

RESOLUTION NO. 104-2022

Introduced by Joe Dike

A RESOLUTION APPROVING THE ERIE COUNTY SOLID WASTE MANAGEMENT DISTRICT DRAFT SOLID WASTE MANAGEMENT PLAN

The City Council of the City of Huron met this 22nd day of November, 2022, with the following members present: William Biddlecombe, Sam Artino, Mark Claus, Monty Tapp, Joe Dike, Matt Grieves and Joel Hagy.

Joel Hagy introduced the following resolution and moved its adoption.

WHEREAS, the Erie County Solid Waste Management District Policy Committee has prepared a draft Solid Waste Management Plan update in accordance with O.R.C. 3734; and

WHEREAS, the Erie County Solid Waste Management District Policy Committee held a public comment period and a public hearing on the draft Solid Waste Management Plan; and

WHEREAS, this Council has received the draft Solid Waste Management Plan; and

WHEREAS, this Council believes the public interest will be served by the implementation of the plan;

NOW, THEREFORE, BE IT RESOLVED BY THE COUNCIL OF THE CITY OF HURON, OHIO:

SECTION 1. That pursuant to O.R.C. 3734.55, this Council hereby approves the Erie County Solid Waste Management District Plan, a copy of which is attached hereto as Exhibit "A."

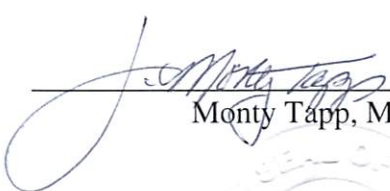
SECTION 2. That the Clerk of Council is hereby directed to send a certified copy of this resolution to the Erie County Solid Waste Management District Policy Committee forthwith.

SECTION 2. That this Council hereby finds and determines that all formal actions relative to the adoption of this Resolution were taken in an open meeting of this Council and that all deliberations of this Council and of its Committees, if any, which resulted in formal action, were taken in meetings open to the public in full compliance with applicable legal requirements, including O.R.C. §121.22.

SECTION 3. That this Resolution shall be in full force and effect from and immediately after its adoption.

ATTEST:


Clerk of Council


Monty Tapp, Mayor

ADOPTED:

22 NOV 2022

TABLE OF CONTENTS

i	Solid Waste Management District Information	6
Chapter 1	Introduction	1
A.	Brief Introduction to Solid Waste Planning in Ohio	1
B.	Requirements of County and Joint Solid Waste Management Districts	1
1.	Structure	1
2.	Solid Waste Management Plan	1
C.	District Overview	2
D.	Waste Reduction and Recycling Goals	4
Chapter 2	District Profile	4
A.	Profile of Political Jurisdictions	1
1.	Counties in the Solid Waste Management District	1
2.	County Overview	1
B.	Population	2
1.	Reference Year Population	2
2.	Population Distribution	2
3.	Population Change	3
4.	Implications for Solid Waste Management	4
C.	Profile of Commercial and Institutional Sector	4
D.	Profile of Industrial Sector	4
E.	Other Characteristics	4
Chapter 3	Waste Generation	1
A.	Solid Waste Generated in Reference Year	2
1.	Residential/Commercial Waste Generated in Reference Year	3
2.	Industrial Waste Generated in Reference Year	3
3.	Excluded Waste Generated in Reference Year	4
B.	Historical Waste Generated	4
1.	Historical Residential/Commercial Waste Generated	4
2.	Historical Industrial Waste Generated	4
C.	Waste Generation Projections	5
1.	Residential/Commercial Waste Projections	5
2.	Industrial Waste Projections	5
Chapter 4	Waste Management	1
A.	Waste Management Overview	2
B.	Profile of Waste Management Infrastructure	2

1.	Solid Waste Management Facilities	2
2.	Waste Collection	3
C.	Solid Waste Facilities Used in the Reference Year	3
1.	Landfill Facilities	3
2.	Transfer Facilities	4
3.	Composting Facilities	4
4.	Processing Facilities	4
5.	Other Waste Management	5
D	Use of Solid Waste Facilities During the Planning Period	5
1.	Landfills	5
2.	Transfer Facilities	5
3.	Composting Facilities	5
4.	Processing Facilities	5
5.	Other Waste Management	5
E	Siting Strategy	5
F	Designation	6
1	Description of the SWMD's Designation Process	6
2	List of Designated Facilities	1
Chapter 5	Waste Reduction and Recycling	1
A.	Solid Waste Management District's Priorities	2
B.	Program Descriptions	3
C.	Waste Reduction and Recycling Rates	9
1.	Residential/Commercial Recycling in the District	9
2.	Industrial Recycling in the District	9
Chapter 6	Budget	1
A.	Overview of the SWMD's Budget	1
B.	Revenue	2
1.	Generation Fees	3
2.	Other Funding Mechanisms	3
	Summary of Revenue	3
C.	Expenses	1
D.	Budget Summary	3
E.	Alternative Budget	3
F.	Major Facility Project	4
Appendix A	Miscellaneous Information	1

A.	Reference Year	1
B.	Planning Period (first and last years)	1
C.	Goal Statement	1
D.	Explanations of differences between data previously reported and data used in the solid waste management plan	1
APPENDIX B	Recycling Infrastructure Inventory	1
A.	Curbside Recycling Services, Drop-Off Recycling Locations, and Mixed Solid Waste Materials Recovery Facilities	1
1.	Curbside Recycling Services	1
2.	Drop-Off Recycling Locations	6
3.	Mixed Solid Waste Material Recovery Facilities	11
B.	Curbside Recycling and Trash Collection Service Providers	12
C.	Composting Facilities	13
D.	Other Food Waste and Yard Waste Management Programs	13
D.	Material Handling Facilities Used by the SWMD in the Reference Year	14
Appendix C	Population Data	1
A.	Reference Year Population	1
B.	Population Projections	2
Appendix D	Disposal Data	3
A.	Reference Year Waste Disposed	3
B.	Historical Waste Analysis	6
1.	Residential/Commercial Waste	7
2.	Industrial Waste	7
3.	Excluded Waste	8
C.	Disposal Projections	9
APPENDIX E	Residential/Commercial Reduction and recycling Data	1
A.	Reference Year Recovery Data	1
B.	Historical Recovery	7
C.	Residential/Commercial Recovery Projections	9
APPENDIX F	Industrial Waste Reduction and Recycling Data	1
A.	Reference Year Recovery Data	1
B.	Historical Recovery	6
C.	Industrial Recovery Projections	1
Appendix G	Waste Generation	1
A.	Historical Year Waste Generated	1
B.	Generation Projections	2

C.	Waste Composition	4
APPENDIX H	Strategic Evaluation	1
1.	Residential Recycling Infrastructure Analysis	1
2.	Commercial/Institutional Sector Analysis	7
3.	Industrial Sector Analysis	10
4.	Residential/Commercial Waste Composition Analysis	10
5.	Economic Incentive Analysis	1
6.	Restricted and Difficult to Manage Waste Streams Analysis	3
7.	Diversion Analysis	5
8.	Special Program Needs Analysis	6
9.	Financial Analysis	10
10.	Regional Analysis	15
11.	Data Collection Analysis	15
12.	Education/Outreach Analysis	15
13.	Processing Capacity Analysis	17
Appendix I	Actions, Priorities, and Program Descriptions	1
A.	Actions and Priorities	1
1.	Actions	1
2.	Priorities	4
B.	Programs	5
APPENDIX J	Reference Year Opportunity to Recycle and Demonstration of Achieving Goal 1	1
A.	Residential Sector Opportunity to Recycle	1
B.	Commercial Sector Opportunity to Recycle	4
C.	Demonstration of Meeting Other Requirements for Achieving Goal 1	6
APPENDIX K	Waste Reduction and Recycling Rates and Demonstration of Achieving Goal 2	1
APPENDIX L	Minimum Required Education Programs: Outreach and marketing plan and General Education Requirements	1
A.	Minimum Required Education Programs	1
B.	Outreach and Marketing Plan	2
C.	Outreach Priority	7
APPENDIX M	Waste Management Capacity Analysis	8
A.	Access to Publicly Available Landfill Facilities	8
B.	Access to Captive Landfill Facilities	10
C.	Incinerators and Energy Recovery Facilities	10
Appendix N	Evaluating Greenhouse Gas Emissions	1

Appendix O Financial Plan.....	1
A. Funding Mechanisms and Revenue Generated	1
1. Disposal Fee	1
2. Generation Fee	3
3. Designation Fees	5
4. Debt/Loans	5
5. Other Sources of District Revenue.....	5
6. Summary of District Revenues	6
B. Cost of Implementing Plan	7
Explanation of Expenses	17
C. Alternative Budget	22
1. Contingent Funding	22
2. Contingent Expenses	24
D. Major Facility Project.....	27
Appendix P Designation	1
A. Statement Authorizing/Precluding Designation	1
B. Designated Facilities	1
C. Documents	1
Appendix Q District Rules	1
A. Existing Rules	1
B. Proposed Rules	3
Appendix R Blank Survey Forms and Related Information	1
Appendix S Siting Strategy	1
APPENDIX T Miscellaneous Plan Documents	1
APPENDIX U RATIFICATION RESULTS.....	1
Appendix V Inventory of Open Dumps and Other Disposal Facilities.....	1
Appendix W District Map	1

I SOLID WASTE MANAGEMENT DISTRICT INFORMATION

Table I-1 Solid Waste Management District Information

SWMD Name	Erie County Solid Waste Management District
Member Counties	1
Coordinator's Name (main contact)	Tiffini McNeely
Job Title	District Coordinator
Street Address	554 River Rd
City, State, Zip Code	Huron, OH 44839
Phone	419-433-7303 X2303
Fax	419-433-6214
E-mail address	TMcNeely@eriecounty.oh.gov
Webpage	https://www.eriecounty.oh.gov/SolidWasteDistrict.aspx

Table I-2 Members of the Policy Committee/Board of Trustees

Member Name	Representing
Erie County	
Matt Old	County Commissioners
Aaron Klein	Municipal Corporations
Jeffery Ferrell	Townships
Craig Ward	Health District
Alex Jones	Generators
Zachary Rospert	Citizens
Caleb Stidham	Public

Table I-3 Chairperson of the Policy Committee or Board of Trustees

Name	Caleb Stidham
Street Address	247 Columbus Ave. Suite 115
City, State, Zip Code	Sandusky, OH 44870
Phone	419-627-7701
Fax	419-627-7733
E-mail address	Cstidham@eriecounty.oh.gov

Table I-4 Board of County Commissioners/Board of Directors

Commissioner Name	County	Chairperson/President
Patrick Shenigo	Erie	
Matt Old	Erie	X
Stephen Shoffner	Erie	

Technical Advisory Committee
N/A

Consultant Information
N/A

CHAPTER 1 INTRODUCTION

A. Brief Introduction to Solid Waste Planning in Ohio

In 1988, Ohio faced a combination of solid waste management problems, including rapidly declining disposal capacity at existing landfills, increasing quantities of waste being generated and disposed, environmental problems at many existing solid waste disposal facilities, and increasing quantities of waste being imported into Ohio from other states. These issues combined with Ohio's outdated and incomplete solid waste regulations caused Ohio's General Assembly to pass House Bill (H.B.) 592. H.B. 592 dramatically revised Ohio's outdated solid waste regulatory program and established a comprehensive solid waste planning process.

