatibility of each alternative with the existing components of the waste and recycling systems in the Region; and assesses the feasibility of using those alternatives to help meet the future needs of the Region.

5.1 Background

Columbia, Lycoming, Montour, Snyder and Union Counties currently generate a total average of approximately 199,201 tons of MSW each year (all categories, after recycling). Approximately 74.34% of the total , from 2012-2023, wasdisposed of at the Lycoming County Landfill. The remaining percent of the waste generated within these five counties is disposed of at landfills which span the state of Pennsylvania (see Exhibit 1). It is noted that Northumberland County, geographically located just south of the region covered by this plan, currently disposes of over half of their MSW at the Lycoming County Landfill. Northumberland County has conducted its own plan update process, separate from this 5 County Regional Plan Update preparation.

Currently, waste haulers that operate within the 5 County Region can dispose of the waste they collect at a landfill or transfer station of their choice, as long as the ultimate waste disposal site is designated in the Regional Solid Plan. As part of this plan update, waste haulers who operate within the 5 County Region can dispose of the waste they collect at a landfill, WTE, or transfer station of their choice, as long as the facility is properly permitted with their respective State agency. The landfills that accept waste from the five Counties are listed in Appendix A. Exhibit 1 shows the Facilities receiving waste from the 5 County Region of at least 400 tons/year or more. Facilities that received greater than 400 tons between 2012 and 2023 included: Lycoming County Landfill, Wayne Township Landfill, Greentree Landfill, Alliance Sanitary Landfill, Cumberland County Landfill, Mosteller Landfill, Mostoller Leonard Landfill, Susquehanna Resource Management Complex, Lancaster Waste-to-Energy Facility, Modern Landfill, Keystone Sanitary Landfill and Western Berks Community Landfill. Additionally, according to waste destination reports from PADEP, various other facilities accepted waste (at some point) from the 5 County Region. Exhibit 1 shows the location of these facilities throughout Pennsylvania. Tables in Appendix A.1 lists the landfills which currently accept waste from the five Counties as well as the percentage of waste each landfill accepts. Tables in A.1 breaks these totals down on an annual basis from 2012 to 2023.

Chapter 4 examined options for collecting and processing recyclable materials and organic wastes. Based on the recommended County recycling strategy, the quantity of waste expected to be diverted from disposal due to recycling and composting was estimated and deducted from gross waste generation estimates. Table A.1 in Appendix A depicts net (after recycling) waste quantities for the Counties, as was demonstrated in Tables 1.3-1 and 1.3-2 in Chapter 1, Section 1.3. Table 3.1-3 in Chapter 3, Section 3.1 reveals that by 2030, approximately 292,850 tons (about 1,126 tons per day, 5 days per week basis) of solid waste (including all 5 waste streams discussed in Section 1.3) will require disposal from the Region. Excluding Residual Waste, which is generally disposed directly by the Generator (so the Counties do not typically have to address), the total tonnage by 2030 is expected to be roughly 215,405 tons (or about 828 tons per day, 5 days per week basis).

Section 5.4 of this chapter describes the current marketplace conditions of the region for MSW management. Section 5.5 provides a summary assessment of existing waste and recycling management facilities in the Region, and identifies potential underserved areas. Section 5.6 describes the technologies that can be employed to process and/or dispose of this waste. Section 5.7 assesses the compatibility of each of these alternatives with the region's needs and existing facilities. Sections 5.8 through 5.11 present recommended waste collection, transportation and processing/disposal strategies for the 5 County Region. This section includes discussions on waste collection, waste reduction and recycling, transportation, disposal, construction and demolition waste, special waste handling and other related topics.

Chapter 8 briefly addresses the current method for handling of special wastes as well as potential future methods that may be developed by the 5 County Region. Chapter 5 presents the waste and recycling system recommendations, as well as the process recommended to be used to secure waste disposal capacity for Regional wastes over the next 10 years. A listing of the disposal facilities expected to be used for disposal of the 5 County Region's municipal wastes is presented in Section 5.23.

Marcellus Shale

A relatively new industry has exploded in the northern tier and western portion of Pennsylvania, which has the potential to impact waste disposal capacity in this 5 County Region. The Marcellus Shale Play is a geologic formation that is a source of natural gas located in deep (1-2 miles deep) shale deposits. It is being actively developed by scores of gas industries, thanks to t drilling technology advances that make this gas development process feasible. These deep mine drilling operations generate drill cuttings and other residuals that currently require disposal in a proper landfill. The operations also require the handling of millions of gallons of chemically-treated fracturing, or "frac", water at each drill site. The subsequent handling of drill residuals (and in some cases, wastewater from the operations) are typically classified as residual waste. A number of landfills in (or near) the 5 County Region currently accept Marcellus drill residuals, including the Clinton County Landfill, the Bradford County (Northern Tier SWA) Landfill, and the White Pines Landfill (a residual waste landfill). The Lycoming County Landfill has indicated that they do not intend to accept Marcellus residuals at its landfill site over the next 10 years.

Marcellus Shale drilling industry growth is dependent upon several factors: ability to install interstate pipelines to move the gas to markets outside the region and price of natural gas vs cost of drilling. These factors will continue to impact the drilling of new wells in the future. Current projections indicate that the industry may have reached its peak in drilling. The potential impact of this industry's residuals on available municipal waste disposal capacity in this region cannot be ignored in this plan. Contracts for long-term disposal capacity of municipal waste generated in the 5 County Region need to confirm that municipal waste disposal capacity is "set aside" for the 5 County Region's use, and will not be negatively impacted by Marcellus Shale residuals disposal needs. This fact underscores the need for the 5 County Region to secure long-term MSW disposal capacity as part of this planning process.

Open (Illegal) Dumping Considerations

Issues and Causes: Like most counties in Pennsylvania, illegal dumping occurs in rural areas of this Region. While most would view illegal dumps as eyesores, they also create significant concerns for public health and safety, property values, and the general quality of life. When they are ignored, these sites often become chronic dumping areas and pollute the soil, surface water, and groundwater. Preventing illegal dumping will require the counties to address factors that contribute to this problem. Cleaning up existing dumps will require cooperation from residents, businesses, haulers, and disposal facilities in the area.

Pennsylvania, and counties like those in the 5 County Region, may have a more severe problem because of the large number of municipalities that manage residential waste through individual subscription systems. In these municipalities, some residents choose to dump their waste illegally rather than pay for a hauler for proper collection and disposal. However, there are other factors that contribute to the problem. Some haulers will not service rural or isolated parts of the counties, thus forcing residents to transport their waste to the nearest landfill or transfer station for proper disposal. Also, some haulers will not collect what might be considered construction and demolition waste generated at the residential level, as a result of remodeling and similar activities. These materials include items such as drywall, roofing, shingles, siding, lumber, bricks, and concrete. Other difficult-to-dispose-of items such as tires, auto parts, appliances, and furniture often end up in illegal dumps. Proper disposal of these materials may require that the residents haul them to a disposal facility during operating hours (or rent a roll-off bin from the waste hauler), and pay to dispose of the waste, an inconvenience or expense that some wish to avoid.

Some homeowners in municipalities with individual subscription services may choose not to subscribe to a waste collection service, simply to save money, or to "share" a hauling service with neighbors or relatives at one house (a practice that is not technically allowed by most haulers). When it becomes a burden for homeowners to haul this material to a disposal facility, or when a contractor who has agreed to dispose of the material decides to avoid the cost of disposal, some of this waste may also be dumped illegally.

Keep PA Beautiful (previously known as PA CleanWays) and Surveys: PA CleanWays (PACW) and Keep PA Beautiful merged their organizations in 2009. This is a non-profit organization that works to eliminate illegal dumping and littering. PACW began surveying illegal dump sites in 2005. The PACW reached its goal to survey the entire state of Pennsylvania and has a presence in all 67 Counties.. Illegal dumpsites pose a direct threat to the health and safety of humans and animals. Illegal dumping attracts disease-spreading rodents and mosquitoes by giving them a place to live and breed. West Nile Virus, carried by mosquitoes, has been a primary concern of environmental officials. Illegal dumps also can be a source of physical injury for humans and animals due to broken glass, rusty metals, and toxic substances. Methamphetamine labs, used to produce the illegal drug crystal meth, are becoming more and more common. The materials used to make the illegal drug are tossed along the roadsides in illegal dumps, and are extremely toxic.

Environmentally, illegal dumping pollutes our soil, surface and groundwater supplies, as well as the air we breathe if a site catches on fire. The emissions released by the burning of plastics and household hazardous waste can be extremely toxic. It is also ugly, and ruins the beauty of natural areas, including many public places such as community parks and state forests, parks, and game lands.

Economically, illegal dumps are expensive to remediate. The estimated cost to clean up a site can be anywhere from $600 to over $1,000 per ton for cleanup and removal. Average cost of cleanup per site is $3,000. Illegal dumpsites can also impact property values, can be a liability for property owners, and affect property purchases and transfers. Tourism revenues can also be affected by illegal dumps.

In KAB survey areas that are considered to be an illegal dumpsite are:

- Areas of concentrated trash
- Areas of scattered trash that:
  - Are not considered roadside litter
  - Appear to have new trash thrown on them occasionally (more than twice per year)
  - Appear to have new trash thrown on them occasionally, but cleanup maintenance is prevalent to prevent accumulation.
- Areas containing only piles of yard waste (grass, leaves, branches, trees, etc.). These sites can often attract the dumping of other materials and can grow into major dumpsites, and,
- Areas containing isolated or solitary items, such as 1 or 2 appliances or tires that may or may not be dumped on in the future.

Two types of dumpsites that are not evaluated by KAB are farm dumps and private dumps. A majority of today's farmers have inherited farm dumps on their properties, although some farmers continue to practice this illegal method to save money and time. Private dumpsites are those dumps which are put on the property by current or previous owners. These dumpsites can include stockpiles of scrap, yard waste, household trash, and other things you may find in an illegal dumpsite. A dumpsite is usually determined to be private by its proximity to a residence, or marked private with no trespassing signs.

KAB on The Causes: According to KAB, the possible causes of an illegal dumpsite can include the following:

- Municipal curbside trash collection is unavailable
  - Because it is not mandated by the state, trash collection options are dependent on the city or municipal government. As many rural and small-town municipalities lack funding for mandatory trash collection, it is up to the resident to pay for trash collection. Communities that depend on private subscription for waste collection services have reported greater dumping problems. Inherent inefficiencies and associated higher costs exist in almost all private subscription systems because trucks must travel long distances between customers, although higher costs may be partially offset by increased competition.
- Recycling programs are unavailable or inconvenient
  - Act 101 dictates that all communities with populations over 10,000, and densely populated municipalities between 5,000 and 10,000, have recycling programs. Communities that fall outside of these parameters must pay for recycling on their own. Depending on the county, many or all of these communities do not have funding to support a curbside recycling program. Curbside recycling communities have reported a lower incidence of residential waste accumulation problems and a slightly lower incidence of dumping problems.
- Disposal of Construction and Demolition debris (C&D)
  - C&D debris is a serious solid waste management issue because of the amount that is generated each year, along with the lack of convenient and or affordable disposal options available. C&D debris is often found in illegal dumps and creates a compounded problem because some of the materials may be hazardous, such as wood that has been chemically treated or painted with lead-based paint, insulation containing asbestos, or shingles.
- Shortage of enforcement
  - Unfortunately, many communities cannot devote people and resources to effectively deal with illegal dumping. As a result, dumpers do not fear prosecution and have no reason to stop their habits.
- Education
  - Illegal dumping has been a learned habit for many. Prior to anti-dumping laws, it was common practice to use open town dumps, burn or bury trash, or dump in a convenient out of the way area. Today we know the harmful effects from illegal dumping. Education is key to diminish the habits learned and teach the public proper and safe disposal practices.

PACW Studies in the 5 County Region: PA CleanWays conducted surveys of open dumping practices in Columbia County in 2007, Snyder County in 2009, Union County in 2010, Lycoming County in 2011 and Montour County in 2011.

Many of the sites identified within the 5 County Region were cleaned up. Since these original surveys were completed the Counties have reported that there has been a significant decrease in the amount of illegal dumping occurring.

Additional information regarding all of the programs that Keep PA Beautiful is involved in can be found on their website at: https://www.keeppabeautiful.org/ .

Many other organizations have also developed and promoted various clean up events that target either specific streams, rivers, roads or areas. These clean up event efforts are promoted heavily around Earth Day in April. The PA Department of Natural and Conservation Resources, Susquehanna Greenway Partnership, Colleges and Universities and many other organizations sponsor clean up events throughout the Region. PennDOT has an extremely successful Adopt-A-Highway Program since 1990.

Open Burning

Open burning of wastes (like open dumping) is prevalent in the more rural parts of the 5 County Region. Burn bans are often implemented and are most successful in more dense boroughs, where neighbors are closer to one another. There are health and safety impacts of this practice, including air pollution from inefficient combustion, fire risk, the needless burning of recyclables, and smoke and odor nuisance impacts on neighbors. Residents sometimes try to save money by burning their waste instead of paying a commercial hauler to collect and dispose of it. The "right" to burn one's waste in the backyard often creates an emotional charged debate. PADEP has noted that the burning of solid waste is illegal under Act 97, the Solid Waste Management Act. Section 601(3) of the Solid Waste Management Act, 35 P.S. § 6018.610(3), provides that it shall be unlawful for any person or municipality to burn solid wastes without a permit from the Department. The burning of recyclables is unlawful under Section 1501 of Act 101, and in fact, the PADEP will not pay 902 recycling implementation grants or 904 recycling performance grants to municipalities that do not have an anti-burn ordinance for recyclables in place. From a practical standpoint, the PADEP has typically relied on local municipalities to enforce these regulations, resulting in the need for local ordinances to define "allowable" practices within each municipality. The prevalence of open burning in the region, its impacts and its politics, has been raised in discussions at stakeholder meetings in this 5 County Region.

5.2 Waste Flow Control Considerations

Waste Flow Control – The Law

Many legal and regulatory actions have impacted the ability of counties to control waste and collect fees for the proper management of recyclable and disposable materials. In 1994, the U.S. Supreme Court issued a wide-reaching flow control decision in *C. & A. Carbone, Inc. et al., v. Town of Clarkstown, NY*, which was subsequently interpreted by lower courts to place serious limitations on the use of County waste flow control ordinances. It effectively resulted in a change of many county solid waste plans, from flow-control-based plans to menu plans. The 2007 *United Haulers Association, Inc., et al. v. Oneida-Herkimer Solid Waste Management Authority, et al.* U.S. Supreme Court case provides relief to the Carbone ruling, in cases of publicly-owned waste management facilities and flow-control powers of public entities. Oneida-Herkimer's application to current flow control options is further explained in the section below on Legislative Flow Control.

Flow Control Alternatives

Generally, there are three types of waste "flow control" that have been practiced, with varying degrees of success, in the United States.

- ***Legislative Flow Control*** consists of laws and regulations that are enacted at a local level to mandate the delivery of the waste to a destination point (e.g. to a landfill, transfer station, waste-to-energy facility, etc.). This form of flow control, when it restricts the free flow of waste as a commodity under interstate commerce protections, was originally determined to be unconstitutional by the U.S. Supreme Court in the Carbone case. In 2007, this ruling was overturned in the Oneida-Herkimer case, as it relates to flow control of waste to public facilities. Thus, legislative flow control has now been determined to be legal if the County implementing the flow control legislation has a financial holding in the disposal facility for which it is sending waste to, and if it can demonstrate public service benefits to its users. For example, if a County is operating a waste management facility, and the operations of that facility are dependent on receiving the waste from that County, then the County can legally enforce legislative flow control to direct waste to the County disposal facility, if it can demonstrate that it meets certain beneficial thresholds to the region. It is believed that other counties could also similarly direct waste to a publicly-owned facility, in another county, in conformance with the Oneida-Herkimer decision. This type of flow control is commonly implemented through a county ordinance, along with other coordinated steps.