There are three overriding purposes of this planning process: to reduce the amount of waste Ohioans generate and dispose of; to ensure that Ohio has adequate, protective capacity at landfills to dispose of its waste; and to reduce Ohio's reliance on landfills.

B. Requirements of County and Joint Solid Waste Management Districts

1. Structure

As a result of H.B. 592, each of the 88 counties in Ohio must be a member of a solid waste management district (SWMD). A SWMD is formed by county commissioners through a resolution. A board of county commissioners has the option of forming a single county SWMD or joining with the board(s) of county commissioners from one or more other counties to form a multi county SWMD. Ohio currently has 52 SWMDs. Of these, 37 are single county SWMDs and 15 are multi county SWMDs.¹

A SWMD is governed by two bodies. The first is the board of directors which consists of the county commissioners from all counties in the SWMD. The second is a policy committee. The policy committee is responsible for developing a solid waste management plan for the SWMD. The board of directors is responsible for implementing the policy committee's solid waste management plan.²

2. Solid Waste Management Plan

In its solid waste management plan, the policy committee must, among other things, demonstrate that the SWMD will have access to at least 10 years of landfill capacity to

¹Counties have the option of forming either a SWMD or a regional solid waste management authority (Authority). The majority of planning districts in Ohio are SWMDs, and Ohio EPA generally uses "solid waste management district," or "SWMD", to refer to both SWMDs and Authorities.

²In the case of an Authority, it is a board of trustees that prepares, adopts, and submits the solid waste management plan. Whereas a SWMD has two governing bodies, a policy committee and board of directors, an Authority has one governing body, the board of trustees. The board of trustees performs all of the duties of a SWMD's board of directors and policy committee.

manage all of the SWMD's solid wastes that will be disposed. The solid waste management plan must also show how the SWMD will meet the waste reduction and recycling goals established in Ohio's state solid waste management plan and present a budget for implementing the solid waste management plan.

Solid waste management plans must contain the information and data prescribed in Ohio Revised Code (ORC) 3734.53, Ohio Administrative Code (OAC) Rule 3745-27-90. Ohio EPA prescribes the format that details the information that is provided and the manner in which that information is presented. This format is very similar in concept to a permit application for a solid waste landfill.

The policy committee begins by preparing a draft of the solid waste management plan. After completing the draft version, the policy committee submits the draft to Ohio EPA. Ohio EPA reviews the draft and provides the policy committee with comments. After revising the draft to address Ohio EPA's comments, the policy committee makes the plan available to the public for comment, holds a public hearing, and revises the plan as necessary to address the public's comments.

Next, the policy committee ratifies the plan. Ratification is the process that the policy committee must follow to give the SWMD's communities the opportunity to approve or reject the draft plan. Once the plan is ratified, the policy committee submits the ratified plan to Ohio EPA for review and approval or disapproval. From start to finish, preparing a solid waste management plan can take up to 33 months.

The policy committee is required to submit periodic updates to its solid waste management plan to Ohio EPA. How often the policy committee must update its plan depends upon the number of years in the planning period. For an approved plan that covers a planning period of between 10 and 14 years, the policy committee must submit a revised plan to Ohio EPA within three years of the date the plan was approved. For an approved plan that covers a planning period of 15 or more years, the policy committee must submit a revised plan to Ohio EPA within five years of the date the plan was approved.

C. District Overview

The District sees its role as providing the tools necessary to the residents, businesses and industries of Erie County to design and maintain their own waste reduction and recycling programs. Those tools include but are not limited to technical assistance, education and outreach.

The District offers a combination of drop-off, non-subscription curbside and subscription curbside recycling programs.

The District currently maintains one office under Erie County Department of Environmental Services. The Department of Environmental Services consists of Wastewater Treatment/Collection, Water, Landfill, Recycling, and Administration. The

District has one employee, the Coordinator, whom reports directly to the Utilities Director.

Due to only having one staff person, the District will continue to operate as a combination of program administrator and direct service provider concerning solid waste issues in Erie County.

Major accomplishments of the District include:

- Partnering with other agencies to provide a united environmental message, educational programs, workshops, events, and the GREEN Bean litter trailer.
- Partnering with local commercial businesses or two Market Development Grants.
- Corrected past years Quarterly Fee Reports and have since maintained a balanced budget.
- Reduced out of District spending.
- Increased assess goal from 21% access to 42%.
- Reduced contamination at drop-off sites.
- Updated expired contracts.
- Funded recycling study for largest municipality
- Extended non-subscription curbside recycling contract with the Village of Berlin Heights and Republic Services

The District will continue to evaluate programs and collection events to ensure that they are operating efficiently. Million dollar carry-over balances will be used for the following:

- Annual Marketing & Advertising Campaign
- Community Grants for all Erie County communities
- Tire credit for all Erie County communities at Erie County Landfill
- Aiding the Sheriff's Office with a Litter Clean-Up Trailer utilizing jail inmates and court appointed community service workers
- Special Events
 - Earth Day Extravaganza
- Educational workshops
 - Teacher workshop
 - Composting workshop
 - Business recycling
 - Upcycling workshops
- Special collection upgrades
 - Household Hazardous Waste Collection
 - Battery drop-off locations
- Recycled Materials Grant monies
- Revolving loan fund for business

Sources for this Chapter:

Ohio Department of Development
U. S. Census Bureau

Erie County Regional Planning
Erie County Solid Waste Management District
District Statistics 2015-2019

D. Waste Reduction and Recycling Goals

As explained earlier, a SWMD must achieve goals established in the state solid waste management plan. The current state solid waste management plan is the *2020 Solid Waste Management Plan* (2020 State Plan). The 2020 State Plan established nine goals as follows:

1. The SWMD shall ensure that there is adequate infrastructure to give residents and commercial businesses opportunities to recycle solid waste.
2. The SWMD shall reduce and recycle at least 25 percent of the solid waste generated by the residential/commercial sector.
3. The SWMD shall provide the following required programs: a Web site; a comprehensive resource guide; an inventory of available infrastructure; and a speaker or presenter.
4. The SWMD shall provide education, outreach, marketing and technical assistance regarding reduction, recycling, composting, reuse and other alternative waste management methods to identified target audiences using best practices.
5. The SWMD shall incorporate a strategic initiative for the industrial sector into its solid waste management plan.
6. The SWMD shall provide strategies for managing scrap tires, yard waste, lead-acid batteries, household hazardous waste and obsolete/end-of-life electronic devices.
7. The SWMD shall explore how to incorporate economic incentives into source reduction and recycling programs.
8. The SWMD will use U.S. EPA's Waste Reduction Model (WARM) (or an equivalent model) to evaluate the impact of recycling programs on reducing greenhouse gas emissions.
9. The SWMD has the option of providing programs to develop markets for recyclable materials and the use of recycled-content materials.
10. The SWMD shall report annually to Ohio EPA regarding implementation of the SWMD's solid waste management plan.

All 10 goals are crucial to furthering solid waste reduction and recycling in Ohio. However, the challenges posed by Goals 1 and 2 often mean SWMDs devote more resources to achieving those two goals than to the remaining goals. Thus, Goals 1 and 2 are the primary goals of the state plan.

A SWMD is encouraged to devote resources to achieving both goals but is not required to demonstrate that achieving both. Instead, SWMDs have the option of choosing either Goal 1 or Goal 2 for their solid waste management plans. This gives SWMDs two options for achieving Ohio's solid waste reduction and recycling goals. Many of the programs and services that a SWMD uses to achieve Goal 1 help the SWMD make progress toward achieving Goal 2 and vice versa.

A SWMD's solid waste management plan will provide programs to meet up to eight of the goals. Goal 9 (market development) is an optional goal. Goal 10 requires submitting annual reports to Ohio EPA.

See Chapter 5 and Appendix I for descriptions of the programs the SWMD will use to achieve the nine goals.

CHAPTER 2 DISTRICT PROFILE

Purpose

This chapter provides context for the SWMD's solid waste management plan by providing an overview of general characteristics of the SWMD. Characteristics discussed in this chapter include:

- The communities and political jurisdictions within the SWMD;
- The SWMD's population in the reference year and throughout the planning period;
- The available infrastructure for managing waste and recyclable materials within the SWMD;
- The commercial businesses and institutional entities located within the SWMD;
- The industrial businesses located within the SWMD; and
- Any other characteristics that are unique to the SWMD and affect waste management within the SWMD or provide challenges to the SWMD.

Understanding these characteristics helps the policy committee make decisions about the types of programs that will most effectively address the needs of residents, businesses, and other waste generators within the SWMD's jurisdiction.

Population distribution, density, and change affect the types of recycling opportunities that make sense for a particular community and for the SWMD as a whole.

The make-up of the commercial and industrial sectors within the SWMD influences the types of wastes generated and the types of programs the SWMD provides to assist those sectors with their recycling and waste reduction efforts.

Unique circumstances, such as hosting an amusement park, a large university, or a coal burning power plant present challenges, particularly for providing waste reduction and recycling programs.

The policy committee must take into account all of these characteristics when developing its overall waste management strategy.

A. Profile of Political Jurisdictions**1. Counties in the Solid Waste Management District**

The District is made up of one county, Erie County with the exclusion of the City of Vermilion.

2. County Overview

Community
Cities
City of Sandusky
City of Huron
Townships
Groton Township
Oxford Township
Margaretta Township
Perkins Township
Huron Township
Milan Township
Berlin Township
Florence Township
Vermilion Township
Villages
Bay View
Castalia
Berlin Heights
Milan
Kelleys Island

The District is made up of two cities, nine townships and five villages for a total of sixteen municipalities.

B. Population**1. Reference Year Population**

In the 2019 Reference Year the District had a population of 69,678.

2. Population Distribution

County		Largest Political Jurisdiction		
Name	Population	Community Name	Population	Percent of Total County Population
Erie County	69,678	City of Sandusky	24,564	35%

County	Percent of Population in Cities	Percent of Population in Villages	Percent of Population in Unincorporated Township
Erie County	45%	5%	50%

3. Population Change

Year	Annual Change persons/year	Erie County
2015		70,482
2016	-434	70,048
2017	-434	69,614
2018	-434	69,180
2019	-434	68,746
2020		68,312
2021	-510	67,802
2022	-510	67,292
2023	-510	66,782
2024	-510	66,272
2025		65,762
2026	-522	65,240
2027	-522	64,718
2028	-522	64,196
2029	-522	63,674
2030		63,152
2031	-566	62,586
2032	-566	62,020
2033	-566	61,454
2034	-566	60,888
2035		60,322
2036	-522	64,388
2037	-522	63,866
2038	-522	63,344
2039	-522	62,822
2040		57,712
Community Additions		74,266
Community Subtractions		4,588

Calculations based on OEPA formulas.

4. Implications for Solid Waste Management

The Solid Waste District will continue to work with municipalities that wish to start a non-subscription curbside recycling program and/or drop-off programs. The District will continue to seek out potential recycling haulers for subscription curbside recycling programs.

C. Profile of Commercial and Institutional Sector

A big part of the District's Commercial Sector comes from the tourism industry: Restaurants, shopping stores, hotels and recreation.

D. Profile of Industrial Sector

The District has several types of Industrial Businesses that operate throughout the District: automotive, manufacturing, mining, and printing.

E. Other Characteristics

The Village of Kelley's Island is located within the District that provided unique challenges as this Village is an island located in Lake Erie. The Village of Kelley's Island is only accessible by ferry/boat, or plane.

CHAPTER 3 WASTE GENERATION

Purpose of Chapter 3

This chapter of the solid waste management plan provides a summary of the SWMD's historical and projected solid waste generation. The policy committee needs to understand the waste the SWMD will generate before it can make decisions regarding how to manage the waste. Thus, the policy committee analyzed the amounts and types of waste that were generated within the SWMD in the past and that could be generated in the future.

The SWMD's policy committee calculated how much solid waste was generated for the residential/commercial and industrial sectors. Residential/commercial waste is essentially municipal solid waste and is the waste that is generated by a typical community. Industrial solid waste is generated by manufacturing operations. To calculate how much waste was generated, the policy committee added the quantities of waste disposed of in landfills and reduced/recycled.

The SWMD's policy committee obtained reduction and recycling data by surveying communities, recycling service providers, collection and processing centers, commercial and industrial businesses, owners and operators of composting facilities, and other entities that recycle. Responding to a survey is voluntary, meaning that the policy committee relies upon an entity's ability and willingness to provide data. When entities do not respond to surveys, the policy committee gets only a partial picture of recycling activity. How much data the policy committee obtains has a direct effect on the SWMD's waste reduction and recycling and generation rates.

The policy committee obtained disposal data from Ohio EPA. Owners/operators of solid waste facilities submit annual reports to Ohio EPA. In these reports, owners/operators summarize the types, origins, and amounts of waste that were accepted at their facilities. Ohio EPA adjusts the reported disposal data by adding in waste disposed in out-of-state landfills.

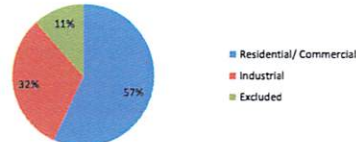
The policy committee analyzed historic quantities of waste generated to project future waste generation. The details of this analysis are presented in Appendix G. The policy committee used the projections to make decisions on how best to manage waste and to ensure future access to adequate waste management capacity, including recycling infrastructure and disposal facilities.

A. Solid Waste Generated in Reference Year

Table 3-1 Solid Waste Generated in the Reference Year

Type of Waste	Quantity Generated (tons)
Residential/Commercial	77,686
Industrial	43,186
Excluded	15,762
Total	136,634

Waste Type as Percentage of Total Waste Generated



Source(s) of Information: 2019 Quarterly Fee Reports

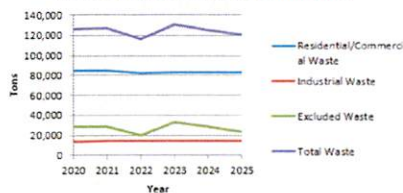
Sample Calculations: N/A

Assumptions: A big part of the District's Commercial Sector comes from the tourism industry: Restaurants, shopping stores, hotels and recreation. The District has several types of Industrial businesses that operate throughout the District: automotive, manufacturing, mining, and printing.

1. Residential/Commercial Waste Generated in Reference Year

Year	Residential/Commercial Waste (tons)	Total Waste (tons)
2020	84,480	84,480
2021	84,762	84,762
2022	82,430	82,430
2023	82,725	82,725
2024	83,026	83,026
2025	83,333	83,333

Waste Projected to be Generated

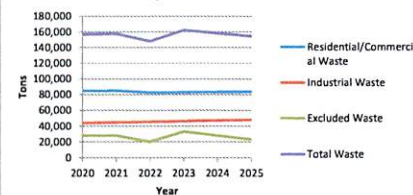


2. Industrial Waste Generated in Reference Year

Year	Residential/Commercial Waste (tons)	Industrial Waste (tons)	Excluded Waste (tons)	Total Waste (tons)
2020	84,480	44,143	28,000	156,623
2021	84,762	44,885	28,019	157,666
2022	82,430	45,641	20,000	148,071
2023	82,725	46,411	33,000	162,136
2024	83,026	47,195	28,000	158,221

2025	83,333	47,994	23,000	154,327
------	--------	--------	--------	---------

Waste Projected to be Generated



3. Excluded Waste Generated in Reference Year

Excluded	15,762
----------	--------

B. Historical Waste Generated

1. Historical Residential/Commercial Waste Generated

Year	Population	Residential/Commercial				Industrial			Excluded (tons)	Total (tons)
		Disposed (tons)	Recycled (tons)	Generated (tons)	Per Capita Generated (ppd)	Disposed (tons)	Recycled (tons)	Generated (tons)		
2015	73,569	81,550	20,702	102,252	7.62	12,646	10,006	22,652	17,520	142,424
2016	75,107	88,032	9,926	97,958	7.15	12,883	1,278	14,161	14,773	126,892
2017	70,195	66,889	38,409	105,298	8.22	12,203	43,493	55,696	53,712	214,706
2018	74,615	81,819	25,061	106,880	7.85	12,665	15,819	28,484	45,400	180,764
2019	69,878	58,199	17,261	75,459	5.93	13,025	55,182	68,188	15,782	159,408

Per capita generation rate = ((tons generated x 2000) + 365) + population)

Annual percentage change = ((New year - old year) + old year) x 100

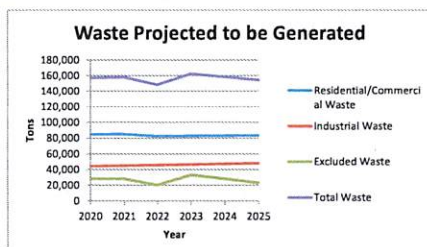
C. Waste Generation Projections

Table 3-2 Waste Generation Projections

Year	Residential/Commercial Waste	Industrial Waste	Excluded Waste	Total
	Waste (tons)	Waste (tons)	Waste (tons)	Waste (tons)
2020	84,480	44,143	28,000	156,623
2021	84,762	44,885	28,019	157,666
2022	82,430	45,641	20,000	148,071
2023	82,725	46,411	33,000	162,136
2024	83,026	47,195	28,000	158,221
2025	83,333	47,994	23,000	154,327

Source(s) of Information: 2015-2019 Erie County Landfill reports, 2015-2019 Quarterly Fee Reports.

Sample Calculations: Per capita generation rate = ((tons generated x 2000) + 365) ÷ population
Annual percentage change = ((New year – old year) ÷ old year) x 100



Assumptions:

Year	Population	Residential/ Commercial				Industrial			Excluded Waste (tons)
		Disposal (tons)	Recycle (tons)	Generation (tons)	Per Capita Generation (ppd)	Disposal (tons)	Recycle (tons)	Generation (tons)	
2019	68,746	58,124	19,487	77,611	6.19	13,025	30,162	43,186	15,762
2020	68,312	58,668	13,472	72,140		9,955	30,765	40,720	28,019
2021	70,333	70,195	13,373	83,932		11,319	31,380	42,699	20,000
2022	72,355	70,195	14,008	84,203		11,407	32,048	43,415	33,000
2023	74,378	70,195	14,285	84,480		11,495	32,648	44,143	28,000
2024	76,402	70,195	14,567	84,762		11,584	33,301	44,885	23,000
2025	65,762	67,575	14,855	82,430		11,674	33,967	45,641	18,000
2026	67,788	67,575	15,150	82,725		11,765	34,646	46,411	13,000
2027	69,815	67,575	15,451	83,026		11,856	35,339	47,195	8,000
2028	71,843	67,575	15,758	83,333		11,948	36,046	47,994	3,000
2029	73,872	67,575	16,071	83,646		12,040	36,767	48,807	100
2030	63,152	64,893	16,392	81,285		12,134	37,502	49,636	100
2031	65,183	64,893	16,720	81,613		12,228	38,252	50,480	100
2032	67,215	64,893	17,054	81,947		12,323	39,017	51,340	100
2033	69,248	64,893	17,396	82,289		12,418	39,798	52,216	100
2034	71,282	64,893	17,746	82,639		12,514	40,594	53,108	100
2035	60,322	61,985	18,033	80,088		12,611	41,406	54,017	100
2036	64,388	66,163	18,469	84,632		12,709	42,234	54,943	100

2037	63,866	65,626	18,843	84,469		12,808	43,078	55,886	100
------	--------	--------	--------	--------	--	--------	--------	--------	-----

CHAPTER 4 WASTE MANAGEMENT

Purpose of Chapter 4

Chapter 3 provided a summary of how much waste the SWMD generated in the reference year and how much waste the policy committee estimates the SWMD will generate during the planning period. This chapter summarizes the policy committee's strategy for how the SWMD will manage that waste during the planning period.

A SWMD must have access to facilities that can manage the waste the SWMD will generate. This includes landfills, transfer facilities, incinerator/waste-to-energy facilities, compost facilities, and facilities to process recyclable materials. This chapter describes the policy committee's strategy for managing the waste that will be generated within the SWMD during the planning period.

To ensure that the SWMD has access to facilities, the solid waste management plan identifies the facilities the policy committee expects will take the SWMD's trash, compost, and recyclables. Those facilities must be adequate to manage all of the SWMD's solid waste. The SWMD does not have to own or operate the identified facilities. In fact, most solid waste facilities in Ohio are owned and operated by entities other than the SWMD. Further, identified facilities can be any combination of facilities located within and outside of the SWMD (including facilities located in other states).