- ***Economic Flow Control*** occurs when the waste management system is structured to provide the most economical means of waste management at the designated facility. As an example, if tipping fees at the designated facility can be reduced (generally through subsidies from other revenue sources) to a point where it is more economical for haulers to take waste to the designated facility than elsewhere, then economic flow control can often be achieved. One way in which this has been accomplished is to finance some facility costs by incorporating revenues via the tax base to cover some costs rather than strictly through tipping fees. When this is done, the resulting tip fee can be potentially lowered or eliminated altogether. In this arrangement, a hauler has a distinct economic incentive to deliver waste to the facility. Another way to help accomplish this form of waste security is to operate more efficiently and to control costs in order to offer more competitive, economical tip fees than the competition.

- ***Contractual Flow Control*** occurs when an entity (such as a transfer station or disposal site) contracts directly with haulers to provide disposal services under pre-established compensation terms (i.e, tip fees). Contractual flow control has been the most commonly used method to secure long-term delivery commitments for waste since the Carbone ruling in 1994.

Securing Waste Disposal Capacity for Columbia, Lycoming, Montour, Snyder and Union Counties

As part of the Municipal Waste planning process, each county in Pennsylvania needs to secure ten (10) years of disposal capacity for municipal waste generated from within its borders. Waste from the area has been delivered in the past to disposal sites based on:

1) its listing as a designated site in a county municipal waste plan, and
2) prevailing market conditions.

Haulers are generally free to take municipal waste from a given county to any disposal site of their choosing.

Currently, under the free market waste system in place in the Region, the majority of municipal waste generated from the 5 County Region is disposed at two publicly-owned and operated landfills, the Lycoming County Landfill and the Clinton County (Wayne Township) Landfill. These public investments are supported primarily by revenues generated from tipping fees on incoming wastes. Publicly-financed facilities often provide other waste management "value-added" services that many private landfills do not provide (recycling, mulching/ composting, special waste disposal, etc.)

Flow Control Considerations in this 5 County Regional Study

The 2007 Oneida-Herkimer court case opened the possibility for a new form of legislative flow control to be considered in this region. The concept of waste flow control by county ordinance was considered at the outset of the 2013 5 County Regional Plan. It was discussed at each of the 5 County Public Kickoff Meetings, and was also discussed in some detail at the Solid Waste Haulers Stakeholder Group meetings. After initial consideration, several of the county commissioner boards from the Five County Region publicly stated they were not in support of utilizing what is, essentially, legislative flow control through a county ordinance, to direct waste from the study region to one or more public disposal facilities. The Solid Waste Haulers Stakeholders Group also voiced their opposition to implementation of such a form of legislative flow control.

The 2023 5 County Regional Plan Update will not further consider the alternative of implementing legislative county flow control by county ordinance, due to a lack of political support, and acknowledging the current opposition from the local haulers to this concept. Should some form of flow control be determined to be needed in the future, and should it gain the support of the county leaders, this concept could be reassessed with an additional planning effort to modify the current SWMP.

The 5 County Regional Plan Update does not designate or require waste to be sent to specific disposal facilities. Haulers operating within the Region are free to take the waste collected to any properly State permitted facility. Disposal capacity assurance has been arranged with the Lycoming County Landfill for the ten year planning period.

Note of clarification to readers: in a 2010 Guidance Document issued by PADEP on the preparation of Municipal Waste Management Plans, PADEP states the following regarding what is commonly referred to as "Menu Plans" that are in widespread use, and are widely accepted in Pennsylvania. "The term "flow control" is often used to describe the situation where the county requires by law that waste generated within its boundaries be delivered only to facilities designated in the county plan. (Flow control is also generally used to describe a situation where an exclusive franchise for waste pickup is granted to a single waste hauler by a municipality.) An Act 101 plan will be considered a "Flow Control" plan even if a county designates more than one facility which may lawfully receive waste generated within the county. It is only when a county allows waste to be disposed or processed at any permitted facility that the plan will not be considered to include "flow control." A county which decides not to use "flow control" as part of its plan must still assure that it has adequate processing and disposal capacity for all county-generated municipal waste during the next ten years."

Thus, the Regional SWMP has been revised to remove any references to "designated" facilities, menu plans, or waste flow control and instead will refer to the Lycoming County Landfill as a "contracted" facility to provide disposal capacity assurance over the ten year planning period, as required by PADEP.

5.3 Waste and Recyclables Collection and Transportation

This section discusses the various methods currently in use, or potentially available, to the municipalities located in the Region for collection and transportation of waste and recyclables.

Collection

Municipal Solid Waste (MSW)

There are three basic methods for the collection of MSW (residential/commercial/ institutional refuse) that are practical in this region.

- Individual households and businesses can each contract directly with a private waste hauler for refuse collection services, with limited or no municipal involvement. This is referred to as subscription collection.
- Municipalities can contract via a public bidding procedure with a private waste hauler to provide refuse collection services to their residents (and institutions and small businesses, typically). This is referred to as contracted collection.
- The municipality itself (or a series of municipalities can join together) can provide the collection and transportation of MSW to the disposal site. This is known as municipal collection.

Lewisburg Borough is the only municipality within the 5 County Region that uses municipal collection. A program of this type requires significant capital costs for equipment, along with municipal staffing commitments, and therefore it is often not economically feasible for smaller municipalities within the 5 County Region to employ this method of collection.

Two municipalities, Brown and McHenry Townships, in Lycoming County do offer a subscription service to a centrally located dumpster or transfer station. These municipalities are in very remote locations and it is difficult to find haulers to service full and part time residents. The Wayne Township (Clinton County) Landfill services the McHenry Township transfer station located in Cammal. The Brown Township dumpster is handled by Love's Disposal and is disposed of at the Wayne Township (Clinton County) Landfill, while the Lycoming County Resource Management Services handles the recyclable materials.

Subscription collection is the most common method of waste collection within the 5 County Region. In this method of collection, residents, commercial, industrial and institutional customers contract directly with private haulers. With the exception of Lewisburg Borough, all of the municipalities within the 5 County Region use subscription waste collection. The advantages of subscription collection include:

- Competition – subscription collection encourages the entry of multiple haulers into the market. This provides competition among the haulers servicing a certain municipality and often creates cost benefits to the residents as well as various service options to fit resident's needs. Subscription collection allows residents to choose their trash hauler and collection options.
- Recycling – Most haulers that operate by subscription offer a range of services, including various types of "pay-as-you-throw". Customers who recycle can thus see an economic benefit related to reduced waste material (as they reduce the number of bags of waste generated).
- Local Markets – Most local haulers do business with other local businesses; consequently, they are integrated into the economies of the local communities they serve.
- Small Business – Because of the competitive nature of subscription collection, small "mom-and-pop" haulers (that have lower overhead costs) can compete successfully with larger companies for customers.
- Minimal Municipal Involvement – Subscription collection requires the least municipal involvement of all the collection methods.

The disadvantages of subscription collection include:

- Increased Truck Traffic – In areas serviced by subscription collection, haulers may be collecting waste in one municipality, even on one street. Multiple haulers serving one area often means multiple days of collection, therefore creating increased truck traffic, air pollution and noise pollution.
- Inefficiencies in Collection – Multiple haulers may lead to inefficient collections and/or missed collections within a municipality. Where there are inefficiencies in collection, some subscription haulers may not be able to offer services for the same price as one hauler who serves an entire area.
- Rural Collection – It may not be economically feasible to collect waste in rural areas through subscription collection due to the limited number of residents available to be served and the length of travel distance between collection routes.

The current system has clear advantages and works well in the five County Region. In more densely populated areas of the State there are advantages to a municipality contracting for collection service. Larger Cities tend to view contracted collection service as a way to reduce littering and illegal dumping. No municipalities within the five County Region currently bid for contract waste collection services. This issue is sometimes contentious when a municipality tries to enact this type of service.

In addition to the potential financial benefits of contracted collection, there are additional advantages as well:

- Control of Collection Services - contracted collection with private haulers allows local governments to indicate the types of collection services to be provided under contract (unlimited collection, pickup with can limits, or straight pay-as-you-throw; bundled curbside recycling services with the waste collection; with or without direct customer billing; with or without disposal costs included; with reporting requirements for wastes and recyclables collected; etc.).
- Designation of a Disposal Facility - a municipal waste disposal contract can also (but does not have to) designate the disposal site or sites where the municipality wishes the contracted hauler to dispose of the municipality's waste, and can also designate a site where the recyclables are to be taken (if part of the contract). Sometimes, haulers are hesitant to support contracted collection programs because they may be perceived as favoring larger haulers that have greater fleet and staff capabilities, or because the contract may contain contract requirements (services, insurances, guarantees, etc.) that small haulers cannot easily comply with.
- Reduction in Waste Vehicles – contracted collection can reduce the number of waste vehicles within a municipality as compared to subscription collection, which results in more efficient collection with less truck traffic, road wear, air pollution and noise.
- Reduction in Illegal Dumping Activities - contracted collection can also help limit the occurrence of illegal dumping, as residents with this form of collection are provided with consistent and reliable refuse collection services and, therefore, are less likely to illegally dispose of waste and/or accumulate waste for long periods of time. However, hard to dispose of items that haulers refuse to take or that involve additional fees such as; tires, air conditioners, computers, …etc are still found dumped illegally.

There are also disadvantages to contracted collection. These include:

- Reduction in Solid Waste Haulers - Contracted collection may take business away from haulers servicing that municipality, if the hauler is not the selected waste hauler for the contract. In some situations this may lead to smaller haulers no longer doing business within the Region.
- Increased Municipality Involvement – Contracted collection requires more involvement on a municipality level. Municipalities are often responsible for collecting the fees from residents associated with their waste service, as well as handling complaints and general residential issues relating to waste and/or recycling collection. This may require more municipal staff or staff time.

- Rural Collection - a municipality that is immensely rural in nature may not benefit from contracted collection. Residents may be required to pay a higher rate for waste and/or recyclables collection due to the nature of the collection routes, and haulers may not even bid on providing curbside collection service in some rural areas, similar to a subscription hauler's reluctance to serve some very rural areas. There also may not be a large enough population to justify contracted collection.

In some very rural areas, haulers, whether under contract or by subscription, may not want to service an area due to the long distances between customers, poor roads, mountainous conditions, or distances between the area and their operation yard and a landfill.

In counties such as Columbia, Lycoming, Montour, Snyder, and Union with sparse population, counties may also want to consider contracting specific routes, within an area of a county that is broader than just one municipality, to one or to multiple haulers. Where subscription service to a rural area may be uneconomical, a defined route with customers may make the economics work for some haulers. For example, within a county, five different private haulers may service their municipalities. If a county would pursue this method, they could develop waste hauling routes that divided their county into distinct areas for waste haulers to service. This scenario can often provide waste collection service for residents who were not previously obtaining it due to their location within the county. If the Counties within this 5 County Regional Plan would decide that contracted collection through a County contract is something worth pursuing, the Counties may be able to coordinate collection with private haulers in multiple municipalities or within multiple Counties, thus potentially further decreasing the cost of refuse collection for residents, and increasing the efficiency and safety of collection for the waste haulers.

Recycling

The collection methods for recycled materials are similar to the collection methods for residential waste. Recycled materials can be collected curbside through municipal collection, contracted collection, subscription collection, or drop-off/transfer collection. The details of these collection methods are described above. Regarding curbside collection of recyclable materials, three methods can be used: source-separated, dual-stream, and single-stream. Source-separated and dual-stream recycling require greater effort by the customer and hauler, but the recycling facility's processing effort is decreased. Single-stream recycling involves much less effort by the customer and hauler, but requires a more complex processing system and greater effort at the recycling facility to process the mixed recyclables. There is one single-stream recycling facilities in the Region, located within Lycoming County.

Source-separated recycling requires residents to separate their recyclables into separate containers at the curb. This method makes processing much simpler and inexpensive, and tends to result in a cleaner recyclable material collected (which improves market value). Dual-stream recycling is similar to source-separated recycling, with the recyclables commonly separated into 2 categories: bottles/ cans and paper fiber. Dual-stream recycling typically has the same benefits as source-separated recycling, but the collection method is

slightly different. For example, glass and plastics may go in one container while paper fiber (cardboard, newspaper, etc.) go in another. Both source-separated and dual-stream recycling operations require the hauler to either place recyclables from the curb into different containers in the recycling truck, or to make multiple collections, for transportation and delivery of the material to the recycling center.

Single-stream recycling collects all of the recyclable materials in a single container at the curb. Some of the benefits of single-stream collection are ease of separating in the home, higher residential participation rates, higher quantities recycled, increased collection efficiency and the ease in which a municipality can incorporate small businesses and multi-family units into the program. Some of the disadvantages of single-stream recycling include lower recyclable material quality and market revenues, higher capital processing costs, decreased quality control at the curb, increased product contamination, increased transportation costs, and the potential to have to dispose of more material due to the contamination factor. Both dual-stream and single-stream collections require access to materials processing facilities in the region that can receive and further process the collected mixed recyclables.

There are many factors to consider when selecting a recycling program, such as what types and size of containers to give residents, what materials to collect, what type of truck will best suit the collection program, what types of recyclables processing infrastructure is available in the area, how the recycling program will be funded (i.e. include in a subscription cost, pay through local taxes, fund through a pay-as-you-throw program, etc.) These considerations may be dependent on the type of waste collection program used.

In many areas of the Region, the only recyclables collection service that is offered is through the recyclables drop-off site option. There are currently recyclables drop-off sites scattered throughout the Region, as shown on Exhibit 2. In contrast, only 9 municipalities in the Region have mandatory curbside recyclables collection programs. This service differs depending on the municipality. In other municipalities, recyclables collection is offered through the waste haulers, and the cost for the program is included in the resident's subscription cost with the haulers. The recycling fee is generally an optional fee selected by the resident who subscribes. The municipalities with mandated recyclables collection are identified in Tables B.2 through B.6 in Appendix B, and are shown on Exhibit 2.

Transportation and Disposal

In June 2002, Pennsylvania approved amendments to the existing solid waste management statutes (adopted as PA Act 90) that, among other provisions, established a statewide waste transportation safety program, including a registration program for all waste haulers doing business in Pennsylvania. Any waste hauler with a GVW (gross vehicle weight) of over 17,000 pounds and trailers with a registered gross vehicle weight greater than 10,000 pounds that transports municipal or residual waste to a waste processing or disposal facility in Pennsylvania must have a valid Waste Transporter Authorization issued by the Department of Environmental Protection. This program is administered by the State and prohibits counties or municipalities from implementing any new municipal waste or residual waste

transportation authorizations or licensing programs (note – since the Act 90 program relates to licensing of larger waste vehicles, it leaves open the possibility of establishing a separate local licensing program for waste vehicles with less than a 17,000 pound GVW). Based on this legislation, all larger haulers doing business within the 5 County Region need to meet the requirements of the State program, and hauler data collected from the State program is available on the Pennsylvania Department of Environmental Protection (PADEP) website at:

https://www.dep.pa.gov/Business/Land/Waste/SolidWaste/Municipal-Residual-Waste--Transportation/Pages/default.aspx

Some counties in the Commonwealth continue to register (as opposed to licensing) haulers, usually with a minimal (or no) fee, to help ensure that basic information on the haulers, the municipalities served and the materials collected, is reported to the county or municipality regularly. There was no interest from this group in promoting additional county registration or licensing of these small-payload waste haulers.