Although the policy committee needs to ensure that the SWMD will have access to all types of needed facilities, Ohio law emphasizes access to disposal capacity. In the solid waste management plan, the policy committee must demonstrate that the SWMD will have access to enough landfill capacity for all of the waste the SWMD will need to dispose of. If there isn't adequate landfill capacity, then the policy committee develops a strategy for obtaining adequate capacity.

Ohio has more than 40 years of remaining landfill capacity. That is more than enough capacity to dispose of all of Ohio's waste. However, landfills are not distributed equally around the state. Therefore, there is still the potential for a regional shortage of available landfill capacity, particularly if an existing landfill closes. If that happens, then the SWMDs in that region would likely rely on transfer facilities to get waste to an existing landfill instead of building a new landfill.

Finally, the SWMD has the ability to control which landfill and transfer facilities can, and by extension cannot, accept waste that was generated within the SWMD. The SWMD accomplishes this by designating solid waste facilities (often referred to as flow control). A SWMD's authority to designate facilities is explained in more detail later in this chapter.

A. Waste Management Overview

Erie County Solid Waste Management District implements flow control. All waste generated within the District must be disposed at the Erie County Landfill.

The District also has opportunities for residents to recycle through drop-off locations, subscription and non-subscription curbside recycling.

There is a compost facility within the District open to the public for a charge to dispose of yard and food waste.

The District provides opportunities to dispose of prohibited landfill materials through, drop-off programs, and collections.

Table 4-1 Methods for Managing Waste

Year	Total Waste	Recycle	Compost	Transfer	Landfill
2020	136,634	42,168	7,481	75	86,910
2021	83,932	52,724	8,076	75	109,690
2022	84,203	53,778	8,238	75	109,690
2023	84,480	54,854	8,402	75	109,690
2024	84,762	55,951	8,570	75	109,690
2025	84,430	57,070	8,742	75	109,690

B. Profile of Waste Management Infrastructure**1. Solid Waste Management Facilities****a. Landfills**

Erie County Sanitary Landfill- Owned and operated by Erie County in Milan Township, Erie County Ohio. Waste accepted includes both municipal and industrial waste.

b. Transfer Facilities

Kelley's Island Transfer Station- This transfer station is NOT used to transfer waste out of the county. This transfer station is located on an island in Lake Erie within the District. The Transfer Station is used to transfer waste generated on the island to the Erie County Landfill.

The District does not have any transfer facilities that transport waste out of the District.

c. Compost Facilities

Barnes Nursery and Compost Facility - Located in Huron, Erie County Ohio. Division Class II and IV. This facility is privately owned and operated and is open to residents in the District for a charge

d. Processing Facilities

N/A

e. Other Waste Management Facilities

N/A

2. Waste Collection

The District's waste collection is provided by private haulers operating within the District.

C. Solid Waste Facilities Used in the Reference Year**1. Landfill Facilities****Table 4-2 Landfill Facilities Used by the District in the Reference Year**

Facility Name	Location		Waste Accepted from SWMD (tons)	Percent of all SWMD Waste Disposed	Remaining Capacity (years)
	County	State			
In-District					
Erie County Sanitary Landfill	Erie	Ohio	84,754	98%	49
Out-of-District					
Republic Services	Ottawa	Ohio	1,831	2%	N/A
Republic Services	Lorain	Ohio	34	0%	N/A
Waste Management - Evergreen	Wood	Ohio	9	0%	N/A
Waste Management - American	Stark	Ohio	23	0%	N/A
Sunny Farms	Seneca	Ohio	1	0%	N/A
Cherokee Run Landfill	Logan	Ohio	63	0%	N/A
Liberty Tire Recycling LLC	Stark	Ohio	72	0%	N/A
Rumpke Harvard Road Transfer	Cuyahoga	Ohio	5	0%	N/A
Wood County Landfill	Wood	Ohio	3	0%	N/A
Out-of-State					

N/A					
N/A					
Total			86,795	100%	49

2. Transfer Facilities**Table 4-3 Transfer Facilities Used by the District in the Reference Year**

N/A

The transfer facilities listed in Table 4-3 are those identified for purposes of Ohio Revised Code Section 3734.53(A)(13)

3. Composting Facilities**Table 4-4 Composting Facilities Used by the District in the Reference Year**

Facility Name	Location (County)	Material Composted (tons)	Percent of all Material Composted
In District			
Barnes Nursery and Compost	Erie	6,043	81%
Sparky Weinlau Farms	Erie	300	4%
Corso's Perennials	Erie	761	10%
Ninke Lawn Service	Erie	330	4%
Out-of-District			
			0%
			0%
			0%
			0%
			0%
			0%
			0%
Total		7,435	100%

4. Processing Facilities**Table 4-5 Processing Facilities Used in the Reference Year**

N/A

The processing facilities listed in Table 4-5 are those identified for purposes of Ohio Revised Code Section 3734.53(A)(13)

5. Other Waste Management

N/A

D Use of Solid Waste Facilities During the Planning Period**1. Landfills**

The Erie County Solid Waste Management District will continue to implement flow control. All waste generated within the District shall be disposed of at the Erie County Landfill. The Erie County Landfill will have adequate capacity throughout the planning period.

2. Transfer Facilities

N/A

3. Composting Facilities

Composting facilities that are operating throughout the District are predicted to operate throughout the planning period. One facility is open to the public for a charge and is predicted to remain open and operating.

4. Processing Facilities

N/A

5. Other Waste Management

N/A

E Siting Strategy**Purpose of the Siting Strategy**

As explained earlier, the solid waste management plan must demonstrate that the SWMD will have access to enough capacity at landfill facilities to accept all of the waste the SWMD will need to dispose of during the planning period. If existing facilities cannot provide that capacity, then the policy committee must develop a plan for obtaining additional disposal capacity.

Although unlikely, the policy committee can conclude that that it is in the SWMD's best interest to construct a new solid waste landfill facility to secure disposal capacity. In that situation, Ohio law requires the policy committee to develop a strategy for identifying a

suitable location for the facility. That requirement is found in [Ohio Revised Code Section 3734.53\(A\)\(8\)](#). This strategy is referred to as a siting strategy. The policy committee must include its siting strategy in the solid waste management plan. If this solid waste management plan includes a siting strategy, then that strategy is summarized in this chapter and presented in full in Appendix S.

The Erie County Solid Waste Management District does not wish to implement a siting strategy.

F Designation

Purpose of Designation

Ohio law gives each SWMD the ability to control where waste generated from within the SWMD can be taken. Such control is generally referred to as flow control. In Ohio, SWMDs establish flow control by designating facilities. SWMDs can designate any type of solid waste facility, including recycling, transfer, and landfill facilities.

Even though a SWMD has the legal right to designate, it cannot do so until the policy committee specifically conveys that authority to the board of directors. The policy committee does this through a solid waste management plan. If it wants the SWMD to have the ability to designate facilities, then the policy committee includes a clear statement in the solid waste management plan giving the designation authority to the board of directors. The policy committee can also prevent the board of directors from designating facilities by withholding that authority in the solid waste management plan.

Even if the policy committee grants the board of directors the authority to designate in a solid waste management plan, the board of directors decides whether or not to act on that authority. If it chooses to use its authority to designate facilities, then the board of directors must follow the process that is prescribed in [ORC Section 343.014](#). If it chooses not to designate facilities, then the board of directors simply takes no action.

Once the board of directors designates facilities, only designated facilities can take the SWMD's waste. That means, no one can legally take waste from the SWMD to undesignated facilities and undesignated facilities cannot legally accept waste from the SWMD. The only exception is in a situation where, the board of directors grants a waiver to allow an undesignated facility to take the SWMD's waste. Ohio law prescribes the criteria that the board must consider when deciding whether to grant a waiver and how long the board has to make a decision on a waiver request.

If the board of directors designates facilities, then the next section will provide a summary of the designation process and Table 4-6 will list currently designated facilities.

1 Description of the SWMD's Designation Process

ERIE COUNTY SOLID WASTE MANAGEMENT DISTRICT

DISTRICT RULES Effective 2023

RULE 1: DEFINITIONS

Board shall mean the Board of County Commissioners of Erie County, Ohio acting in its capacity as the Board of Directors of the District.

Collection Services shall mean Solid Waste and Source Separated Recyclable Material collection services.

District shall mean the Erie County Solid Waste Management District.

Generator shall mean each Person which generates Solid Waste within the District.

Landfill shall mean the Erie County Sanitary Landfill.

Legitimate Recycling Facility shall mean an engineered facility or site where recycling of material other than scrap tires is the primary objective of the facility, in accordance with the definition set forth in Ohio Administrative Code 3745-27-01(L)(2).

Person shall mean each individual, public or private corporation, partnership, and each other form of entity, including a political subdivision or agency thereof.

Plan shall mean the Solid Waste Management Plan or amended Solid Waste Management Plan of the District

Service Provider shall mean any Person which provides Collection Services to Generators in the District.

Solid Waste shall mean such unwanted residual solid or semisolid material as results from industrial, commercial, agricultural, and community operations, excluding earth or material from construction, mining, or demolition operations, or other waste materials of the type that normally would be included in demolition debris, nontoxic fly ash and bottom ash, including at least ash that results from the combustion of coal and ash that results from the combustion of coal in combination with scrap tires where scrap tires comprise not more than fifty per cent of heat input in any month, spent nontoxic foundry sand, nontoxic, nonhazardous, unwanted fired and unfired, glazed and unglazed, structural products made from shale and clay products, and slag and other substances that are not harmful or inimical to public health, and includes, but is not limited to, garbage, scrap tires, combustible and noncombustible material, street dirt, and debris. Solid Waste does not include any material that is an infectious waste or a hazardous waste.

Source Separated Recyclable Materials shall mean a subset of Solid Waste materials that have been separated from other Solid Waste materials at the location where the materials are generated, for the purpose of recycling such materials at a Legitimate Recycling Facility.

RULE 2: REQUIREMENT FOR DISPOSAL AT THE ERIE COUNTY SANITARY LANDFILL OF SOLID WASTE GENERATED IN THE ERIE COUNTY SOLID WASTE MANAGEMENT DISTRICT.

No Person shall deliver, or cause the delivery of, any Solid Waste generated within the District to any solid waste facility other than the Landfill, the only solid waste facility designated by the Plan, or a solid waste facility outside the boundaries of the State of Ohio, unless a waiver from this rule has been granted by the Board, in accordance with Section 343.01(I)(2) of the Ohio Revised Code. For the purpose of this rule, Solid Waste shall exclude: asbestos, yard waste, hazardous waste, Source Separated Recyclable Material, or any other Solid Waste which the Erie County Utilities Director has determined is unacceptable at the Landfill.

RULE 3: REQUIREMENT FOR SUBMISSION OF PLANS FOR SOLID WASTE DISPOSAL, TRANSFER, RECYCLING OR RESOURCE RECOVERY FACILITIES TO THE BOARD OF COUNTY COMMISSIONERS.