Municipal Solid Waste (MSW)

Under Act 101, it is the responsibility of each municipality to provide for the proper collection and transportation of municipal waste generated from within their municipal borders. There are three (3) ways that waste can be transported to a disposal facility. Residents or businesses can transport their waste directly to a disposal facility; waste haulers can collect waste at curbside and transport it to a disposal facility; or municipalities can collect waste at curbside and transport it to a disposal facility. A "disposal" facility in this context can be a regional transfer station, a landfill, or another type of permitted processing or disposal facility. All municipal waste generated within the 5 County Region must be transported to a properly permitted disposal facility, with larger haulers duly licensed by the State as required by Act 90.

Currently, all municipalities within the 5 County Region, with the exception of Lewisburg Borough, rely on either direct hauling by the generator or private subscription services for transportation of MSW from the curbside to a disposal facility. Lewisburg Borough hauls its waste to disposal sites using municipal trucks and curbside collection of MSW.

Within the geographic boundaries of the 5 County Region, there is one MSW landfill and five permitted transfer stations. MSW from residents within the Region can be transported to any one of these disposal facilities. The location of these facilities is presented on Exhibit 2.

Lycoming County is currently considering improvements to the Lycoming County transfer station located in Williamsport, to improve the efficiency of the operation. Lycoming County purchased an adjacent parcel from Penn College to accommodate improvements to the flow of waste into the transfer facility and also to move the recycling drop-off location from across the street to the adjacent parcel. The relocation of the recycling drop-off location will provide more security and monitoring of the site that would cut down on the amount of non-recyclable materials and waste being improperly disposed of at the current location.

Recycling

As with MSW, recyclables can be transported in three ways to a disposal facility: directly by residents and businesses, by waste haulers, or by municipalities. A disposal facility in this context includes a drop-off site, a transfer station, or a materials recovery facility (MRF), or other suitable facility. Ultimately, the goal is for all segregated recyclables to be shipped to markets for reuse, or reused locally (such as inert materials that can be used for pipe bedding or aggregate).

Drop-off recycling sites can supplement curbside collection, and in areas where no curbside collection exists, provide the only opportunity for recycling. Drop-off recycling sites can enable a municipality to expand their current recycling program by enabling them to accept a broader range of materials from their residents than a hauler may collect. Typically, rural municipalities are not mandated to recycle under Act 101, and thus haulers may not offer curbside recyclable collection. Drop-off locations can provide residents the opportunity to recycle when their hauler does not offer it. The municipalities which are mandated to recycle within the 5 County Region are identified in Exhibit 2.

Drop-off locations can be permanent sites or mobile sites. Permanent drop-off sites are sites which contain recyclable drop-off containers at the same location year-round. Each drop-off site operates with specific hours and days of operation; this information is often available by calling the local municipality. A permanent drop-off site may be located at a municipal building, a local park, a local business parking lot or similar locations within the municipality. Mobile drop-off sites are typically moved from one location to another location, to offer recyclable collection to the maximum number of residents and geographic areas. Mobile sites may be beneficial in rural areas where a permanent site is not feasible, but where the residential desire to recycle more material is high. Exhibit 2 shows the location of the recyclables drop-off sites throughout the 5 County Region.

Each permitted landfill and transfer station in Pennsylvania is also required by Act 101 to provide a permanent recyclables drop-off site at or near its facility. Residents, businesses, haulers and municipalities can also transport their recyclables to these drop-off sites. There is one permitted landfill and two permitted transfer stations within the 5 County Region. These facilities act as drop-off locations within a larger facility for residents and businesses, while haulers and municipalities who haul recyclables can bring larger loads to these facilities for sorting and processing. Transfer stations often have the capability of processing recyclables on site (i.e. sorting, baling, compacting, etc.) and subsequently transporting these recyclable materials to the best available markets.

A MRF can also accept recyclables from residents, businesses, institutions or haulers. A MRF can be classified as “clean” or “dirty”. A “clean” MRF accepts recyclable materials that have been segregated from MSW by residents prior to delivery or placed separately at the curb for pickup. Recyclables are usually sorted, baled, shredded, crushed, or otherwise processed for shipment to the best available market. “Dirty” MRFs accept a mixed solid waste stream and separate out designated recyclable materials through a combination of manual and mechanical sorting. The sorted recyclable materials are further processed for

shipment to the best available market, while the remaining residual waste is sent to a disposal facility, such as a transfer station or landfill. There are currently four "clean" MRFs located within the 5 County Region and an additional four MRFs located near the Region.

The materials accepted at the MRFs located in or near the 5 County Region are listed in Table 5.3-1, on the following page. These MRFs, as well as other surrounding MRFs, are identified on Exhibit 2.

Table 5.3-1
Materials Accepted by Local MRF Facilities

J.A.W.S.	Closed
Lycoming County MRF	Single Stream MRF aluminum cans, steel/tin cans, clear glass, brown glass, green glass, mixed office paper, cardboard, low grade paper/chipboard, newsprint, magazines, books, junk mail, plastics #1-7 (bottles and jars only)
Bloomsburg MRF	3 colors of glass, aluminum and tin cans, newspaper, magazines, catalogs, books, office paper, paper bags, cardboard, chipboard and plastics 1&2.
Clinton County MRF	aluminum, steel and tin cans, newspaper, #1 thru #7 plastic bottles and jugs, antifreeze, residential batteries, magazines, corrugated cardboard, motor oil, paperboard, office paper, junk mail, vehicle batteries, glass bottles and jars
Penn Recycling MRF	aluminum cans
Staiman Recycling MRF	newspaper, magazines, office paper, cardboard, aluminum cans
Coal Township Recycling Center/MRF	plastics 1&2, 3 colors of glass, aluminum and tin cans, newspaper, office paper, and cardboard
Jeff's Auto Body and Recycling Center/MRF	mixed paper, newspaper, aluminum and tin cans, and cardboard
Northumberland MRF	No longer operates an MRF.
Sunbury Transfer Station	Operates a small processing facility

5.4 Service Area (Shed) and Economic Marketplace Analysis

The concept of a Service Area (Shed) analysis is housed in the idea that, in the management and handling of municipal waste and recyclables from within the 5 County Region, there are geographical areas within the 5 County Region that have common needs and common logical, economical management and disposal solutions. For waste disposal, this may be the hauling of wastes from within a service shed to a common disposal site. The disposal site could be a transfer station, a landfill, etc. For recyclables, this could mean coordinated collection and hauling of the materials to a common Materials Recovery Facility (MRF) for processing. By determining logical service areas within the 5 County Region, the local needs and

deficiencies, as well as the most logical and economical waste and recyclables management solutions may be identified.

As part of this 5 County Regional Plan Update, a Stakeholder Group was established to provide input and feedback on the plan and its ideas. Members of various stakeholders were asked to participate with the Stakeholder Group.
The previous Plan at a Solid Waste Haulers Stakeholder Group meeting on August 25, 2010, asked the waste haulers to participate in a workshop where they broke into several groups, were given a map of the region that displayed major transfer stations and landfills, and were asked to mark on the map which disposal site they felt waste most logically should flow. They took into consideration road networks, natural barriers (mountains, rivers, etc.), hauling distances, urban congestion, population centers, and other factors that they felt affected where waste should be logically taken. These service shed maps were created using the assumption that equally competitive tip fees exist at all sites – no tip fee advantage was assumed at any site. In this way, the analysis could be done purely on relevant waste transportation factors.

The current Stakeholder Group for the 2023 Plan Update acknowledges that there are still areas of the 5 County Region that are underserved due to geographic and economic reasons. It is anticipated that as growth and development occurs in the Region that the 5 Counties will adjust where services are needed and provide access to through regional locations that meet the needs of these areas best. It is anticipated that some service locations will change to better meet the needs of the area being served. It is also acknowledged that tipping fee differences, depending upon the area, will continue to determine where waste is disposed.

The Economic Marketplace – Disposal Facilities and Costs

The concept of an "economic marketplace" is the combination of public and private haulers, processors and disposal sites that serve the 5 County Region with waste management and recycling services, and the system of costs incurred and fees charged for services provided throughout the 5 County Region. Solid waste and recycling fees charged to residents and businesses within the region include the costs of collection, hauling and processing/recycling/disposal. Current costs charged are important to this system, since waste transportation decisions are largely driven by hauling and disposal economics, as well as the suitability and range of services provided. This discussion focuses in some detail on the current marketplace that serves the 5 County Region.

Outreach was conducted to obtain the tipping fees for MSW from the disposal facilities in and around the 5 County Region. Information was gathered from transfer and disposal facilities, through phone calls and emails to the sites.,

Based on this survey, the reported gate rate tipping fees were found to be quite consistent for MSW landfills in the 5 County Region as noted below in Table 5.4-1. ranging from a low of $58.35 per ton at the Wayne Township (Clinton County) Landfill to a high of $131/ton at both the Alliance Sanitary Landfill and the Cumberland County SVC Landfill. The current

tipping fee at the Lycoming County RMS Landfill, where the majority of municipal waste from the 5 County Region is currently disposed, is $60.05 per ton.

There was one facility that closed in the last 10 years: Pine Grove Landfill. There were four landfills that would not release or did not respond with their current tipping fees; Waste Management Inc. Transfer Station, Mostoller Leonard Landfill, Mosteller Landfill, and Western Berks Community Landfill. The tipping fees of facilities that are furthest away from the Region are, generally, significantly higher than the tipping fees reported at the remaining landfill facilities in and nearest to the 5 County Region.

The reported tipping fees at the transfer stations in the 5 County Region had a much larger price range. This surveyed range varied from a low of $58/ton at the Tioga County Transfer Station to a high of $103.95/ton per ton at the Susquehanna Resource Management Complex. The MSW tipping fee information from transfer stations and landfills in the area are located in Table 3.4-1, below. Additionally, C&D tipping fee information from transfer stations and landfills in the area are located in Table 3.4-2, below.

Table 5.4-1
Reported MSW Tipping Fee for Local Facilities

FACILITY	REPORTED GATE RATE (PER TON)***	NOTES
TRANSFER STATIONS		
Heaps Transfer Station	No response	No answer
Lycoming County Transfer Station	$60.55	
Sunbury Transfer Station	$66.80	
Waste Management, Inc. Transfer Station		Closed
Mifflin County Solid Waste Authority Transfer Station	$84.00	Public Rates will increase by 5% effective January 1, 2024
Tioga County Transfer Station	$58.00**	
Tiadaghton Area Transfer Station	$74.00**	
PA Waste Transfer, LLC	$104.00 Regular/$116 Bulk	
Susquehanna Resource Management Complex	$103.95	
LANDFILLS		
Bradford County Landfill	$54.00**	
Lycoming County Landfill	$60.05**	
Wayne Township Landfill	$58.35**	

Commonwealth Environmental Systems (CES) Landfill	$75.00*	Has a 3% fuel charge on haulers
Pine Grove Landfill	N/A	Closed
White Pines Landfill	N/A	Only accepts residual waste
Greentree Landfill	$65.00	
Alliance Sanitary Landfill	$105.00	
Keystone Sanitary Landfill	$100.00	
Sanitary Landfill	$100.00	
Mostoller Leonard Landfill	No response	Declined to Answer
Mostoller Landfill	No response	Declined to Answer
Cumberland County SVC Landfill	$105.00	
Modern Landfill	$84.00	
Western Berks Community Landfill and Recycling Center Birdsboro	No Response	Email Sent

** Rates obtained through phone call to facilities in June/July .
*** Facilities may offer discounts off reported gate rates.

Table 5.4-2
Reported C&D Tipping Fee for Local Facilities

FACILITY	REPORTED GATE RATE (PER TON)***	NOTES
TRANSFER STATIONS		
Heaps Transfer Station	No Response	No answer
Lycoming County Transfer Station	$52.80**	
Sunbury Transfer Station	$81.00**	
Waste Management, Inc. Transfer Station		Closed
Mifflin County Solid Waste Authority Transfer Station	$64.90**	
Tioga County Transfer Station	$58.00**	
Tiadaghton Area Transfer Station	$65.00**	
PA Waste Transfer, LLC	N/A	Permit has been submitted to DEP for approval
Susquehanna Resource Management Complex	$95.00	
LANDFILLS		
Bradford County Landfill	$45.00**	
Lycoming County Landfill	$48.05**	

Clinton County SWA (Wayne Township) Landfill	$49.00**	
Commonwealth Environmental Systems (CES) Landfill	$67.50*	
Pine Grove Landfill	$75.00*	
Phoenix Resources C&D Landfill, Inc.	No Response	Phone calls were made to this facility; no costs were released
Tioga County C&D Landfill	$32.75**	
Greentree Landfill	$65.00	
White Pines Landfill	$49.00*	Only accepts residual waste
Alliance Sanitary Landfill	$105.00	
Keystone Sanitary Landfill	$100.00	
Sanitary Landfill	$100.00	
Mostoller Leonard Landfill	No response	Declined to Answer
Mostoller Landfill	No response	Declined to Answer
Cumberland County SVC Landfill	$105.00	
Modern Landfill	$84.00	
Fairless Landfill	$147.69	½ ton min + surcharge, taxes and fees
Western Berks Community Landfill and Recycling Center Birdsboro	No Response	Email Sent

*

** Rates obtained through phone call to facilities on

*** Facilities may offer discounts off reported gate rates.

The tipping fees included in this section do not account for any discounts given to haulers at the landfills or transfer stations. Also, many do not release their fees to the public. Typically, these facilities offer discounts off of the reported tipping fee for haulers that deliver large volumes of waste to the site. Regardless, this economic marketplace analysis still offers a good relative comparison of the markets and price competition (undiscounted) for MSW disposal in the region.

Based on the tipping fee ranges obtained from the MSW landfills, there is no significant disposal cost advantage to using one MSW landfill by haulers in the 5 County Region over another, since the tipping fees at these facilities are reasonably consistent. Due to these similar fees, the waste hauling costs become a vital factor in the economics of selecting a landfill for waste disposal by haulers in the 5 County Region.

With the closure of the Pine Grove Landfill, the CES landfill is another option closer to southern Columbia County, and its reported tipping fees are $67.50/ton be, but there is insufficient information available at this time from other transfer stations in the region to determine the most economical hauling and disposal solution for southern Columbia County.

Based on the locations of the MSW landfills, as shown on Exhibit 1, as well as their reported tipping fees, it is justifiable that most of the 5 County Region's waste has been historically

disposed at the Lycoming County and Clinton County (Wayne Township) Landfills. Additionally, the Lycoming County Transfer Station is another economical choice for haulers to dispose of waste, with a tipping fee lower than other transfer stations in the area.

Discounting tipping fees, the marketplace analysis suggests that it may be more economical for waste generated in central and western Snyder County to be transported to the Mifflin County Solid Waste Authority (MCSWA) Transfer Station, for consolidation and ultimate disposal. Wastes generated in western and central Snyder County are closer to the MCSWA Transfer Station than the Lycoming County Landfill. Wastes generated in western Union County are equidistant to the MCSWA Transfer Station and the Lycoming Landfill. The remaining waste from Snyder and Union counties, generated in central and eastern Union County and in eastern Snyder County, can probably more economically be shipped to the Lycoming County Landfill.

However, the published gate rates at the MCSWA Transfer Station are significantly higher than those at the Lycoming County Landfill. MCSWA's published rates are $64.90/ton In addition, a fuel surcharge, which varies bimonthly, is added to cover costs associated with transfer hauling to the landfill. Lycoming County Landfill's rates are $52.80/ton.

On the other hand, large volume PADEP licensed haulers who use the MCSWA Transfer Station may be able to obtain significantly discounted tipping fees (off the stated gate rates) if they are willing to enter into a long-term contract. Therefore, a large volume hauler with a tip fee discount at Mifflin may be able to provide competitive or cheaper waste collection and disposal services to central and western Snyder County, and in western Union County, than haulers using the Lycoming County Landfill. Without the benefit of large-volume tip fee discounts at the MCSWA Transfer Station, the Mifflin Transfer Station is probably not a cost-competitive alternative to use in lieu of the Lycoming County Landfill by this southwestern portion of the 5 County Regional area.

All portions of Snyder and Union Counties have significantly shorter road distances to the Lycoming County Landfill than to the Clinton County Landfill, due to natural (rivers, mountains) and manmade (road network) restrictions.

Due to the significant east-west mountain ranges and the road network located in southern Lycoming County, most northwestern Lycoming County waste is best hauled to and disposed of at the Lycoming County Transfer Station or at the Clinton County Landfill. Clinton County Landfill's tip fee ($49.00 per ton) is somewhat lower than the Lycoming Transfer Station tip fee ($52.80 per ton). However, the fee differential to use the transfer station may be offset by the approximate 17 mile additional one-way road distance (and additional transportation cost) to use the Clinton County Landfill. The fluctuation in fuel and transportation costs is a large factor in which disposal facility is used. The remainder of Lycoming County waste can be economically hauled to and disposed of at either the Lycoming Transfer Station or the Lycoming County Landfill.

Exhibit 1 identifies the location of the landfills and transfer stations within the economic market place analysis as well as the tipping fees for MSW at these facilities.

5.5 Facilities Assessment

In July 2023, the Lycoming County Planning Staff reviewed, with county representatives, the waste transportation and disposal facilities, the recycling infrastructure in the 5 County Region, along with the marketplace information and concluded the following:

- The landfills located closest to the center of this five County Region offer some of the lowest tipping fees in the vicinity of this Region. Due to their proximity, they also provide a waste disposal location to which it is economical to haul waste. The favorable economics of using the LCRMS and the Clinton County Landfill is confirmed by the fact that a high percentage (over 90%) of MSW from the 5 County Region is currently disposed at one of these two facilities, just based on marketplace influences. This service should continue.
- The eastern portion of the region is served by multiple waste transfer stations in Northumberland County. These transfer stations are capable of transferring waste to selected disposal sites from that part of the region.
- Since the most economical landfills (in general) are also the closest (in general) to the center of the 5 County region, there is no economic incentive to add a new transfer station in the region to improve the current cost of transportation/ disposal of wastes to cheaper, more distant disposal sites. In fact, the more distant disposal sites are, in general, have higher tipping fees.
- There are multiple material recovery facilities (MRFs) in the region that serve sub-geographic areas of the region. These MRFs serve the recyclables processing and marketing needs of the entire region, and should continue to do so in the future. All of these MRFs accept source-segregated recyclables of some sort. The Lycoming County MRF was upgraded to receive and process single stream recyclables. This upgrade provides, the 5 County Region service by source-separated and single stream MRFs. These MRFs provide local outlets for haulers that collect recyclables from their customers, either in source-separated form or as a single stream collection.
- There are currently more than 35 public-access recyclables drop-off sites in the Region. It is not believed that additional recyclables drop-off locations are needed in the Region. A better option may be to re-locate and consolidate certain sites to offer better access, hours or service. While there was a large number of sites that closed over the last 10 years, this has not resulted in reduction of recycled materials. The general focus for most of the existing drop-off sites should be the acceptance of additional recyclable materials, the expansion of operating hours, increased monitoring and easier access as discussed elsewhere.

5.6 Processing/ Disposal Alternatives

There are numerous waste processing and disposal system alternatives that are currently available in the industry. In the interest of space, a long series of Alternatives have been included in Appendix I. This Appendix also discusses alternatives that have specific compatibility or that show particular promise within the current Columbia, Lycoming, Montour, Snyder, and Union Counties' waste management system that was described earlier in this chapter.

5.7 Compatibility of Processing/ Disposal Alternatives in the Region

The No-Action Alternative

In the no-action alternative, the 5 County Region's waste management operations would function in the same manner as they do now. Residents would subscribe with haulers for waste and recyclables collection. Haulers would transport the MSW and recyclables to the facilities of their choice. Haulers would not expand their recycling services; they would have the ability to offer recyclables collection to residents or not, except in mandated municipalities where recyclables must be collected curbside. There would be no expansion of the 5County Region's current transfer, processing or disposal facilities and programs. The current drop-off locations would remain, with the same current level of collection. No expansion of MRF processing capabilities would occur. There would be no support for enhancements to recycling education and information dissemination to schools, businesses and residents in the 5 County Region. No opportunities to secure funding to support existing and new recycling programs and value-added services would occur.

The current waste management system is sufficient for residents in the 5 County Region today, the no-action alternative meets the disposal needs of the 5 County Region for the next ten years. Some expansions at the Lycoming and Clinton County Landfills have already occurred and additional expansion(s) are planned in the future, haulers will not need to travel further distances, at greater costs, to dispose of the region's wastes at distant out-of-county landfills and WTE facilities.

In 2023, the total waste tonnage landfilled by the 5 County Region was 248,790 tons. The Lycoming County Landfill has a permitted limit in 2023 of 1,600 tons ADV (average daily tons) per day and no more than 2,000 tons MDV (maximum daily volume per day. In 2023, the 5 County Region was disposing of approximately 810 tons per day at the Lycoming County Landfill. At this rate of disposal, the Lycoming County Landfill was set to reach its useful life sometime in 2035. The projected total waste tonnage (including Residual Waste) that will need to be landfilled by the 5 County Region in 2030 is approximately 292,849 tons (about 1,028 tons per day, 5½ days per week basis - including all 5 waste streams discussed in Section 1.3). Based on the anticipated waste volumes requiring disposal by the 5 County Region in 2030 and the additional waste tonnages that are anticipated to be disposed of by Northumberland County at the Lycoming County Landfill, there is 10 years of remaining capacity available. .

The total material recycled in the 5 County Region in 2020 was 69,116 tons. At the current recycling rate per capita, the estimated recycled tonnage for the year 2030 is 98,380, or 378 tons per day (assuming 5 days per week). (See Table 3.1-3) However, if the Recycling rate increases to 38%, this total will increase to 104,340 tons (or 401 tons per day) by 2030. (See Table 3.1-4) Based on these volumes, and the current processing capability of the local MRFs, expansions are not necessary to sustain the anticipated 5 County Regional demands.

The 5 County Region has expressed a desire to manage the current recyclables collection program more effectively, as well as ensure that the maximum number of residents is being

offered a location to drop-off recyclables. In order to satisfy the needs of the 5 County Region, some changes may need to be made to the current waste management system. The No-Action Alternative does not limit the prospects of expanding recycling services in the 5 County Region.

Therefore, the No-Action Alternative does meet the needs of this ten-year solid waste management planning mandate.

Landfill

The LCRMS has a permit from the Pennsylvania Department of Environmental Protection (PADEP) to develop a new lined landfill cell, Cell 12 (horizontal expansion) within the existing permitted area of its site. This cell will provide at least 12 years of additional site life for the landfill's service area (which is, essentially, the entire 5 County Region). Cell 12 is almost ready to accept waste. It is expected that Cell 12 will be actively accepting waste by the end of 2023, beginning of 2024.

As discussed in the previous Plan, the Clinton County Solid Waste Authority (Authority) received approval for an expansion to its landfill. The existing closed disposal area was expanded by 75 acres. The permit application proposed to remove the historic waste from the existing closed disposal area and place it in a lined disposal area. At final grade, the expansion would add approximately 14 million cubic yards of airspace. The Authority had also proposed an increase to the average daily volume (ADV) and maximum daily volume (MDV) to 1,700 tons per day ADV and 2,000 tons per day for MDV. The (up to) 500 tons per day increase would come from the proposed addition of a rail line. The actual life of the expansion was anticipated to be 23 years based on an average intake of 1,700 tons per day, but the Authority was not proposing an increase in waste being transported by over-the-road vehicles.

Together, the Lycoming County Landfill and the Clinton County (Wayne Township) Landfill (the two historically highest volume facilities in the region) can provide greater than 100% of the disposal needs of the five county Region for the next ten years.

In addition, the Regional Plan does not designate where waste must be disposed of and as shown on Exhibit 1 there are numerous additional facilities that are accepting waste from the Region.

Landfill Gas Recovery

The Lycoming County Landfill currently operates a landfill gas collection and control system (GCCS) to capture and destroy methane emissions generated by the decomposition of organic wastes within the landfill. This landfill gas (LFG) (50% methane/50% carbon dioxide) is beneficially utilized in a landfill gas to energy (LFGE) system via combustion in two CAT 3516 reciprocating engine generator sets (gen sets) or used in heating boilers onsite. The gen sets generate electricity and waste heat. The electricity is currently net metered and sold to the PPL grid. A portion of the waste heat from the engines is used to heat buildings on

the landfill site. LFG is also used to operate boilers used to heat a building at the landfill. Based on future projected waste filling rates, and subsequent LFG generation, much more LFG than can be currently utilized will be generated at the landfill in the future. Lycoming County therefore negotiated a power purchase agreement with the Federal Bureau of Prison's Allenwood facility adjacent to the landfill.

Combustion (Waste-to-Energy)

In the previous Plan, the projected cost of a new waste-to-energy facility is one of the biggest deterrents to its consideration or potential development in this Region. Based on the waste tonnages currently generated by the 5 County Region, it is assumed that a WTE facility sized nominally at 750 TPD +/- may be appropriate. In a recent (2007) analysis conducted by Barton & Loguidice for another client, the estimated capital costs to develop, permit and construct a 750 TPD WTE facility are in the magnitude of $150 to $200 million. In the other study, the costs of WTE development were found to be significantly higher than the costs of developing a new landfill. Construction costs have increased significantly and it is expected that these estimated costs would remain higher than conventional disposal costs. Clearly, unless there is some driving set of regional conditions that eliminates conventional (i.e. landfill) waste disposal technology, WTE is not the most cost-effective option to consider, and is not worthy of further consideration here. Incineration of waste is often contentious with the local residents where these facilities are proposed.

Refuse-Derived Fuel (RDF)

RDF project development requires a large energy user that is willing and able to burn the RDF fuel in its boiler. The PADEP restrictions and permitting requirements on burning RDF in a conventional boiler, requiring a permit as if it is a WTE facility, are severe restrictions on this technology, in addition to its high equipment and capital costs. This is not a feasible option for this 5 County Region, unless a large industry with a specific RDF fuel need (i.e. looking to substitute RDF for coal in a boiler), is willing to make a large financial commitment to project development, and thus dictates a second look at this option.

Biogasification

Use of municipal solid waste as a biogas process feedstock has received some renewed interest recently, but no commercial-scale facilities are known to have been successfully developed in the United States using this technology. Therefore, this is considered to be in its developmental stages, and is not considered to be a proven technology at this time.

Composting/Co-Composting

A municipal waste composting project is capital-intensive. Typically, the economic feasibility of MSW composting is highly dependent on the cost of other disposal alternatives (e.g. landfilling) that are available for a region and also upon the quality of the product and local markets of the compost end-product produced. Where landfilling is available at a relatively economical price, and where there are no other critical environmental issues ruling out continued landfilling,

composting is not typically cost-competitive with landfills in most areas. However, segregated-organics composting as a component of a waste management system that includes landfilling may be found to meet increased waste diversion and recycling goals, extend landfill life, and result in a system that is still reasonably economical. Larger facilities (several hundred tons per day or more) can help improve compost system economics.

Emerging Waste Conversion Technologies

While some emerging technologies show real promise, such as plasma arc gasification, the fact remains that this is, as titled, an emerging technology. It also carries a high capital cost. As such, it is not believed to be appropriate for a public entity to invest large sums of money in a developing technology. Therefore, it is not recommended that this technology be implemented in the 5 County Region by any public entity. The status of development and commercial use of currently termed "emerging" technologies can again be assessed in the future, with the next plan update, if necessary.

Future Technology Proposed in the Region

A company called ENCINA is proposed to build a facility that would address the plastic waste crisis. Their project is proposed in Point Township, Northumberland County. This is adjacent to the 5 County Region and should it receive permits would be a large acceptor of hard to recycle plastics. For more information please visit their website: https://encinapointtownship.com/

5.8 Waste and Recycling Recommendations

The following waste and recycling management system is recommended for the 5 County Study Region. The reasons for recommending implementation of this selected system of waste and recyclables management are as follows:

- Meets Public Goals – This recommended system was selected on its technical, economical, environmental and long-term merits. It meets the requirements to provide for 10 years of disposal capacity and to propose a system to attain an ultimate goal of increasing the amount of recycling available to residents.
- Cost-Effectiveness – Haulers can select any disposal facilities. Haulers will have the option of selecting the processing/disposal facility that offers the best opportunity to meet their individual needs to deliver MSW collected from the 5 County Region.
- System Flexibility – The Counties have not committed specific amounts of waste to any of the disposal facilities shown in this 5 County Regional Plan. Therefore, if a hauler, municipality or business can secure a more competitive tipping fee at a facility other than those shown, this results in competition that helps minimize costs.
- Adequate Disposal Capacity – The system has more than adequate capacity to manage all municipal waste and recyclables generated in the five Counties. There is no need to seek additional facilities or consider other management options unless a petition to add a site is received by the Counties.

- Logical Extension of Existing System – Each of the five Counties has a professional staff that currently engages in waste handling, recycling, yard waste composting, public education and financial management activities. However, these professional staffs are stretched on budgets and available time, and a regional approach to enhancing and expanding recycling and waste management opportunities benefits all Counties in the Region, as efforts are coordinated and knowledge is pooled.

5.9 Collection of Refuse and Recycling

MSW Collection

Waste collection is a local municipal responsibility. The collection methods for municipal solid waste (MSW) that are practical for this region include municipal collection, contracted collection, subscription collection and drop-off/ transfer collection.

In the 5 County Region, Lewisburg Borough is the only municipality currently utilizing municipal collection. Municipal collection can be beneficial because it regulates the amount of trucks on the roadways as well as the days and times that refuse is collected. Unfortunately, a municipal collection program is capital intensive and requires a significant amount of money for start up for the purchasing of vehicles and equipment.

Contracted collection (municipalities typically bid for refuse and/or recycling collection and disposal/recycling services with a single hauler) can be beneficial to municipalities. Contracted collection allows municipalities to request specific refuse and recycling collection services, which will benefit their residents. Contracted collection allows a hauler to become more efficient in its collection routes, and often results in savings to residents of compared to similar services provided through a private subscription program. Often, bundled services (waste and recycling pickups, bulk item pickups, education, etc.) can be part of one municipal contract with resulting "bundled" cost savings. Contracted collection also reduces the number of refuse collection vehicles on the roadway and related environmental impacts of truck traffic.