Any Person proposing to construct, enlarge, or modify any in-District solid waste transfer, disposal, recycling or resource recovery facility shall submit general plans and specifications for the proposed construction, enlargement or modification to the Board for a determination by that Board of whether those plans and specifications comply with the Plan.

No Person shall construct, enlarge or modify any solid waste transfer, disposal, recycling or resource recovery facility until general plans and specifications for the proposed construction, enlargement or modification have been approved by the Board as complying with the Plan.

This rule shall not apply to any facility described in Division (D) of Section 3734.53 of the Ohio Revised Code, which includes captive facilities and facilities exclusively for the disposal of wastes from the combustion of coal.

General plans and specifications shall be submitted to the attention of the Erie County Solid Waste District Coordinator, 554 River Road, Huron, Ohio 44839. All general plans and specifications shall be clearly marked as complying with the requirements of the Rule Number 3 and Section 343.01(G)(2) of the Revised Code.

RULE 4: ESTABLISHMENT AND OPERATION OF DISTRICT SOLID WASTE COLLECTION SYSTEM.

Except as herein provided, each Generator shall utilize the services of a Service Provider to collect the Solid Waste that it generates, OR Generator shall transport waste generated to the Erie County Sanitary Landfill for proper disposal.

No Person which is not a Service Provider shall provide Collection Services to Generators.

RULE 5: WAIVER FROM DESIGNATION

Any Person may request, in writing, that the District grant a waiver permitting the delivery of Solid Waste to a solid waste facility other than a solid waste facility designated in the Plan. All written waiver requests shall include such information and explanation as are required to demonstrate (1) that the requested waiver, if granted, is not inconsistent with the projections contained in the Plan and will not adversely affect the implementation and financing of the Plan as provided in the implementation schedule contained in the Plan; or (2) that the Solid Waste, which is the subject of the waiver request is exempt from delivery to a designated solid waste facility pursuant to applicable law or rules of the District. All such waiver requests shall be submitted to the Erie County Solid Waste Management District, attention: Solid Waste Coordinator, 554 River Road, Huron, Ohio 44839. All such waiver requests shall be clearly marked as complying with the requirements of this Rule Number 5 and Section 343.01(I)(2) of the Ohio Revised Code.

RESOLUTION NO. 197-3

RESOLUTION OF THE BOARD OF DIRECTORS OF THE SOLID WASTE MANAGEMENT DISTRICT OF ERIE COUNTY, OHIO, FOR THE PURPOSES OF ADOPTING A STRATEGY FOR ENFORCING THE ERIE COUNTY SOLID WASTE MANAGEMENT DISTRICT'S FACILITY DESIGNATION RULE.

The Board of Directors of the Erie County Solid Waste Management District of Erie County, Ohio met this 6th day of February , 1997 in

Special Session with the following members present:

Nancy McKeen, Harold Butcher, Thomas Ferrell

Mr. Ferrell introduced the following resolution and moved its adoption:

WHEREAS, the Erie County Solid Waste Management District, the "District," was established pursuant to O.R.C. 343.01 and 3734.52 for the purposes of preparing, adopting, submitting and implementing the Solid Waste Management Plan for the District, and for the purpose of providing for, or causing to be provided for, the safe and sanitary management of solid waste within all of the incorporated and unincorporated territory of the District that is protective of the public health safety and welfare; and

WHEREAS, the District's Board of Directors has determined that it is necessary to designate the Erie County Sanitary Landfill in order to assure adequate disposal capacity for solid waste generated within the District, as well as to assure that all solid waste generated within the District is disposed of in a safe and sanitary manner; and

WHEREAS, the Board of Directors adopted a Solid Waste Management Plan, the "Plan," that depends upon designation of the Erie County Sanitary Landfill for the implementation of an effective long-term plan that provides for the safe and sanitary management of solid waste generated within the District and, on December 27, 1993, said Plan was approved in order to be implemented by the Director of Ohio EPA; and

WHEREAS, the Board of Directors has adopted and published rules to implement the Plan's designation of the Erie County Sanitary Landfill, which rules require that all solid waste collected within Erie County must be delivered to the Erie County Sanitary Landfill; and

WHEREAS, the Board of Directors desires to implement a policy that all individuals, corporations, and commercial, industrial, and governmental entities subject to the rules adopted and published by the Board of Directors are in compliance therewith; and

WHEREAS, the Board of Directors desires to authorize the District, in conjunction with the Erie County Prosecutor, to take necessary or appropriate enforcement action to ensure compliance with the District's Plan and rules designating the Erie County Sanitary Landfill; NOW THEREFORE,

BE IT RESOLVED BY THE BOARD OF DIRECTORS OF THE ERIE COUNTY SOLID WASTE MANAGEMENT DISTRICT OF ERIE COUNTY, OHIO:

THAT, this Board hereby authorizes the District, in conjunction with the Erie County Prosecutor, to take necessary or appropriate enforcement action including, but not limited to the strategies identified in Exhibit "A" attached hereto, to ensure compliance with the District's Plan and rules designating the Erie County Sanitary Landfill.

THAT, this Board of Directors of the Erie County Solid Waste Management District hereby finds and determines that all formal actions relative to the adoption of this Resolution were taken in an open meeting of this Board; and that all deliberations of this Board and of its committees, if any, which resulted in formal action, were taken in meetings open to the public, in full compliance with applicable legal requirements, including Section 121.22 of the Revised Code.

M. F. Butcher seconded the motion for the adoption of said Resolution; and the roll being called upon its adoption, the vote resulted as follows:

Roll Call: Mr. Butcher - Aye, Mr. Ferrell-Aye, Mrs. McKeen-Aye

Adopted: February 6, 1997

CERTIFICATE

I, Patricia C. Tomazic, Secretary of the Board of Directors of the Erie County Solid Waste Management District, hereby do certify that the above is a true and correct copy of Resolution 197-3 adopted by said Board of February 6, 1997.

Patricia C. Tomazic Secretary
Board of Directors
Erie County Solid Waste Management District

2 List of Designated Facilities

Table 4-6 Facilities Currently Designated

Facility Name	Location		Facility Type
	County	State	
In-District			
Erie County Sanitary Landfill	Erie	Ohio	Landfill
		Ohio	
Out-of-District			
		Ohio	
Out-of-State			

The Erie County Sanitary Landfill located in Erie County Ohio is the Designated Facility for waste generated within The Erie County Solid Waste Management District.

CHAPTER 5 WASTE REDUCTION AND RECYCLING

Purpose of Chapter 5

As was explained in Chapter 1, a SWMD must have programs and services to achieve reduction and recycling goals established in the state solid waste management plan. A SWMD also ensures that there are programs and services available to meet local needs. The SWMD may directly provide some of these programs and services, may rely on private companies and non-profit organizations to provide programs and services, and may act as an intermediary between the entity providing the program or service and the party receiving the program or service.

Between achieving the goals of the state plan and meeting local needs, the SWMD ensures that a wide variety of stakeholders have access to reduction and recycling programs. These stakeholders include residents, businesses, institutions, schools, and community leaders. These programs and services collectively represent the SWMD's strategy for furthering reduction and recycling in its member counties.

Before deciding upon the programs and services that are necessary and will be provided, the policy committee performed a strategic, in-depth review of the SWMD's existing programs and services, recycling infrastructure, recovery efforts, finances, and overall operations. This review consisted of a series of 12 analyses that allowed the policy committee to obtain a holistic understanding of the SWMD by answering questions such as:

- Is the SWMD adequately serving all waste generating sectors?
- Is the SWMD recovering high volume wastes such as yard waste and cardboard?
- How well is the SWMD's recycling infrastructure being used/how well is it performing?
- What is the SWMD's financial situation and ability to fund programs?

Using what it learned, the policy committee drew conclusions about the SWMD's abilities, strengths and weaknesses, operations, existing programs and services, outstanding needs, available resources, etc. The policy committee then compiled a list of actions the SWMD could take, programs the SWMD could implement, or other things the SWMD could do to address its conclusions. The policy committee used that list to make decisions about the programs and services that will be available in the SWMD during the upcoming planning period.

After deciding on programs and services, the policy committee projected the quantities of recyclable materials that would be collected through those programs and services. This in turn allowed the policy committee to project its waste reduction and recycling rates for both the residential/commercial sector and the industrial sector (See appendix E for the residential/commercial sector and Appendix F for the industrial sector).

A. Solid Waste Management District's Priorities**Actions**

- Advertising Campaign- Up to \$75,000 annually throughout the planning period to have consistent messaging on recycling rules.
- Sheriff Litter Trailer- \$5,000 and increase 5% annually throughout the planning period per year. This will be a continuing program from previous planning period.
- G.R.E.E.N. Bean Community Trailer- \$1,000 and increase 5% over the planning period. This will be a continuing program from previous planning period.
- Debris Management Plan- \$25,000 annually for managing all types of waste/debris resulting from a disaster or significant emergency.
- Household Battery Collections (Drop-Off Sites) - \$30,000.00 annually increase of 5% annually throughout the planning period per year. Fund will be used to pay private contractor to collect, haul and properly dispose of batteries collected at drop-off sites throughout the county. This will be a continuing program from previous planning period.
- Household Hazardous Waste Collections- \$30,000.00 annually increase of 5% annually throughout the planning period per year. This will be a continuing program from previous planning period.
- Municipality Tire Credit- \$1,000 credit to each municipality in the District (\$16,000 total) for tire recycling to reduce the amount of roadside tires throughout the District. This will be a continuing program from previous planning period.
- Community Clean Up Grants- Up to \$10,000 in grant monies annually to local political subdivisions of Erie County Solid Waste District (\$160,000.00 total). This grant will allow municipalities to host their own clean up events. This will be a continuing program from previous planning period, with increased funds.
- Sheriff Litter Aide- \$150,000 annually
- The District provides funding to the Erie County Sheriff deputy's wages and fringes that operates the community service litter collection trailer not cover by grant fund from the Common Pleas Court. The District will also provide funding to the investigating and enforcing litter and related solid waste laws. The combined funding will be \$150,000.00 annually throughout the planning period. This will be a continuing program from previous planning period.

- Recycled Materials Grant- Up to \$250,000 annually to encourage the purchase of recycled-content products. This grant is offered to public and private entities.
- Revolving Loan Fund- Up to \$75,000 annually for businesses wishing to start a recycling program.