Subscription collection (individual contracts between haulers and customers) is the dominant method currently in use in the 5 County Region. With subscription collection, residents can choose their own waste hauler, which allows them to subscribe with the hauler who may offer the best rates or the collection service that is most compatible with the resident's needs. Subscription collection is also beneficial for small waste haulers because it allows this type of waste hauler to be able to remain competitive in the municipality and continue to offer waste collection services on a small scale. Based on PADEP clarifications, it may be difficult to comply with Act 101 recycling requirements by using a subscription collection system to collect recyclables in municipalities that are mandated to recycle under Act 101. This has not been an issue with the 10 mandated communities in the Region.

The Plan acknowledges that each of these collection systems appears to be feasible in portions of the five County Region. Individual municipalities will retain the choice of what kind of waste and recycling system they wish to have in their community.

The Plan acknowledges that many municipalities will continue to use the method of subscription refuse collection when it benefits their residents. The subscription collection method can allow small waste haulers to remain competitive as well as provide residents with the opportunity to select their own waste hauler based on costs and needs. The subscription collection method involves the least amount of responsibility by the municipality. Subscription collection may be beneficial for municipalities who are not mandated to recycle under Act 101, whose municipality contains a variety of waste haulers and whose municipality does not have the means necessary to monitor refuse collection. The Plan recommends municipalities who use subscription collection enter into discussions with their waste haulers to provide increased recycling opportunities for their residents. A sample ordinance is in included in Appendix E that requires haulers providing subscription collection to also collect recyclables curbside.

Recycling Collection

Similar to waste collection, recyclables collection is a local municipal responsibility. The collection methods for recycling are similar to the collection methods for residential waste. Recycling can be collected through a municipal collection, contracted collection, subscription collection or drop-off/transfer collection. The benefits of these collection methods are similar for recycling as for refuse collection. Based on stakeholder meetings, the counties and stakeholder groups would like to increase opportunities to recycle in the 5 County Region through organizational opportunities. In most of the 5 County Region's municipalities, where subscription collection is prevalent, residents and businesses may not be receiving or opted into recyclables collection. Municipalities are only required to collect recyclables when they are mandated to do so (by population and density) under Act 101.For this reason, the Plan encourages the municipalities with subscription collection services to work with their waste haulers to provide increased recycling opportunities for their residents.

A municipal bid contract is an option for municipalities that wish to use a private hauler to add a recycling program to their municipal services. The bid could be just for recyclables collection, or could be bundled with a waste collection bid contract. Recycling program costs can be included in the fees to residents and businesses.

In regard to curbside recycling collection, haulers can collect recyclables using three methods; source-separated, dual-stream and single-stream.

5.10 Transportation of Refuse and Recycling

Municipal Solid Waste (MSW)

There are several ways that waste can be transported to a disposal facility. Residents or businesses can transport their waste directly to a disposal facility; waste haulers can collect waste at curbside and transport it to a disposal facility; or municipalities can collect waste at curbside and transport it to a disposal facility. Waste can also be taken to a regional transfer station for consolidation and transportation to an ultimate disposal site.

Within the geographic boundaries of the 5 County Region, there is 1 MSW landfill, 6 permitted transfer stations that accept waste.

Recycling

As with MSW, recyclables can be transported in several ways to a collection or processing facility: directly by residents and businesses, by waste haulers, or by municipalities. Facilities can include stand-alone drop-off sites, drop-offs at transfer stations and landfills, MRFs, or even directly to markets. Ultimately, the goal is for all segregated recyclables to be shipped to markets for reuse, or reused locally.

In general, any improvements that can be made in the hauling of recyclables to collection and processing sites (by municipal haulers, private haulers, hauling of drop-off containers, etc.) are supported by this Plan. As recycling collection opportunities expand in the region, the hauling of these recyclables to multiple outlets by the collectors is probably the most efficient form of transport of collected recyclables.

5.11 Processing/Disposal of Refuse and Recycling

Waste Processing Alternatives

Because of the significant excess in available capacity within a relatively close proximity of the 5 County Region, capital-intensive alternative methods for processing the 5 County Region's municipal waste were not seriously considered. These alternative methods included:

- Construction of a new publicly-owned waste-to-energy facility (incinerator).
- Construction of a new publicly-owned refuse-derived fuel (RDF) facility.
- Construction of a new biogasification facility.
- Construction of a new publicly-owned composting facility.
- Construction of a waste conversion technology facility.

The alternative technologies of Biogasification, Pyrolysis, Gasification and Plasma Arc Gasification have a high risk factor. These technologies have limited operating experience at only small scales, previous failures and trouble becoming large scale operations. For these reasons, these are not recommended alternatives for this Region at this time.

The previously approved expansion of the Clinton County Landfill and the Lycoming County Landfill provide enough capacity to take 100% of the waste from the five counties for more than the ten year planning period (if necessary), and the ability of haulers to choose their own disposal sites based upon market demands. Landfill disposal capacity is relatively inexpensive compared to most processing alternatives listed above. For this reason, the waste processing alternatives mentioned above are not considered feasible options for the Counties at this time (source separated household organics (SSO) composting can be further analyzed if waste diversion from the landfills is determined to be of value in the Region, since SSO diversions can yield anywhere from 10 to 30% waste reduction).

MSW Waste Disposal

The Counties are responsible for managing the safe disposal of their municipal waste from within the 5 County Region. The system described in this Plan (see Chapter 6) helps ensure that municipal waste generated in Columbia, Lycoming, Montour, Snyder and Union Counties will be delivered to facilities that are legally permitted and contracted with the five Counties, consistent with Act 101 requirements.

As part of this 5 County Regional Plan, a Solicitation of Interest (SOI) was discussed. It was decided by the Region that this was not needed. This Plan does not restrict where waste may be disposed at. Having multiple facilities available promotes competition that will help to keep the system cost-effective. As noted above, the disposal system is more than sufficient to meet the disposal needs of the Region. The Plan recommends the 5 County Region does not explore further waste processing/disposal options for this 10-year planning period.

Additional disposal sites can petition to be added to the Plan in the future.

With this in mind, use of publicly and privately owned landfills, supplemented by a commitment to maintain and potentially increase recycling where additional funding is available for support, was selected as the Municipal Waste Management Program.

Recyclables Processing

The Lycoming County Resource Management Services' Single Stream MRF has a current capacity of 70-80 tons per day of material in the 60,000 sq. ft. facility (with an average of roughly 45 tons per day). Upgrades and improvements to the MRF may improve the end products and may help with labor issues.

5.12 Electronics Recycling

Electronic equipment contains metals that, if not properly managed or contained, can become hazardous wastes. Some of the materials contained in electronics include:

- Cadmium - the largest source of cadmium in municipal waste is rechargeable nickel-cadmium (NiCad) batteries.
- Lead - old monitors and televisions contain a cathode ray tube (CRT) that contains leaded glass. CRTs are the largest source of lead in municipal waste.
- Mercury - some electronic equipment also contains recoverable quantities of mercury.

The "Covered Device Recycling Act" (House Bill 708), PA Act 108 of 2010 established a recycling program for certain covered devices; imposed duties on manufacturers and retailers of certain covered devices; provides for the powers and duties of the Department of Environmental Protection and for enforcement; establishes the Electronic Materials Recycling Account in the General Fund; and prescribes penalties for noncompliance.

A covered device is a covered computer device and covered television device marketed and intended for use by a consumer. A further description of these items is as follows:

- Covered computer device - A desktop or notebook computer or computer monitor or peripheral, marketed and intended for use by a consumer.
- Covered television device - An electronic device that contains a tuner that locks on to a selected carrier frequency and is capable of receiving and displaying television or video programming via broadcast, cable or satellite, including, without limitation, any direct view or projection television with a viewable screen of four inches or larger whose display technology is based on cathode ray tube, plasma, liquid crystal, digital light processing, liquid crystal on silicon, silicon crystal reflective display, light emitting diode or similar technology marketed and intended for use by a consumer primarily for personal purposes.
- Peripheral- A keyboard, printer or any other device sold exclusively for external use with a computer that provides input into or output from the computer.

The following websites contain information on PA DEP's guidelines for electronics recycling, PA Covered Device Recycling Act,as well as links to information on EPA's electronic recycling guidelines.

https://www.dep.pa.gov/Business/Land/Waste/SolidWaste/HazardousWaste/Household/Pages/Covered-Device-Recycling-Act.aspx

https://www.dep.pa.gov/Business/Land/Waste/SolidWaste/HazardousWaste/Household/Pages/Electronic-Recyclers.aspx

http://www.portal.state.pa.us/portal/server.pt/communitv/househ0Id/14079/electronicsmanagement program/589592

LCRMS currently offers recycling of Covered Devices for the 5 County Region. This service will be provided until the program is no longer feasible. The current program may include collections of TVs, Computers, and Computer peripherals; and may only be offered to the residents and small business owners. In the 5 County Region, there has been other options for computer and computer peripherals to be recycled, such as community pop up events and standalone businesses (e.g. KVS Computers located in Hughesville, PA, and Staples has recently added services).

Unfortunately, the PA CDRA has limited the ability of Counties and Municipalities in obtaining funding for electronic waste. It is recommended that PADEP revisit this with the PA State Legislator to amend the PA CDRA to help fill the gap in funding that is no longer available since the was enacted.
Challenges from the CDRA program has been apparent in the 5 County Region. The program is not conveniently available to the region. The CDRA requires amendments in order to improve its accessibility and affordability to the residents in PA. As noted in a report by PADEP in 2021 to the PA General Assembly, “A 2021 Pennsylvania Recycling Markets Center analysis reported that collection infrastructure diminished to the point of seven collection sites in the entire commonwealth that take covered devices without restrictions… only 22 percent of the population has unrestricted access to recycling opportunities under CDRA.”

5.13 Construction and Demolition Waste

Much of the construction and demolition (C&D) waste generated in Columbia, Lycoming, Montour, Snyder, and Union Counties is recycled, disposed of at permitted municipal or C&D waste landfills, or handled otherwise. According to Table A.1, approximately 26,068 tons of C&D waste originating from the 5 County Region was disposed of at state-permitted disposal facilities in 2020. The Counties should continue to promote options for the safe handling or disposal of small volumes of C&D waste such as:

1. Educating citizens about the availability of safe and legal opportunities to dispose of these materials;
   - Identifying recycling and reuse opportunities for select C&D materials;
   - Educating residents about the option to rent dumpsters or roll-off containers for collection and disposal of wastes created during remodeling projects;
   - Encouraging the enforcement of municipal waste ordinances as they apply to illegal dumping.

This Plan will provide for acceptance of C&D material at any properly permitted disposal facility, as well as acceptance of C&D at the contracted disposal facility for disposal capacity assurance.

5.14 Household Hazardous Waste

None of the other counties or municipalities in the Region currently offers HHW collection events for their residents, although there are special collection events in place in some counties for many hard-to-recycle items. The Counties in the Region are interested in hosting HHW collection events if funding opportunities are available to offset expenses. Lycoming, Snyder and Union County, along with the Town of Bloomsburg, advertise special collection events on their websites, and provide locations where residents can recycle items, such as electronics, oil, batteries, and other items. Montour County partners with their Conservation District to hold special collection events.

Residents are also encouraged to check with large retail stores and chains such as Wal-Mart, Home Depot, Lowes, Staples, Best Buy, and Weis Markets for recycling programs that may be available in local areas. Many items, such as used motor oil, may also be recycled at some Jiffy Lube and some local service stations. Residents are encouraged to call local county recycling coordinators or check with their local municipal or county websites for details. Market conditions dictate what items may be accepted, so residents should check new listings throughout the year.

The Counties would like to offer more HHW collection events, but unfortunately the funds to support these collection events are not available at this time. The Plan recommends the counties partner to conduct HHW collections which will reach more county residents. These

partnerships can be between counties, municipalities, and/or businesses. Educating the public on these collection events, i.e. what is accepted, why it should be recycled, when the collection event is, who can participate in the event, etc., will ensure the maximum amount of participants at each collection event.

PA DEP has an Act 190 Grant titled Household Hazardous Waste Collection and Disposal Grant in which municipalities and counties that establish HHW collection programs may be reimbursed up to 50% of approved costs for the collection program. This grant cannot exceed $100,000. The Plan recommends all counties and/or municipalities which organize a HHW collection event apply for this grant.

It is also noted that the improper disposal of lithium batteries is a continuing concern to all facilities that accept both waste materials and recyclables. Lithium batteries must be kept out of waste and recycling, and should be safely transported and handled. These batteries can cause fires and destroy waste trucks, landfills, and MRFs and cause harm to the public and employees. A program to deal with the issues and hazards created by lithium batteries should be developed.

5.15 Pharmaceutical Waste

Since 2013, there have been significant improvements and efforts to ensure that pharmaceutical waste is disposed of properly. The 5 County Region has access to collection program with local law enforcement agencies and police departments, program called National Take Back Day. The Plan also lists multiple websites that residents can visit to find information on pharmacies that will take medication in need of disposal. These websites are listed in the household hazardous waste section in Chapter 8.

The Plan recommends the counties place information on their websites, in their newsletters and in the local newsprint pertaining to pharmaceuticals collection. The information can include businesses which will take certain pharmaceutical items and local collection events.

5.16 Marcellus Shale

The Marcellus Shale deep drilling operations generate drill cuttings, wastewater treatment sludge, and other residuals. The Wayne Township Landfill, the Antrim Landfill, and the Northern Tier Regional landfills are three facilities within the Marcellus play that are currently accepting residuals.

5.17 Illegal Dumping

According to Keep PA Beautiful there are some possible solutions to illegal dumping. These solutions include:

- Organize a Cleanup
    - Cleanups are an effective way to combat littering and illegal dumping. Cleanups help to build ownership, restore community pride, and send a message that dumping will no longer be tolerated.
- Organize a special collection event

    - Special one-day collection events are worthwhile. These special collection opportunities are very effective when routinely offered, such as each spring or fall as a community cleanup day, but are also successful when offered as community resources permit. These special collections commonly target hard-to-dispose of materials such as tires, appliances, scrap metal, computers, electronics, and household hazardous waste. Most of these items account for what is found in illegal dumps.
- Physical deterrents
    - The placing of guard rails or mounds of dirt at pull-off areas, as well as the planting of trees, can help provide a barrier that will limit accessibility to a site for future dumping.
- Site monitoring and maintenance
    - It is important to monitor a site after an area has been cleaned in order to watch for subsequent dumping or littering, to keep the site clean, and to report any incriminating evidence to the proper enforcement agency. Keeping the site clean makes it easier to spot new trash and discourages subsequent dumping, since trash attracts trash.
    - Enforcement, with site monitor support, effectively decreases the incidents of dumping and littering. When word gets out that dumping activity will not be tolerated and violators will be caught and prosecuted, dumping decreases.
- Community education
    - Intentional illegal dumping and littering are social problems that require a shift in attitudes and practices. Education is the key to changing values, habits, and attitudes. Education programs should be tailored to inform the community and can take many forms, such as, school/community presentations, press releases, radio and newspaper ads, and publications.

- Enforcement of existing laws
  - Any improper disposal of trash is illegal and violators can be prosecuted. Numerous Pennsylvania agencies enforce laws addressing improper disposal of trash. The Pennsylvania General Assembly creates and enacts our littering and dumping laws. County and municipal governments create and enact ordinances that are specific within their local boundaries.

Landfills should be asked to donate some discounted or free landfill capacity each year to the Region's open dumping cleanup efforts. LCRMS participates in these annual clean-up events.

5.18 Open Burning

Open burning of wastes is an emotionally charged issue that elicits strong responses both in favor of and in opposition to the right to burn waste. Burn ban ordinances are a local issue that each municipality needs to determine whether or not to implement as a local ordinance. To aid the process, this Plan offers several versions of anti-burn ordinances from other communities that have instituted them. These sample ordinances are included in Appendix H. Additionally, this Appendix includes sample educational materials on open burning, which counties and municipalities can use to educate their residents about the harms and risks associated with this practice.

5.19 Expansion of County Recycling Programs

The information presented in this Plan, even with the significant increases in recycling amounts, demonstrates that there is still room for improvement in recycling. Although all of these ideas may not work in each county, there needs to be a greater emphasis on regionalization and cooperation, with an analysis of what can realistically be achieved. With decreased grant money to spend on programs, each county must decide what its achievable goals are, and take incremental steps toward realizing the desired end result.

Based on the stakeholder meetings, the Plan recommends the following options for expanding the recycling program.

- Expand Education Programs via links between County Web Sites - Explore the option of linking websites together to improve recycling education and outreach in the area. A website with consistent information across the 5 County Region would be beneficial. The Lycoming County RMS website does accomplish most of this goal and there is potential for further expansion with municipal and regional cooperation. This would not replace recycling information already publicized on various county or municipal websites, but it would be most useful for counties with smaller budgets or less staff, and to standardize information. The websites should contain links to any existing websites for more specific local information. It would be especially useful if new materials are added, to publicize special collections, and to explain dual-stream recycling, should this new collection method take effect. It should explain new Regional or state/federal programs such as electronics and pharmaceutical collections, and new state and federal mandates. It would highlight

private sector recycling initiatives for items such as food waste, fluorescent bulbs, clothing, plastic bags, furniture, and other drop off items, difficult to recycle items, or new recycling initiatives.

- Expand Education Programs in Schools – This could include initiatives wherein local landfills are encouraged to provide tours to local school groups, direct outreach programs for Earth Day activities, Regional recycling contests, etc., with the focus on children between Elementary and High School age.
- Expand Education Programs for Business and Industry – As a significant source of MSW generation, local Business and Industry facilities could benefit directly through enhanced education. This includes not only the provision of educational information regarding proper waste management handling and disposal, but also the initiation of a "business-to-business" communication opportunity so that "waste" generators could find potential demand for those materials.
- Expand Drop-off Hours - It is generally less expensive to expand the hours of existing drop-off collection sites rather than to add new sites. Counties and municipalities should explore the option of increased hours. They should also explore the idea of instituting a fee at drop-off collection points for those municipal sites which will not currently accept outside customers. Again, this option might be less costly than opening new drop-off sites, although additional drop-off sites for underserved areas are also recommended.
- Contact farmers concerning their interest in food waste composting, or the acceptance of additional leaves and yard waste (see Appendix I for definitions of acceptable yard waste). With a large number of colleges, institutions, and large grocery chains in the region, an emphasis should be made to expand food waste composting programs.
- Increase educational services to commercial accounts, large and small businesses, and schools and institutions.
- Contact large businesses such as Weis Markets, Giant, Wegmans, WalMart, Target, Lowe's, Home Depot and others concerning their interest in sponsoring recycling events, or in special collections.
- Provide funding for special collections, although funding sources for this effort would need to be identified.
- Provide education for recycling in the 5 County Region schools
- Provide education to residents regarding the health hazards that are caused by open burning
- Educate the population regarding how to discard household hazardous wastes by listing resources for disposal of these wastes.
- Continue with pharmaceutical waste collections as well as hard-to-dispose items
- Select material commodities that are more cost-effective to collect.
- Investigate expanding the types of materials collected curbside or at a local drop-off site.
- Select material commodities that are more cost-effective to collect.
- Expand educational outreach to include information regarding the fire hazards that lithium batteries and pool chemicals may cause when not disposed of properly.
- Expand educational outreach to include more events and contests that reach larger numbers of residents and would receive more newsworthy attention.
- Coordinate electronic recycling: look for regional opportunities to address the growing need for affordable and accessible electronic recycling.

The following recommendations are targeted at specific County programs:

Columbia County

- Provide additional funding for recycling coordinator's salary, and for educational outreach to schools and community groups. Funding sources for this effort would need to be identified.
- Provide funding for special collections.
- Explore possibility of partnering with Town of Bloomsburg for special collections and drop-off events.
- Determine how to address, in a regional nature, recycling in those programs that have been reduced or eliminated by loss of the administrative fee.

Montour County

- Provide additional funding for recycling coordinator's salary and for educational outreach to schools and community groups. Funding sources for this effort would need to be identified.
- Provide funding for special collections.
- Explore the possibility of additional drop-off sites throughout the County.

Lycoming County

- Investigate a plan to operate the recycling drop-off sites in a more coordinated regional nature; possibly consolidating locations with limited hours and staffed.
- Work with municipalities to address disposal of non-recyclable materials at drop-off sites, and work to minimize illegal dumping at drop off sites.
- Establish a battery disposal program to keep batteries out of waste and recycling streams.

Snyder County

- Improve existing drop-off sites and expand the hours of operation of existing drop-off sites.
- Work with municipalities to address disposal of non-recyclable materials at drop-off sites.
- Provide additional funding for recycling coordinator's salary and for educational outreach to schools and community groups
- Reach out to schools to help with recycling education and programs.
- Look for additional opportunities and funding to collect non-traditional recyclables.
- Explore the expansion of municipal yard waste collection sites.
- Selinsgrove Borough will explore moving their composting facility nearer to their existing recycling drop-off location to alleviate illegal dumping and potentially expand hours of operation.

Union County

- Explore the expansion of yard waste composting at additional drop-off sites.
- Look for additional opportunities and funding to collect non-traditional recyclables

5.20 Promotion of Recycling within the Municipality

For commercial recycling, currently proposed legislation, if enacted, may require local governments to take a more proactive approach to this effort. Local efforts will include enhanced education of residents and businesses, and possible increases in drop-off sites, along with a reevaluation of the types of recyclable materials to be included in the programs. However, some of the local markets (led by Weis Markets) are also becoming more proactive in recycling, with the potential to have very positive recycling results, and a subsequent reduction in commercial waste disposal.

As noted above, the majority of the municipalities in the 5 County Region utilize drop-off sites for recycling, especially in the more rural areas. This system has been quite successful and results in relatively clean recyclables, although the volume of material would probably increase if curbside recycling was instituted in some locations. Single stream curbside collection is available in the 5 County region as well as source-separated curbside in certain municipalities.

With regard to increasing residential recycling, local governments, as well as private hauling companies, may consider the implementation of Pay-As-You-Throw (PAYT) programs. Some municipalities and Counties have implemented this type of program for recycling. These programs charge residents for waste removal services based on the quantity of material discarded, thus encouraging residents to recycle more. Some programs have a set rate per container, while others use a combination of a fixed fee plus a variable fee based on service. Some haulers also offer a price dependent upon the size of the container, this allows the residents to choose the appropriate container size and encourages saving money by recycling more.

There are municipalities in Pennsylvania that have instituted these types of programs. The benefits of PAYT programs include:

- Fairness — each household pays based on its use of solid waste services
- Increased Recycling — residents have a financial incentive to recycle
- Waste Reduction — consumers become more aware that they can purchase recyclable packaging, avoid excessive packaging and consider alternatives to disposable products.

5.21 Recycling Revenues and Fees

The Regional counties could use additional revenue to cover operating costs, and increase programs. Support from outside sources with the stabilization, enhancement and expansion of the current recycling programs in the Region would assist counties in many ways including:

- Increased special collections
- Increased hours and materials accepted at drop-off locations
- The possibility of additional or better coordination of locations of permanent drop-off sites
- Funding for regional education outreach programs such as websites and brochures and events

- Provision of funding for municipal programs which were reduced or eliminated as a result of past revenue shortfalls, such as the elimination of the administrative fee and the PA CDRA.

5.22 Securing Waste Disposal Capacity for the Region for the next Ten Years

Under its PADEP-permitted disposal capacity, the Lycoming County Landfill would technically be able to provide up to 100 percent of the needed MSW disposal capacity for the entire Region. Together, based on the capacity commitments discussed elsewhere herein, the Lycoming County Landfill and the Clinton County Landfill (the two historically highest volume facilities in the region) can provide greater than 100 percent of the disposal needs of the 5 County Region for the next ten years.

Also, disposal capacity agreements, see Appendix D for a list of participants, will continue to be approved and expanded as needed.

Haulers are free to negotiate tipping fees at their discretion on a case-by-case basis.

5.23 Contracted Waste Disposal Sites

Municipal waste generated within the Region may be disposed of at any properly permitted facility. The 5 County Region has contracted with the Lycoming County Landfill to provide disposal capacity assurance over the ten year planning period.

5.24 Contracted Regional Transfer Stations

It is acknowledged that transfer stations, both within and outside of the 5 County Region, currently accept and transfer waste to disposal sites. Haulers are able to deliver waste generated within the 5 County Region to any properly permitted Transfer Station. In addition, the Region has contracted with several Transfer Stations to ensure waste material is properly labeled and delivered to a permitted final disposal facility.

5.25 Integrated Waste and Recycling Program Sustainability Needs

It is recognized that as markets changed over the last few years and with the pandemic costs of recycling and waste disposal has increased. In order to continue to improve recycling percentages new funding streams or other opportunities to collect fees are needed.

5.26 Implementation Schedule

The above-referenced section of Act 101 requires that the Region submit to PADEP, within one year after PADEP approval of the Plan or Plan revision, copies of executed ordinances, contracts or other requirements to implement its approved Plan, that will be used to insure sufficient available capacity to properly dispose or process municipal waste that is expected to be generated within the County for the next 10 years.

Activities included in this category are:

1. Preparation and Implementation of a County Solid Waste Management Ordinance. Current ordinances are still valid.
2. Execution of final contracts to assure adequate processing/ disposal capacity for the 5 County Region are updated as necessary.
3. Continuance of Regional Steering Committee discussions and plans to investigate support for the proposed Integrated Waste and Recyclables Management Program in the Region
4. Assistance to Mandated communities with Implementation
5. Development and dissemination of public education materials dealing with waste minimization, HHW and infectious wastes generated in the home.

Scheduled dates for completion of the aforementioned actions are:

1. Formal County approval to enter into Disposal Capacity Agreements is completed now on a demand basis.
   a. Submit Updated Regional Plan Draft Update to PADEP October 31, 2024
   b. Submit additional revised information to PADEP November 27, 2024
   c. Counties solicit public comment on the Regional Plan Draft Update January 1, 2025 to March 2025
   d. PADEP Approval of Regional Plan
   e. Counties adopt Regional Plan Update on or before May 31, 2025
   f. Municipal ratification by August 31, 2025

   (Note that the PADEP allows a maximum of 1 year for final implementation of the Plan after final "Approval")

3. Assist Mandated communities
   a. Enforcement of their mandated recycling ordinances
   b. Educating residents and the commercial, municipal and institutional establishments
   c. Cooperative efforts to compost leaf waste and bring collections up to Act 101 standards

4. Public Education Materials
   a. Update the County Solid Waste & Recycling Department web pages (individually, or collectively with hyperlinks from all five (5) counties to one website), as needed.
   b. Develop other various forms of public awareness/outreach including brochures and flyers to be distributed to residential and commercial populations

CHAPTER 6 – LOCATION (per DEP § 272.228)

6.1 Recycling Facilities

There are 2 primary recycling facilities in the 5-county Region that accept the majority of materials. In addition, there are several smaller facilities which accept miscellaneous specialty commodities. The following discusses the three larger facilities:

Bloomsburg Recycling, Columbia County - The Town of Bloomsburg operates one of the oldest recycling programs in the Commonwealth. Its record of recycling success places it among the leaders in Pennsylvania, as well as in the nation. Bloomsburg's first curbside collection, which began in 1977, became mandatory in 1983, five years before the passage of Act 101. The recycling center opened at its current location in 1982. The Town provides municipal curbside recycling collection for a fee to all residents every other week, collecting the following items: clear, brown and green glass bottles and jars; steel and aluminum cans; #1 and #2 plastic bottles and jars; and mixed paper. In addition, a once a month curbside collection for corrugated cardboard is provided to all residents. All items must be source-separated and placed in open containers or paper bags. Various sections of the towns are collected on different days each month and taken to the Bloomsburg Recycling Center for processing.

The Recycling Center, located at 901 Patterson Drive, accepts the materials listed above, source separated, on Monday through Friday, along with the 2nd and 4th Saturdays each month. It also accept corrugated cardboard, office paper, hard cover and paperback books. In order to assist businesses, the recycling center accepts office paper for confidential shredding on a fee for service basis. The Town provides three free residential shredding days each year for household documents. Bloomsburg provides a wide variety of recycling education including presentations, magnets, calendars, and brochures. It enforces recycling requirements for businesses, residents, and multi-family units. The recycling center's drop-off is open to the public, regardless of municipality of residence.

The Bloomsburg facility also offers special collections throughout the year. Christmas trees are collected in January, through curbside collections or by drop-off at the compost site. Municipal crews collect yard waste curbside in April and October, with curbside leaf collection set for October/November. Residents can drop off yard waste at the compost site from April through November. Compost is available for no cost to the residents of Bloomsburg and Scott Township; others are charged a small fee for this material.

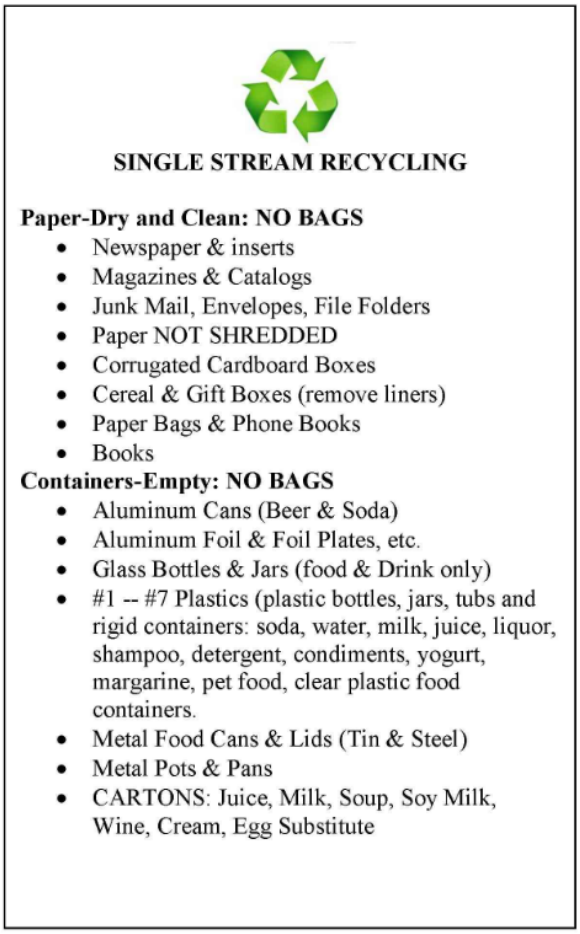
Berwick Borough, Columbia County www.berwickborough.org/b-Recycling+information-200.htm

Curbside collection of the following items NEWSPAPER & NEWSPAPER INSERTS | TIN CANS & LIDS | #1 & #2 PLASTICS

The Borough's Public works department collects the curbside recycling.