2. Priorities

- Advertising Campaign- Goals 2,3,4,5
- Sheriff Litter Trailer- Goal 2
- G.R.E.E.N. Bean Community Trailer- Goals 2,4
- Debris Management Plan- Goals 2,5
- Household Battery Collections (Drop-Off Sites) - Goal 5
- Household Hazardous Waste Collections- Goal 5
- Municipality Tire Credit- Goal 5
- Community Clean Up Grants- Goals 2,5
- Sheriff Litter Aide- Goal 2
- Recycled Materials Grant- Goals 3,4,5, 6, 8,9
- Revolving Loan Fund- Goals 1,2,3, 4, 5, 6,8, 7

B. Program Descriptions**Residential Recycling Infrastructure****Curbside Recycling Services****Table 5-1 Curbside Recycling Services**

ID#	Name of Curbside Service/Community Served	Service Provider	When Service Was/Will be Available
NCS1	Berlin Village	Republic Services	Existing
NCS2	Huron City	Republic Services	Existing

SC1	Bay View Village	Republic Services	Existing
SC2	Berlin Township	Republic Services	Existing
SC3	Castalia Village	Republic Services	Existing
SC4	Sandusky City	Republic Services/ US Rubbish	Existing
SC5	Florence Township	Republic Services	Existing
SC6	Groton Township	Republic Services	Existing
SC7	Margaretta Township	Republic Services	Existing
SC8	Milan Township	Republic Services	Existing
SC9	Milan Village	Republic Services	Existing
SC10	Oxford Township	Republic Services	Existing
SC11	Perkins Township	Republic Services	Existing
SC12	Vermillion Township	Republic Services	Existing
SC13	Huron Township	Republic Services	Existing

Drop-off Recycling Locations**Table 5-2 Drop-off Recycling Locations**

ID#	Name of Drop-off/Community Served	Service Provider	When Service was/will be Available
FTU1	Sandusky (Service Center)	Republic Services	Existing
FTU2	Sandusky Steel	Sandusky Steel	Existing
FTR1	Erie County Landfill	Republic Services	Existing
FTR2	Groton Township	Republic Services	Existing

FTR3	Margaretta Township	Republic Services	Existing
FTR4	Berlin Township	Scrap Yard	Existing
FTR5	Florence Township	Royal Oak Recycling	Existing

Commercial/Institutional Sector Reduction and Recycling Programs

The District currently offers the following programs to commercial businesses within the District:

- In person presentations
- Media resources
- Technical assistance with recycling programs
- Liaison with recycling companies
- Technical assistance with grant programs
- Surveys

New Strategies for Commercial Business Recycling:

In addition to the current programs offered by the District, during the planning period the District would like to offer the following to increase governmental agencies recycling:

- Sharing information on economic incentives provided by various recycling companies
- Share Information on the benefit of manufacturing with recycled products
- Provide information on energy saving projects
- District would like to establishing a revolving loan fund for commercial businesses

Industrial Sector Reduction and Recycling Programs

The District currently offers the following programs to commercial businesses within the District:

- In person presentations
- Media resources
- Technical assistance with recycling programs
- Liaison with recycling companies
- Technical assistance with grant programs
- Surveys

New Strategies for Commercial Business Recycling:

In addition to the current programs offered by the District, during the planning period the District would like to offer the following to increase governmental agencies recycling:

- Collaborating with industries through the Ohio Materials Marketplace
- District would like to establishing a revolving loan fund for industrial businesses
- Work with industries and consultants on waste assessments

Restricted/Difficult to Manage Wastes

Yard Waste- Privately owned compost facility located within the District open to residents for a charge.

Household Hazardous Waste- Annual collection operated by the District

Scrap Tires- Drop-off program at the Erie County Landfill funded with user fee.

Electronic Equipment- Utilization of local businesses providing electronic equipment recycling at no charge.

Lead-Acid Batteries- Drop off locations located throughout the county.

Appliances- Privately owned scrap yard accepts used/unwanted/non-working appliances.

Pharmaceuticals- Drop boxes located at police stations throughout the District.

Other Material Specific Programs

Food Waste- Privately owned compost facility located within the District open to residents for a charge.

Glass- Glass is accepted at District drop-off locations and through curbside recycling.

Funding/Grants

- **Improvement Grants-** Community Clean up Grants up to \$10,000 annually for municipalities that hold a clean-up collection event. Recycled Materials Grant- Up

to \$250,000 annually to encourage the purchase of recycled-content products. This grant is offered to public and private entities.

Other Funding/Grant Programs (list individually)**Economic Incentives**

Volume-Based Billing/Pay-As-You-Throw Trash Collection- Offered through private haulers.

Market Development Programs

- **Recycled Materials Grant-** Up to \$250,000 annually to encourage the purchase of recycled-content products. This grant is offered to public and private entities.

Feasibility Studies-

- As needed

Facilities

Materials Recovery Facilities/Recycling Centers- N/A

Landfills- Erie County Sanitary Landfill (not operated by the Solid Waste District)

Closed Facility Maintenance (Closure/Post-Closure Care)- N/A

Transfer Facilities- N/A

Composting Facilities- Privately owned and operated

Data Collection

- Annual survey

Outreach, Education, Awareness, and Technical Assistance

Web Page- [Solid Waste District / Recycling \(oh.gov\)](https://www.eriecountyohio.gov/solid-waste-district/recycling)

Resource Guide- Digital and hard copy available.

Education Provider- District Coordinator

Outreach and Marketing Plan

- **Residential Sector-** providing education and technical assistance.
- **Commercial/Institutional Sector-** providing education and technical assistance.
- **Industrial Sector-** providing education and technical assistance.
- **Political Leaders-** providing education and technical assistance.
- **Schools-** providing education and technical assistance.

Other Programs

Open Dumping/Litter Enforcement- Sheriff Litter Aide- The District provides funding to the Erie County Sheriff deputy's wages and fringes that operates the community service litter collection trailer not cover by grant fund from the Common Pleas Court. The District will also provide funding to the investigating and enforcing litter and related solid waste laws. The combined funding will be \$150,000.00 annually throughout the planning period.

Disaster Debris Assistance- \$25,000 annually for managing all types of waste/debris resulting from a disaster or significant emergency

Other- Revolving Loan Fund- Up to \$75,000 annually for businesses to start recycling programs.

C. Waste Reduction and Recycling Rates**1. Residential/Commercial Recycling in the District****Table 5-3 Residential/Commercial Waste Reduction and Recycling Rate**

Year	Projected Quantity Collected (tons)	Residential/Commercial WRR ¹ (%)
2020	28,152	29%
2021	28,715	29%
2022	29,289	30%
2023	29,875	31%
2024	30,472	31%
2025	31,082	32%

¹WRR = Waste Reduction and Recycling Rate

2. Industrial Recycling in the District**Table 5-4 Industrial Waste Reduction and Recycling Rate**

Year	Projected Quantity Collected (tons)	Industrial WRR ¹ (%)
2020	2,348	17%
2021	2,395	17%
2022	2,442	17%
2023	2,491	17%
2024	2,541	18%

2025	2,592	18%
------	-------	-----

*WRR = Waste Reduction and Recycling Rate

CHAPTER 6 BUDGET

Purpose of Chapter 6

Ohio Revised Code Section 3734.53(B) requires a solid waste management plan to present a budget. This budget accounts for how the SWMD will obtain money to pay for operating the SWMD and how the SWMD will spend that money. For revenue, the solid waste management plan identifies the sources of funding the SWMD will use to implement its approved solid waste management plan. The plan also provides estimates of how much revenue the SWMD expects to receive from each source. For expenses, the solid waste management plan identifies the programs the SWMD intends to fund during the planning period and estimates how much the SWMD will spend on each program. The plan must also demonstrate that planned expenses will be made in accordance with ten allowable uses that are prescribed in ORC Section 3734.57(G).

Ultimately, the solid waste management plan must demonstrate that the SWMD will have adequate money to implement the approved solid waste management plan. The plan does this by providing annual projections for revenues, expenses and cash balances.

If projections show that the SWMD will not have enough money to pay for all planned expenses or if the SWMD has reason to believe that uncertain circumstances could change its future financial position, then the plan must demonstrate how the SWMD will balance its budget. This can be done by increasing revenues, decreasing expenses, or some combination of both.

This chapter of the solid waste management plan provides an overview of the SWMD's budget. Detailed information about the budget is provided in Appendix O.

A. Overview of the SWMD's Budget

On average the District receives \$400,000-\$500,000 in revenues annually through generation fees. On average the District spends \$300,000-\$400,000 annually to provide recycling opportunities, education and litter law enforcement.

Throughout the previous planning period the district saw a consistent carryover quarter to quarter and year to year. This carryover was due to decreased expenditures:

- Reduction in staff, salary, HHW Collections and battery drop-offs
- Partnering with local entities to provide no cost workshops
- Fundraising and sponsorships to reduce cost for events
- Renewing expired contracts to reduce cost and locking in pricing

Going forward the District has implemented cost increase in funding for programing to spend down some of the excess carryover balance that it has accumulated throughout the years. These increases will give the District more options going forward. The total budgeted amount may not get spent every year. Program funding increases include:

- Community Clean Up Grants- \$2,500 annually per municipality to be increased to up to \$10,000 annually per municipality.
- Advertising- \$ 100 annually increased up to \$75,000 annually.
- Recycled Materials Grant- \$5,000 annually increased up to \$250,000 annually.
- Revolving loan fund- up to \$75,000 annually

B. Revenue

Overview of How Solid Waste Management Districts Earn Revenue

There are a number of mechanisms SWMDs can use to raise the revenue necessary to finance their solid waste management plans. Two of the most commonly used mechanisms are disposal fees and generation fees.

Before a SWMD can collect a generation or disposal fee it must first obtain approval from local communities through a ratification process. Ratification allows communities in the SWMD to vote on whether they support levying the proposed fee.

Disposal Fees (See Ohio Revised Code Section 3734.57(B))

Disposal fees are collected on each ton of solid waste that is disposed at landfills in the levying SWMD. There are three components, or tiers, to the fee. The tiers correspond to where waste came from – in-district, out-of-district, and out-of-state. In-district waste is solid waste generated by counties within the SWMD and disposed at landfills in that SWMD. Out-of-district waste is solid waste generated in Ohio counties that are not part of the SWMD and disposed at landfills in the SWMD. Out-of-state waste is solid waste generated in other states and disposed at landfills in the SWMD.

Ohio's law prescribes the following limits on disposal fees:

- The in-district fee must be at least \$1.00 and no more than \$2.00;
- The out-of-district fee must be at least \$2.00 and no more than \$4.00; and
- The out-of-state fee must be equal to the in-district fee.

Generation fees (see Ohio Revised Code Section 3734.573)

Generation Fees are collected on each ton of solid waste that is generated within the levying SWMD and accepted at either a transfer facility or landfill located in Ohio. The fee is collected at the first facility that accepts the SWMD's waste. There are no minimum or maximum limits on the per ton amount for generation fees.