Drop -off Recycling

EVERTHING BELOW CAN STILL BE RECYCLIED
BUT YOU WILL NEED TO DROP IT OFF AT
TEST TRACK PARK RECYCLING/COMPOST CENTER
OPEN EVERY WEDNESDAY
JAN – MAR 1-5PM
APR – SEP 1-7PM
OCT – DEC 1-5PM
ALSO OPEN THE FIRST SATURDAY OF EACH MONTH 8AM – NOON



SINGLE STREAM RECYCLING

Paper-Dry and Clean: NO BAGS

- Newspaper & inserts
- Magazines & Catalogs
- Junk Mail, Envelopes, File Folders
- Paper NOT SHREDDED
- Corrugated Cardboard Boxes
- Cereal & Gift Boxes (remove liners)
- Paper Bags & Phone Books
- Books

Containers-Empty: NO BAGS

- Aluminum Cans (Beer & Soda)
- Aluminum Foil & Foil Plates, etc.
- Glass Bottles & Jars (food & Drink only)
- #1 -- #7 Plastics (plastic bottles, jars, tubs and rigid containers: soda, water, milk, juice, liquor, shampoo, detergent, condiments, yogurt, margarine, pet food, clear plastic food containers.
- Metal Food Cans & Lids (Tin & Steel)
- Metal Pots & Pans
- CARTONS: Juice, Milk, Soup, Soy Milk, Wine, Cream, Egg Substitute

Scott Township, Columbia County Mandated to recycle based on the 2010 census. Adopted an ordinance requiring all waste haulers to provide recycling services to their customers. Curbside leaf and yard waste collections are provided by the Township Public Works. Residents may also drop off yard waste at the Bloomsburg Compost Site.

MANDATORY RECYCLING
As of January 1, 2014, recycling is mandatory in Scott Township. The Ordinance requires all residents to contract with a registered authorized collector for removal of garbage and recycling.
ELECTRONICS RECYCLING
Recycling of electronics might be available at the following locations:
SCOTT ELECTRIC
647 Railroad Street, Bloomsburg, PA 17815
Phone: 888-784-2916
• scottelectricusa.com/divisions/recycling
LYCOMING COUNTY RESOURCE MANAGEMENT SOURCES
447 Alexander Drive (Route 15), Montgomery, PA 17752
Phone: 800-736-7559
• lyco.org/Departments/Resource-Management-Services/Recycling/Computer-Recycling

NOTICE: Please note that no grass clippings will be accepted at the Bloomsburg compost site.
2023 Recycling Newsletter click here

Website scott-township.com

Voluntary programs Columbia county

Hemlock Township - Recycling Drop off provided at Buckhorn Fire Hall on the first Saturday of every month. Additionally curbside recycling collection provided for Fernville, Buckhorn and some housing developments on the first Saturday.

Mifflinville - Recycling drop off provided on the second Saturday of each month.

Montour County:

Danville Borough, Montour County

Danville Borough is divided into four wards for recycling curbside collection. Each ward is collected on a separate Thursday each month with each ward collected once a month. The following items are collected source separated by the Town of Bloomsburg Recycling in an inter-municipal agreement. Clear, Brown and green glass bottles; tin and aluminum cans; plastic bottles #1 &#2; mixed paper and newspaper.

A weekend drop off roll off container is provided for the collection of all of the above items and an additional container is provided for corrugated cardboard. Service provided by the Town of Bloomsburg Recycling.
Information available on the borough website: danvilleboro.org/recycling/

Lycoming County Resource Management Services - The Lycoming County Single Stream Materials Recovery Facility (MRF), owned and operated by Lycoming County Resource Management Services (LCRMS), is located near the Lycoming County Landfill in Brady Township, 9 miles south of Williamsport on Route 15. Dedicated in 2003, the single stream

MRF has a capacity of approximately 20-40 tons per hour of material in the 60,000 sq. ft. facility.

The LCRMS provides monthly curbside collection to its mandated communities, since the 2020 US Census, this includes the City of Williamsport, Loyalsock Township, and South Williamsport Borough. Curbside collection may include 3 items, currently this includes green, brown and clear glass bottles and jars, and steel and aluminum cans, which are collected source-separated.

It also operates drop off locations throughout County, many of which accept additional materials beyond those listed above, including #1 and #2 plastic bottles, newspapers, magazines, chipboard and corrugated cardboard. Customers are asked to check with the municipality or LCRMS for hours and materials collected at the various drop-off sites. They may also visit the Lycoming County Recycling website (see Section 4.2) for more information. Lycoming County residents can use any of the drop-off centers at no cost, including a drop-off at the LCRMS landfill site.

Lycoming County operates a wood waste/mulch grinding facility at its landfill site. It only accepts clean wood for processing

The LCRMS provides periodic informational newspaper ads and pamphlets indicating the types of material collected at the recycling facility, as well as information regarding upcoming special collection events. (See items Appendix B)

6.2 Solid Waste Disposal Facilities

Detailed discussions of the disposal facilities that have been used in the past 10 years are included in Section 5.1, and these facilities are geographically located on Exhibits 1 and 2. The Plan does not specifically designate where waste must be disposed of and allows all to choose where they dispose of their waste.

CHAPTER 7 – IMPLEMENTING ENTITY IDENTIFICATION (per DEP § 272.229)

Implementing responsibilities include those activities delineated in previous Plans, those which have been undertaken since those Plans were approved, and those which should be undertaken in the future.

7.1 Five County Regional Steering Committee

Each County within the 5 County Region has designated representatives (forming the Regional Steering Committee) to be charged with managing and ensuring that solid waste and recyclable materials are handled in an environmentally safe, reliable and efficient manner. Within the 5 County Region, a combination of the Public and Private sector provides collection/hauling, recycling, landfilling and transfer services to residents, and businesses, through municipal contract, or through private residential, industrial or commercial subscription. The private sector is primarily responsible for the collection, processing, and disposal of infectious and chemotherapeutic waste.

It is the 5 County Region's responsibility to provide for adequate disposal capacity for the municipal solid waste generated within its borders, including septage, sewage sludge, and infectious and chemotherapeutic waste.

Specific responsibilities of the 5 County Regional Steering Committee will include:

- Continuance of Regional Steering Committee discussions and plans to investigate support for the proposed Integrated Waste and Recyclables Management Program in the Region
- Oversight of the Regional Municipal Waste Management Plan (and potential Plan revisions)
- Maintenance of landfill agreements for disposal capacity, on behalf of the five counties
- Approval or denial of additional processing and disposal facilities that petition to be added to the Regional Plan
- Approval or denial of requests of contracted disposal facilities to use back-up sites
- Coordination with the PA Recycling Markets Center (PennRMC) to encourage development of increased use of current recyclables and expansion of new recycling-related businesses
- Assistance to municipalities with promoting the purchase of materials with recycled content
- Assistance to municipalities with promoting 'green' shopping habits and waste minimization
- Assistance to local governments and the community at large on matters of proper solid waste management
- Assistance to municipalities in participating with PADEP in the development and implementation of a construction materials recycling program
- Assistance to municipalities in addressing the need to develop a more comprehensive and coordinated electronics recycling program in the Region

In addition, there were two (2) Regional Committees. The Stakeholder Committee consisted of the 5 County Representatives and the Regional Steering Committee included the

Stakeholder Committee Members and representatives from; citizens, recyclers, haulers, business and industry, and municipal, each with a designated representative during the Regional Plan development process. It is recommended that the full 5 County Regional Steering Committee, including the designated Stakeholder Group representatives, serve in a continuing role as the designated implementing entity for the appropriate components of this Regional Plan.

It is recommended that Lycoming County continue to host the Regional Plan and associated links to other Counties on their web site to promote better access to information for the collection and presentation of specific Integrated Waste and Recycling Programs. This website could expand to establish links to those 132 individual municipalities within the 5 County Region, as well as to private haulers, recycling venues and waste disposal facilities that are incorporated as part of this Plan.

7.2 Local Governments

Individual municipalities within the 5 County Region will have a variety of responsibilities, depending on whether they are designated under Act 101 as a Mandated Municipality, including the following:

- Implement mandates specified in Act 101 and the Regional Plan
- Stipulate in their bid specifications for collection services that materials designated by the municipality for inclusion in the municipal recycling program not be collected and disposed with the municipal waste
- Stipulate in their bid specifications for collection services that solid waste materials collected will only be taken to processing/disposal facilities that have current Disposal Capacity Agreements with the Counties in the 5 County Regional Solid Waste Plan.
- Enforce local mandates, ordinances and bid specifications to assure compliance with the intent of the Regional Plan
- Prepare and submit reports to their respective County as required by this Regional Plan, their County and Act 101
- Develop and distribute recycling and waste management educational materials
- Promote the purchase of materials with recycled content
- Promote ‘green’ shopping habits and waste minimization
- Foster the improvement of recycling opportunities for commercial, institutional, and multi-family facilities

A copy of a Model Municipal Solid Waste Ordinance is included in Appendix E, which: provides definitions of solid waste items, identifies prohibited activities, discusses standards for storage/collection/transportation of solid waste, and establishes authorization for the municipality to fund the waste collection program.

According to PA Act 101 and Act 140, open burning of refuse and yard waste is permitted in non-mandated communities, but does not include demolition waste, insulation, shingles, treated wood, paint, painted or stained objects or furniture, tires, mattresses, box springs, metal, insulating coating on wire, television sets and appliances, automobiles, automotive parts, batteries, PVC products, waste oil and other petroleum products. However, the burning of solid waste is illegal under Act 97, the Solid Waste Management Act. Section 601(3) of

the Solid Waste Management Act, 35 P.S. § 6018.610(3), provides that it shall be unlawful for any person or municipality to burn solid wastes without a permit from the Department. The burning of recyclables is unlawful under Section 1501 of Act 101. From a practical standpoint, the PADEP has typically relied on local municipalities to enforce these regulations, resulting in the need for local ordinances to define "allowable" practices within each municipality.

In areas of relatively high population density, no-burning ordinances have not only resulted in cleaner air, but have also resulted in greater recycling rates of paper products. In the Region, several municipalities have adopted burning ordinances, including Berwick, Danville, Lewisburg, Selinsgrove and Williamsport. Examples of four (4) different types of burning ordinances have been included in Appendix E as model language. These include:

- A limited burning ordinance (Exeter Twp, Berks County)
- A No Burning of Recyclable Materials Ordinance (Brady Twp, Lycoming County)
- A Complete No Burning Ordinance (South Williamsport, Lycoming County)
- A PADEP Model Air Pollution Control Ordinance

These four (4) ordinances were recommended for use as models by the PADEP based on the previously reviewed and approved language.

PADEP requires anti-burning ordinances, at least for recyclables, in mandated communities and in communities that receive Sections 902 and 904 grant funding from PADEP for recycling activities and programs. The specific section of Act 101 which discusses burning of recyclables is located at the following website:

http://www.dep.state.pa.us/dep/deputate/airwaste/wm/recycle/Coordinators/References/leaf.htm

It is recommended that municipalities with recycling programs, whether mandated or not, consider adoption of an ordinance to control the burning of recyclable materials.

Municipalities may contract for waste and/or recycling collection services (as used in Lewisburg for waste collection) as an alternative to the private subscription method currently in use throughout the Region, as discussed in detail in Section 5.3.

7.3 Private Haulers

Private haulers are a critical component of the regional waste collection system, and some haulers are also currently involved with recycling, or would like the opportunity to become more directly involved in municipal recycling efforts. Residents and businesses can subscribe to their haulers services, the haulers can provide the necessary containers/totes and the educational list of accepted recyclable materials.

7.4 Businesses, Industry, Schools and Private Citizens

As the primary generators of municipal solid waste and recyclables, businesses, industries, schools and private citizens have a responsibility to participate in the general goals of reducing the total volume of solid waste created, ensuring the proper disposal of generated waste products, and increasing the recycling of appropriate commodities.

In order to establish a partnership between these groups (who generate the MSW) and the County and Municipal government agencies (who plan for the proper processing and disposal of the generated MSW), it is critical that the 5 County Regional Steering Committee have the means to publicize the Regional Solid Waste Management Plan Update, and to provide sufficient educational materials to clarify the issues and recommended solutions.

A more extensive discussion of regional municipal waste management planning issues is included in Sections 3.1 and 4.1, and the recommended solutions are discussed in more detail in Chapter 5.

CHAPTER 8 – PUBLIC FUNCTION (per DEP § 272.230)

8.1 Public Function

The PADEP Solid Waste Regulations require that the Counties should assess whether it is in the public interest for municipal waste processing or disposal to be a public function, or if waste management should be handled primarily by the private sector.

As defined in Chapters 4 and 5, the 5 County Region has a combination of Public and Private facilities/operators to manage waste processing and disposal. The process has developed into a rather complex Public/Private cooperative effort, and it was determined that the current system should be encouraged, with efficiencies added where possible.

The Lycoming County Planning Department will continue to be accountable for implementing the plan's disposal-related components, such as, but not only, executing and monitoring disposal capacity agreements.

8.2 County Owned Landfill

As discussed in Chapters 1.0 and 3.0, there is one County-operated landfill located within the 5 County Region. Between 2012 and 2023, this facility, located in LCRMS, has accepted 74.34%% of the Regions MSW disposed. In addition, the Clinton County (Wayne Township) Landfill (located just west of the Lycoming County border) has accepted 23.38%% of the Regional MSW generated during that same period. As such, 97.72%% of disposed Regional MSW has been accounted for between the two local Public landfills. The remaining municipal waste disposal has been distributed among Private landfills located throughout the Commonwealth. (See a breakdown of these landfills in Appendix A, along with maps showing the location of the Local and State-wide landfills which have accepted more than 400 tons of disposed municipal waste.)

As part of this Regional Solid Waste Management Plan, the Region has determined that relying on long-term Disposal Agreements with privately or publicly owned processing, disposal facilities will continue to serve its obligation to provide for the processing, and disposal of municipal wasted generated within in the Region. This strategy accomplishes the objectives of the region because it is:

- Region-wide
- Long-term
- Assured
- Integrated
- Protective of public health and safety
- Environmentally Safe
- Cost-effective

8.3 County Sponsored Recycling Programs

As a complement to municipal recycling programs, the five Counties have sponsored a series of activities aimed at collecting and recycling a variety of materials (organics for composting, periodic household hazardous waste collection, etc.). There are also Recycling Drop-off centers located in 3 of the 5 counties which are supported by the LCRMS. These facilities are supplemented by several Private recycling facilities and transfer stations. Details of the specific programs are located in Section 4.3.

8.4 Leaf and Yard Waste (and possible future Food Waste) Composting

All mandated municipalities in the 5 County Region fulfill Act 101 requirements by collecting leaves and yard waste, operating compost sites, or hiring outside contractors to grind material. However, there is still room for some growth and improvement in the Region in both organics collection and composting. This can be accomplished through; the expansion of collection schedules and items accepted in some mandated municipalities, an increase in the number of composting programs, the acceptance of more types of material, and for increased hours at existing composting sites.

There are 25 composting/wood waste grinding sites in the region: 5 in Columbia County, 9 in Lycoming, 1 in Montour, 3 in Snyder and 7 in Union. This list includes 2 private sites, and 23 municipal operations. In addition, some of the colleges and universities in the region have sites for the collection and processing of yard waste from their campus acreage. The private sites are open to the public and accept various types of organic waste including yard waste, wood, hay, manure and saw dust. (See Exhibit 4 for location of facilities.)

The Town of Bloomsburg operates the largest municipally owned site, accepting yard waste from its residents and businesses through both curbside collection and drop-off. The site also accepts material from some surrounding municipalities. They also have an agreement with Scott Township to accept their leaf and yard waste.

Lycoming County Resource Management operates a site for the grinding of wood waste and yard debris. In addition, the Clinton County Recycling Center provides grinding services for a fee.

There is also the potential for local farms in close proximity to residential areas to accept more items for composting, such as newspaper and yard waste.

Possible expansion/enhancement of the existing leaf and yard waste (and possibly food waste) composting activities is an area that is recommended for consideration by the 5 County Regional Steering Committee. Expansion could be encouraged through a combination of public education and the provision of various collection methods to increase diversion rates.

8.4 Marketing

Each of the five counties in the region mails notification and educational materials to its local governments and updates on its websites with pertinent information. The municipalities, in turn, are tasked with educating their citizens and businesses about these issues. There are websites for a number of the counties in the Region that provide details on composting, household hazardous waste collection, recycling facts, purchasing recycled goods, municipal recycling programs, services for business, mailing lists, and press releases.

Additionally, residents should ask their neighborhood shops what materials they will accept for recycling. Plastic bags, oil and antifreeze, electronics, rechargeable batteries, printer ink cartridges and fluorescent bulbs are among the items that many retailers accept for recycling. Chains such as WalMart, Home Depot, Lowe's, Staples, Best Buy, and Weis Markets for recycling programs that may be available in local areas. Many scrap yards and service stations in the 5 County Region accept all types of metals, and some accept lead acid batteries and used motor oil.

Below is a list of scrap yards in the region:

- Sims Metal – 2525 Trenton Ave., Williamsport PA 17701
- Sims Metal – 177 Swartz Rd., Bloomsburg PA 17815
- Staiman Recycling – 201 Hepburn St., Williamsport PA 17701
- B & C Auto Wreckers – 4867 US-15, Montgomery PA 17752
- Clemens Salvage – 643 Clemens Rd., Watsontown PA 17777
- Direkt Recovery – 29 Frosty Valley Rd., Bloomsburg PA 17815
- Jeff's Auto Body & Recycling + Scrap – 5446 Snydertown Rd., Paxinos PA 17860
- S & J Recycling – 3576 Old Route 15, New Columbia PA 17856
- Ridgeside Recycling LLC – 517 Hackenburg Rd., Middleburg PA 17842

Residents should look for environmentally friendly choices while recycling pharmaceuticals. Pharmaceuticals have the potential to contaminate our water and unintentionally expose us to the toxins they contain. Endocrine disrupting substances are present in some drugs, including hormones and antidepressants, which prevent many aquatic species, including frogs and fish, from reproducing normally and growing. In addition to their negative effects on the environment, prescription medications kept in home cabinets are a major contributor of unintentional poisoning. Additionally, these medicines are quite prone to abuse and misuse. The wastewater treatment system, which cleans the water, comes into contact with pharmaceuticals when they are flushed down the toilet or drain. Unfortunately, a lot of these treatment techniques lack the ability to eliminate medicines. Never dispose of prescription or over-the-counter medications that are outdated or undesirable in the garbage or flush them down the toilet.

The U.S. EPA sponsored a collection program for outdate medications in September 2010 in cooperation with regional law enforcement and police departments. The program was run in a number of places throughout the 5 County Region. The EPA anticipates running related initiative in the future and will promote them via the 5 County Regional Recycling Coordinators and the USEPA website. The National Association of Community Pharmacies also a sponsors the website, https://disposemymeds.org/, which directs users to independent

community pharmacies that offer medication disposal programs. Users can use the Pharmacy Locator to find the closest participating pharmacy by entering their zip code. Another site of interest is http://www.smarxtdisposal.net/index.html. This site gives instructions for proper disposal of medicines when a take-back program is not available.

Additionally, Geisinger has installed medication disposal boxes at several locations in central and northeast Pennsylvania. Residents can bring old medications and drop them in the box. Users can use the Medication take back program website, https://www.geisinger.org/pharmacy/medication-take-back-program#site, to locate a box nearest them.

Popular Geisinger Locations:

- Geisinger Hospitals
- Weis Markets
- Pharmacies

Two regional recycling facilities – Lycoming County, and Bloomsburg – market the vast majority of materials collected at curbside and drop-off locations. Due to their proximity to the material's source, the Clinton County Recycling Center Collects a small quantity of commercial recyclables form Lycoming County and markets them.

Lycoming County Resource Management Services:
www.lcrms.com
www.facebook.com/lycomingcountyresourcemanagementservices

Town of Bloomsburg Recycling:
https://bloomsburgpa.org/recycle-center/

Union County Recycles
https://unioncountypa.org/recycling/

8.5 Household Hazardous Wastes

Lycoming, Snyder and Union County, along with the Town of Bloomsburg, may advertise special events on their websites, and provide locations where residents can recycle items, such as electronics, oil, batteries, and other HHW items.

Residents should also check with large retail stores and chains such as WalMart, Home Depot, Lowe's, Staples, and Weis Markets for recycling programs that may be available in local areas. Many items, such as used motor oil, may also be recycled at some quick oil change businesses (i.e., Jiffy Lube), and some local service stations. Large grocery stores, such as Weis Markets, accept plastic bags for recycling. Call the local county recycling coordinators or check with websites for details. Market conditions dictate what items may be accepted, so residents should check new listings throughout the year.

The 5 County Region also has the option to dispose of certain Household Hazardous Wastes at LCRMS. At the time of this plan includes used motor oil, used antifreeze, small collections

of batteries, and CDRA electronic items. There is currently no charge to the residents of the 5 County Region to promote these items to stay out of the environment and out of the landfill. Some services may change to a charge model is free program is no longer feasible.

8.6 PADEP Initiatives

PADEP created a Recycling Markets Center (PennRMC) – Organized as a non-profit 501c(3) corporation, the Pennsylvania Recycling Markets Center is a leader in developing and expanding recycling markets in Pennsylvania. In a competitive global marketplace, the PennRMC is the keystone clearinghouse of environmental, economic development, and manufacturing resources for end use support of recycled commodities and products. The PennRMC is headquartered at Penn State Harrisburg with satellite offices near Pittsburgh. The Mission of the PennRMC is to expand and develop more secure and robust markets for recovered (recycled) materials by helping to overcome market barriers and inefficiencies.

CHAPTER 9 – COPIES OF ORDINANCES AND RESOLUTIONS (per DEP § 272.231)

9.2 County Ordinances

A copy of the model County Ordinance is contained in Appendix E. This ordinance is considered a model in that each County will have the opportunity to modify the text to make it specific to their operations, as long as the final version maintains the intent of the *Regional Solid Waste Management Plan for Columbia, Lycoming, Montour, Snyder & Union Counties.*

9.3 Implementing Documents

The institutional framework for implementing the Regional Solid Waste Management Plan is formed by the Regional Solid Waste Plan Multi-County Planning Agreement among Columbia, Montour, Snyder, Union Counties and Lycoming Counties (Appendix G), and the individual Multi-County Planning Agreement Ordinances established by each County (attached as an Exhibit to the Agreement).

Other implementing documents include the County Resolutions to adopt the Regional Solid Waste Management Plan, the Memorandum of Understanding between the 5 Counties and the PADEP approval of the Plan (Appendix G).

In addition, the Disposal Site Capacity Agreements are included in Appendix E.

CHAPTER 10 – ORDERLY EXTENSION (per DEP § 272.232)

10.1 Disposal Capacity Agreement Contracts

The disposal capacity agreements will be executed between the contracted disposal facilities and the implementing entity for this Regional Plan. A copy of the model contract form is contained in Appendix E. This contract is slightly different than the model that had been used in previous Plans, since it accounts for current legislation, as well as the application of an Integrated Waste and Recyclables Management Program (IWRMP).

As in the current contracts, temporary alternate sites will be permitted if emergency or other situations beyond the Operators control necessitate the temporary suspension of the handling of solid waste at the disposal facility and the Operator wishes to temporarily use another disposal site(s) owned by the Operator but not specifically listed in the Plan.

The contracts will be in accordance with the Ordinances and Implementing Documents adopted by each of the 5 Counties, as described in Chapter 9.

10.2 Implementation of the Solid Waste Management Plan

The method and sequencing for implementation of the Solid Waste Management Plan is defined in other sections throughout this Plan. The Implementing Documents are as discussed in Section 9.2, with the Implementing Entities defined in Chapter 7, and the schedule as discussed in Section 5.27.

CHAPTER 11 – METHODS OF DISPOSAL OTHER THAN BY CONTRACTS

This 5 County Regional Solid Waste Management Plan is intended to address the collection and disposal of municipal solid waste (MSW) generated within Columbia, Lycoming, Montour, Snyder and Union Counties.

As discussed in Section 1.3, MSW consists of waste generated by residences, businesses, institutions, government facilities, offices, cafeterias, shopping areas, and similar facilities. Construction and Demolition (C&D) waste includes "all solid waste resulting from the construction or demolition of buildings and other structures, including but not limited to, wood, plaster, metals, asphaltic substances, bricks, blocks and un-segregated concrete." It does not include waste from land clearing (trees, brush, stumps, and vegetative matter) and uncontaminated soil, rock, stone, gravel, bricks and blocks. ICW represents Infectious/Chemotherapeutic Waste, primarily from hospitals and clinics. Residual, Sewage Sludge and Ash waste material tonnages are typically reported by industries or treatment plants within the Region, and Asbestos tonnages are a special category generally associated with C&D waste.

This Regional Solid Waste Plan deals primarily with the "municipal" portion of the waste stream.

The Disposal Capacity Agreement Contracts discussed in Section 9.1 are intended to assure that disposal capacity is available for MSW generated within the Region. These contracts are intended to address the material discussed above, and will not include the following:

- Hazardous Waste (portions of which may be discussed in the Plan with respect to Special HHW collections, but will not be disposed at the Contracted facilities)
- Large-scale C&D waste collection intended for disposal at C&D Landfills
- Residual Waste material that is deposited at Captive Industrial Landfills (landfills owned by the generator of the waste and used solely for the disposal of that waste)

These items will be addressed separately by the generator of the waste material, and are not part of the responsibility of the five Counties.

CHAPTER 12 – NON-INTERFERENCE (per DEP § 272.233)

The 5 County Region (the Region, herein) composed of Columbia, Lycoming, Montour, Snyder and Union Counties, has developed a Solid Waste Management Plan that will not interfere with the design, construction, operation, financing or contractual obligations of any municipal waste processing or disposal facility. Nearly all of the waste generated within the Region is collected by local haulers, and distributed to existing disposal facilities that are part of the current Plan. The Region (or the individual Counties) has not, and does not intend to interfere with any part of the construction or operation of these facilities.

CHAPTER 13 – PUBLIC PARTICIPATION (per DEP § 272.222)

13.1 General

Public participation elements associated with this Plan revision include:

- Notification to PADEP regarding Plan revision undertaking
- Activities of the Regional Plan Steering Committee
- Activities of the Regional Solid Waste Advisory Committee (RSWAC) composed of the five Stakeholder Groups
- Notifications to local governments

Formal notification of the 5 County Region's intent to prepare a revision to the previously-approved Plans was given to PADEP April 20, 2009, and the PADEP responded that the Plan Revision would be considered Substantial in a letter dated May 14, 2009. An application for a planning grant was submitted to PADEP on June 30, 2009. (See Appendix F for copies of both letters to the PADEP.) The following paragraphs give specific details associated with other public participation activities which were undertaken from inception of the planning process through completion of that process and submittal of the Plan to PADEP.

13.2 Regional Plan Steering Committee (272.202)

The development of the Regional Plan was coordinated by a Steering Committee with planning and/or waste staff representation from each of the five participating Counties. Other Steering Committee participants included representatives from each of the RSWAC stakeholder groups; the Lycoming County landfill operator; and the PADEP plan coordinator. A list of the Steering Committee Members is included in Appendix F.

A total of 20 Steering Committee Meetings were held, beginning on March 2, 2019, and continuing through the development of the Final Draft Plan. The Steering Committee members were primarily responsible for the identification of the Plan direction, with guidance from the Lycoming County Planning & Community Development.

As a first step in the development of the first Regional Plan, an Intergovernmental Agreement was developed by Lycoming County, and signed by each of the other 4 Counties. See Appendix G for a copy of the Intergovernmental Agreement and MOU. The Regional Plan Update includes the Memorandum of Understanding regarding the 5 Counties coordinating and cooperating in the Plan Update.

13.3 Regional Solid Waste Advisory Committee (RSWAC) (272.202)

Representatives from each of the five Counties in the Region contacted potential RSWAC members, notifying them of their appointment to the RSWAC by the County Commissioners. The Steering Committee is made up of representatives from the 5 Counties Planning Departments, Recycling Coordinator and the Town of Bloomsburg Recycling Coordinator. The Steering Committee members representing the principal stakeholders, composed of the following:

Municipal Stakeholders, Business & Industry Stakeholders (including colleges), Solid Waste Industry Stakeholders (including waste haulers and landfill representatives), Recycling Stakeholders, and Citizens Stakeholders. A list of the RSWAC Members is included in Appendix F.

Separate meetings were held for each Stakeholder Committee when necessary, the majority of the meetings were held jointly as this project was strictly an update to the 2013 Regional Plan and not a full re-write., with the first RSWAC meeting for the Plan development held on March 2, 2019. After 4 meetings it was determined that the 5 Counties should participate in a Regional Plan Update due to the Plan Update requirement for 2023. Meetings were held throughout the Plan development process. Prior to the first round of meetings, a list of the RSWAC members, a description of the charge of the RSWAC, background information and the agenda for the first meeting were provided to the Committee Members. Meetings were held monthly beginning September 21, 2022. Generally quarterly updates were distributed to all municipalities within the 5 County Region regarding the Plan Update progress. A final meeting of the RSWAC was held on **XXXX** to review and comment on the final draft before it was presented to the Counties for approval.

As discussed in Section 3.2, communication of the Plan development process was critical, and specific communication of RSWAC issues was handled in several different ways. Each of the members of the RSWAC were included on pre-meeting emails, which included the date and time of proposed meetings, as well as attachments including pertinent information for the meeting discussions. Each representative was encourage to involve interested parties in the plan development process. During the public comment process the Regional Plan Update will be available with all supporting documentation via the Lycoming County Planning & Community Development website.

Copies of the RSWAC meeting attendees and notes are contained in Appendix F.

13.4 Notice to Municipalities (272.203 and 272.241)

A public meeting was held March 2, 2020 to discuss the future Plan Update. (See Appendix F)

Upon initiation of the Regional Plan Update project, a Kickoff Meeting was held virtually for the five Counties, September 21, 2022. Copies of the Meeting attendees lists are included in Appendix F.

Notification to municipalities of the intent to undertake this Plan revision was completed by each of the 5 Counties individually via a letter sent to each municipality (See Appendix F).

The current Update is considered a Substantial Modification to the previously approved Regional County Plan. Copies of the Draft Plan Update were distributed to each Municipality for comment on October 26, 2023. A revised draft Regional County Plan will be sent out to the Municipalities in December 2024 for additional comments and a copy of the Final Plan will be submitted to each Municipality upon approval by the PADEP and the County Commissioners.

13.5 Website

Since the Plan covers a 5 County Region, it was understood that communication among the various Stakeholder Groups, the Steering Committee and interested citizens would be critical. To accomplish the most effective means of communication, an internet website was established to provide a location for the documentation developed at the meetings. Throughout the Plan development, this website was maintained at the following location.

https://www.lyco.org/Departments/Planning-and-Community-Development/Environmental-Planning

Eventually, a version of this website will be hosted on the Lycoming County web site, and links will be provided from each of the five County web pages. The website was used to summarize the status of the project, and to identify upcoming meeting dates and times. In addition, the website listed the Project Goals, a timeline history of project, members of each of the committees, and Plan development Team contacts. Draft chapters of the Plan were also included during the progression.