Rates and Charges (see Ohio Revised Code Section 343.08)

The board of directors can collect money for a SWMD through what are called rates and charges. The board can require anyone that receives solid waste services from the SWMD to pay for those services.

Contracts (see Ohio Revised Code Sections 343.02 and 343.03)

The board of directors can enter into contracts with owners/operators of solid waste facilities or transporters of solid waste to collect generation or disposal fees on behalf of a SWMD.

Other Sources of Revenue

There are a variety of other sources that SWMDs can use to earn revenue. Some of these sources include:

- Revenue from the sale of recyclable materials;
- User fees (such as fees charged to participate in scrap tire and appliance collections);
- County contributions (such as from the general revenue fund or revenues from publicly-operated solid waste facilities (i.e. landfills, transfer facilities));
- Interest earned on cash balances;
- Grants;
- Debt; and
- Bonds.

1. Generation Fees

The District receives \$6 per ton as the generation fee.

2. Other Funding Mechanisms

User Fee- The District charges residents a user fee to recycle tires. This user fee is used to offset the cost of the tire recycling program.

Reimbursements- Annually the District partners with Erie MetroParks for an event to promote substantiality. For this event the District receives sponsorships from local businesses to offset the cost of the event.

Table 6-1 Summary of Revenue

Year	Disposal Fees	Generation Fees	Designation Fees	Other Revenue	Reimbursements	Enter Revenue Source C	Enter Revenue Source D	Enter Revenue Source E	Total Revenue
Reference Year									
2019	\$0	\$462,404	\$0	\$6,447	\$775	\$0	\$0	\$0	\$469,626
Planning Period									
2020	\$0	\$462,404	\$0	\$7,474	\$656	\$0	\$0	\$0	\$470,734
2021	\$0	\$462,404	\$0	\$7,698	\$873	\$0	\$0	\$0	\$470,975
2022	\$0	\$462,404	\$0	\$7,929	\$890	\$0	\$0	\$0	\$471,224
2023	\$0	\$462,404	\$0	\$8,167	\$908	\$0	\$0	\$0	\$471,479
2024	\$0	\$462,404	\$0	\$8,412	\$926	\$0	\$0	\$0	\$471,742
2025	\$0	\$462,404	\$0	\$8,664	\$945	\$0	\$0	\$0	\$472,013

Source(s) of Information: 2019 Quarterly Fee Reports
Sample Calculations: Ohio EPA formula

Assumptions:

Revenue should remain consistent throughout the planning period.

C. Expenses

Overview of How Solid Waste Management Districts Spend Money

Ohio's law authorizes SWMDs to spend revenue on 10 specified purposes (often referred to as the 10 allowable uses). All of the uses are directly related to managing solid waste or for dealing with the effects of hosting a solid waste facility. The 10 uses are as follows:

1. Preparing, monitoring, and reviewing implementation of a solid waste management plan.
2. Implementing the approved solid waste management plan.
3. Financial assistance to approved boards of health to enforce Ohio's solid waste laws and regulations.
4. Financial assistance to counties for the added costs of hosting a solid waste facility.
5. Sampling public or private wells on properties adjacent to a solid waste facility.
6. Inspecting solid wastes generated outside of Ohio and disposed within the SWMD.
7. Financial assistance to boards of health for enforcing open burning and open dumping laws, and to law enforcement agencies for enforcing anti-littering laws and ordinances.
8. Financial assistance to approved boards of health for operator certification training.
9. Financial assistance to municipal corporations and townships for the added costs of hosting a solid waste facility that is not a landfill.
10. Financial assistance to communities adjacent to and affected by a publicly-owned landfill when those communities are not located within the SWMD or do not host the landfill.

In most cases, the majority of a SWMD's budget is used to implement the approved solid waste management plan (allowable use 2). There are many types of expenses that a solid waste management district incurs to implement a solid waste management plan.

Examples include:

- salaries and benefits;
- purchasing and operating equipment (such as collection vehicles and drop-off containers);
- operating facilities (such as recycling centers, solid waste transfer facilities, and composting facilities);
- offering collection programs (such as for yard waste and scrap tires);
- providing outreach and education;
- providing services (such as curbside recycling services); and
- paying for community clean-up programs.

Table 6-2 Summary of Expenses

Expense Category	Year		Planning Period					
	Reference		2020	2021	2022	2023	2024	2025
Plan Monitoring/Prep	\$3,978		\$4,314	\$5,192	\$4,577	\$5,485	\$4,856	\$5,769
Personnel/Admin./O	\$60,415		\$55,770	\$55,780	\$57,453	\$59,177	\$60,952	\$62,781
Drop-Off Recycling	\$52,227		\$58,545	\$59,716	\$100,000	\$100,000	\$102,000	\$104,040
Tire Collection	\$3,478		\$6,600	\$22,732	\$23,187	\$23,650	\$24,123	\$24,606
HHW Collection	\$56,810		\$23,146	\$24,303	\$25,518	\$26,794	\$28,134	\$29,540
Education/Awareness	\$2,950		\$3,000	\$240,000	\$240,000	\$620,000	\$620,000	\$620,000
Recycling Market Development	\$0		\$0	\$50,000	\$50,000	\$310,000	\$310,000	\$310,000
Community Clean Up Grants	\$32,384		\$23,600	\$40,000	\$40,000	\$160,000	\$160,000	\$160,000
Local Law Enforcement	\$150,000		\$150,000	\$150,000	\$150,000	\$150,000	\$150,000	\$150,000
Emergency Debris Management	\$0		\$0	\$0	\$0	\$25,000	\$25,000	\$25,000
Total Expenses	\$362,242		\$324,984	\$647,723	\$690,735	\$1,480,106	\$1,485,065	\$1,491,736

Source(s) of Information: 2019 Quarterly Fee Report.

Assumptions: Throughout the previous planning period the district saw a consistent carry over quarter to quarter and year to year. This carryover was due to decrease in expenditures:

- Reduction in staff, salary, HHW Collections and battery drop-offs
- Partnering with local entities to provide no cost workshops
- Fundraising and sponsorships to reduce cost for events
- Renewing expired contracts to reduce cost and lock in pricing

Going forward the District has implemented cost increase in funding for programing to spend down some of the excess carryover balance that it has accumulated throughout the years. Program funding increases include:

- Community Clean Up Grants- \$2,500 annually per municipality to be increased to up to \$10,000 annually per municipality.
- Advertising- \$ 100 annually increased up to \$75,000 annually.
- Recycled Materials Grant- \$5,000 annually increased up to \$250,000 annually.
- Revolving loan fund- up to \$75,000 annually

D. Budget Summary

Table 6-3 Budget Summary

Year	Revenue	Expenses	Net Difference	Ending Balance
Reference Year				
2019	\$469,626	\$571,465	-\$101,838	\$1,647,119
Planning Period				
2020	\$470,499	\$435,630	\$34,870	\$1,738,545
2021	\$470,734	\$441,104	\$29,630	\$1,768,174
2022	\$470,975	\$448,343	\$22,632	\$1,790,807
2023	\$471,224	\$454,200	\$17,024	\$1,807,831
2024	\$471,479	\$461,883	\$9,596	\$1,817,426
2025	\$471,742	\$458,154	\$13,589	\$1,831,015

Source(s) of Information: Quarterly Fee Reports

Revenues should remain consistent, expenses will increase to add new programs to spend down excess carry over balance. The District would like to remain flexible as recycling conditions changes over the coming years.

E Alternative Budget

Purpose of an Alternative Budget

The budget that was described earlier in this section represents the policy committee's preferred and anticipated budget. However, there may be circumstances beyond the SWMD's control that make it difficult for the policy committee to confidently project the SWMD's future financial position. In those circumstances, the policy committee provides an alternative budget. That alternative budget demonstrates how the SWMD would adjust its financial strategy if circumstances significantly change the SWMD's financial position after the solid waste management plan is approved.

An alternative budget can address situations where the SWMD may not have enough money to implement the plan as well situations where the SWMD may have more money than anticipated.

Potential circumstances that warrant an alternative budget include:

- Uncertainties about the SWMD's ability to collect revenue from a funding source in the future/stability of the SWMD's sources of funding. An example is a SWMD that relies on a disposal fee and the only landfill within the SWMD may or may not close in six years;
- Lack of a clear historical trend to predict how much revenue the SWMD can

- expect to receive from a funding source;
- Uncertainties about how much revenue the SWMD will earn during the planning period;
 - Uncertainties about the future costs of planned programs; and
 - Programs the SWMD may or may not implement.

Having an alternative budget provides a SWMD with flexibility to alter its financial strategy without having to update its solid waste management plan sooner than required to. At the same time, the policy committee can present a solid waste management plan that demonstrates meeting all requirements needed to be approvable under uncertain circumstances.

In an alternative budget, a policy committee may:

- provide for a contingent funding source the SWMD will implement if an anticipated funding source becomes unavailable or doesn't generate revenue as projected;
- present reduced expenses in order to meet lower than projected revenue;
- identify and project costs for programs the SWMD will implement if revenue is higher than projected; or
- some combination of the previous options.

The alternative budget presented below is a summary of the policy committee's strategy for addressing uncertainty in the preferred budget. The alternative budget is described in more detail in Section C of Appendix O.

Table 6-4 Alternative Budget Summary

N/A

F. Major Facility Project

Purpose of a Budget for a Major Facility Project

SWMDs can own and operate solid waste management facilities, and a number already do. Other SWMDs include feasibility studies or strategies to build new or make renovations to existing facilities in their solid waste management plans.

The types of facilities solid waste management districts own and operate include landfills, transfer facilities, material recovery facilities, recycling centers, household hazardous waste collection centers, and composting facilities.

Solid waste facilities represent major financial undertakings that can result in substantial capital investments along with ongoing operating costs. For this reason, when the policy committee decides that the SWMD will develop a new or make extensive renovations to an existing solid waste management facility, the solid waste management plan provides a specific budget for that facility.

This chapter of the solid waste management plan provides a summary of the SWMD's major facility budget. The full details of the budget are provided in Section D of Appendix O.

N/A

APPENDIX A MISCELLANEOUS INFORMATION

Reference Year Planning Period Goal Statement Material Change in Circumstances Explanations of Differences in Data

A. Reference Year

The reference year for this solid waste management plan is 2019

B. Planning Period (first and last years)

The planning period for this solid waste management plan is: 2023 to 2038

C. Goal Statement

The SWMD will achieve the following Goal(s): Goal 2

D. Explanations of differences between data previously reported and data used in the solid waste management plan

a. Quantities of materials recovered between the annual district report and the solid waste management plan are different. In 2020 when collecting data for the 2019 annual district report the district did not get a response from many local haulers and scrap yards. During the planning period in 2021 the district received approval from OEPA to reach back out to haulers and scrap yards to try to get data, so we could accurately complete the plan. Republic Services (the major hauler in the District) was able to provide data because they had a new person in charge of our area that was willing to work with the district to provide this information. This Republic Services representative is now working closely with the district and will provide future data for annual reports. Sandusky Steel (large scrap yard in the District) also provided the district with data for the planning process that they did not provide for the annual district report.

b. The District reported pass through grants for the received Market Development Grants in the Quarterly Fee Reports. For this plan the District did not include the pass through grants as part of the final plan because these grants do not fund programs for the District and are not considered a revenue or an expense to the District.

APPENDIX B RECYCLING INFRASTRUCTURE INVENTORY

A. Curbside Recycling Services, Drop-Off Recycling Locations, and Mixed Solid Waste Materials Recovery Facilities

1. Curbside Recycling Services

Note: Table on next page

Appendix B Recycling Infrastructure Inventory

SC7	Margaretta Township	Erie	Private Hauler	Weekly	Cardboard, Paper, Metal/Aluminum, Plastic, Glass	Single Stream	Y	19	Y
SC6	Milan Township	Erie	Private Hauler	Weekly	Cardboard, Paper, Metal/Aluminum, Plastic, Glass	Single Stream	Y	36	Y
SC9	Milan Village	Erie	Private Hauler	Weekly	Cardboard, Paper, Metal/Aluminum, Plastic, Glass	Single Stream	Y		Y
SC10	Oxford Township	Erie	Private Hauler	Weekly	Cardboard, Paper, Metal/Aluminum, Plastic, Glass	Single Stream	Y		Y
SC11	Perkins Township	Erie	Private Hauler	Weekly	Cardboard, Paper, Metal/Aluminum, Plastic, Glass	Single Stream	Y		Y
SC12	Vermillion Township	Erie	Private Hauler	Weekly	Cardboard, Paper, Metal/Aluminum, Plastic, Glass	Single Stream	Y	4	Y
SC13	Huron Township	Erie	Private Hauler	Weekly	Cardboard, Paper, Metal/Aluminum, Plastic, Glass	Single Stream	Y		Y
SC14	Kelley's Island Village	Erie	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Total								318	

Page B-4

Appendix B Recycling Infrastructure Inventory

Table B-1a Inventory of Non-Subscription Curbside Recycling Services Available in the Reference Year										
ID #	Name of Curbside Service	Service Provider	County	How Service is Provided	Collection Frequency	Materials Collected ⁽¹⁾	Type of Collection	PAY T (Y/N)	Weight of Materials Collected from SWMD (tons)	Service will Continue Throughout Planning Period (Y/N)
NCS1	Berlin Village	Republic Services	Erie	Contract between political jurisdiction and private hauler.	weekly	Cardboard, Paper, Metal/Aluminum, Plastic, Glass	Single Stream	Y	23	Y
NCS2	Huron City	Republic Services	Erie	Contract between political jurisdiction and private hauler.	weekly	Cardboard, Paper, Metal/Aluminum, Plastic, Glass	Single Stream	Y	761	Y
Total									784	

Two municipalities participated in a non-subscription curbside recycling program for the 2019 reference year totaling 784 tons collected.

Page B-2

Appendix B Recycling Infrastructure Inventory

Twelve municipalities participated in a subscription curbside recycling program for the 2019 Reference Year, totaling 318 tons collected. Data for 5 municipalities was not reported by hauler.

Appendix B Recycling Infrastructure Inventory

Table B-1b Inventory of Subscription Curbside Recycling Services Available in the Reference Year										
ID #	Name of Curbside Service	County	How Service is Provided	Collection Frequency	Materials Collected ⁽¹⁾	Type of Collection	PAYT (Y/N)	Weight of Materials Collected from SWMD (tons)	Service will Continue Throughout Planning Period (Y/N)	
SC1	Bay View Village	Erie	Private Hauler	Weekly	Cardboard, Paper, Metal/Aluminum, Plastic, Glass	Single Stream	Y		Y	
SC2	Berlin Township	Erie	Private Hauler	Weekly	Cardboard, Paper, Metal/Aluminum, Plastic, Glass	Single Stream	Y	40	Y	
SC3	Castalia Village	Erie	Private Hauler	Weekly	Cardboard, Paper, Metal/Aluminum, Plastic, Glass	Single Stream	Y	19	Y	
SC4	Sandusky City	Erie	Private Hauler	Weekly	Cardboard, Paper, Metal/Aluminum, Plastic, Glass	Single Stream	Y	172	Y	
SC5	Florence Township	Erie	Private Hauler	Weekly	N/A	N/A	Y	N/A	N/A	
SC6	Groton Township	Erie	Private Hauler	Weekly	Cardboard, Paper, Metal/Aluminum, Plastic, Glass	Single Stream	Y	28	Y	

Page B-5

Page B-3

Table B-2c Inventory of Full-Time, Rural Drop-off Sites Available in the Reference Year

ID#	Name of Drop-off Site	Service Provider	County	How Service is Provided	Days and Hours Available to the Public	Materials Collected ⁽¹⁾	Drop-off Meets All Minimum Standards? (Y/N)	Weight of Materials Collected from the SWMD (tons)	Service will Continue Throughout Planning Period (Y/N)
FTR1	Erie County Landfill	Republic Services	Erie	Contract between SWMD and private hauler.	24hrs/7 days a week	Cardboard, Paper, Metal/Aluminum, Plastic, Glass	Y	337	Y
FTR2	Groton Township	Republic Services	Erie	Contract between SWMD and private hauler.	24hrs/7 days a week	Cardboard, Paper, Metal/Aluminum, Plastic, Glass	Y	409	Y
FTR3	Margaretta Township	Republic Services	Erie	Contract between Township and private hauler.	24hrs/7 days a week	Cardboard, Paper, Metal/Aluminum, Plastic, Glass	Y	697	Y
FTR4	Berlin Township	Scrap Yard	Erie	Contract between private organization and private hauler.	24hrs/7 days a week	Metal/Aluminum	N		Y
FTR5	Florence Township	Royal Oak Recycling	Erie	Contract between private	24hrs/7 days a week	Paper	N		Y

2. Drop-Off Recycling Locations

Table B-2a Inventory of Full-Time, Urban Drop-off Sites Available in the Reference Year

ID#	Name of Drop-off Site	Service Provider	County	How Service is Provided	Days and Hours Available to the Public	Materials Collected ⁽¹⁾	Drop-off Meets All Minimum Standards? (Y/N)	Weight of Materials Collected from the SWMD (tons)	Service will Continue Throughout Planning Period (Y/N)
FTU1	Sandusky (Service Center)	Republic Services	Erie	Contract between political jurisdiction and private hauler.	24hrs/7 days a week	Cardboard, Paper, Metal/Aluminum, Plastic, Glass	Y	312	Y
FTU2	Sandusky Steel	Sandusky Steel	Erie	Private Collector	8.5 hrs/5 days a week. 3.5 hours 1 day a week.	Cardboard, Paper, Metal/Aluminum	Y	3,840	Y
Total								4,152	

Two full time urban drop-off locations were operating in the 2019 Reference Year, 4,152 tons were collected. All materials collected were reported as creditable materials.

				organization and private hauler.					
Total								1,443	

Five total full-time rural drop-off sites were operating in the 2019 Reference Year. Of the five, three met the minimal drop-off standards. 1,443 tons were collected in the reference year.

Table B-2b Inventory of Part-Time, Urban Drop-off Sites Available in the Reference Year

ID#	Name of Drop-off Site	Service Provider	County	How Service is Provided	Days and Hours Available to the Public	Materials Collected ⁽¹⁾	Drop-off Meets All Minimum Standards? (Y/N)	Weight of Materials Collected from the SWMD (tons)	Service will Continue Throughout Planning Period (Y/N)
PTU1									
Total								0	

Zero part-time urban drop-off sites in the 2019 Reference Year.

B. Curbside Recycling and Trash Collection Service Providers

Table B-4 Inventory of Curbside Recycling and Trash Collection Service Providers in the Reference Year

Name of Provider	Counties Served	Trash Collection Services				Curbside Recycling Services			
		PAYT (Y/N)	Residential	Commercial	Industrial	Residential 2	Commercial 2	Industrial 2	
Republic Services	Erie	Y	X	X	X	X	X	X	
Cyclone	Erie	Y	X	X					
Rumpke	Erie			X			X		
U.S. Rubbish	Erie		X						
Waste Management	Erie				X				
Lake Disposal	Erie		X	X					
Ruffin	Erie		X						

Seven major haulers provide services within the District. One hauler provides recycling services to the residential sector.

Table B-2d Inventory of Part-Time, Rural Drop-off Sites Available in the Reference Year

ID#	Name of Drop-off Site	Service Provider	County	How Service is Provided	Days and Hours Available to the Public	Materials Collected ⁽¹⁾	Drop-off Meets All Minimum Standards? (Y/N)	Weight of Materials Collected from the SWMD (tons)	Service will Continue Throughout Planning Period (Y/N)
PTR1									
Total								0	

Zero part-time rural drop-off sites in the 2019 Reference Year.

C. Composting Facilities

Table B-5 Inventory of Composting Facilities Used in the Reference Year

Facility Name	Compost Facility Classification	Publicly Accessible (Y/N)	Location	Food Waste (tons)	Yard Waste (tons)	Total
Barnes Nursery and Compost	Division Class II and IV	Y	3511 West Cleveland Road Huron, OH	85	5,926	6,011
Sparky Weilnau Farms	Class IV	N	12917 Milan Rd. Milan, OH		300	300
Corso's Perennials	Class IV	N	4001 Bardshar Rd. Castalia, OH		761	761
Ninke Lawn Service	Class IV	N	1832 Milan Rd. Sandusky, OH		330	330
Sand Road Ent, Inc.			4352 Sand Rd, Norwalk, OH 44857		79	79
Total				85	7,395	7,481

Five composting facilities were operating in the 2019 Reference Year, a total of 7,402 tons were collected.

D. Other Food Waste and Yard Waste Management Programs

Table B-6 Inventory of Other Food and Yard Waste Management Activities in the Reference Year

Facility or Activity Name	Activity Type	Location	Food Waste (tons)	Yard Waste (tons)

3. Mixed Solid Waste Material Recovery Facilities

Table B-3 Mixed Solid Waste Material Recovery Facility

Name of Material Recovery Facility	Location (County, City)	Communities Served	Types of Materials Recovered ⁽¹⁾	Weight of Materials Recovered (tons)	Waste Processed (tons)	Bypass Waste (tons)	Total Waste (tons)	Recovery Rate in Reference Year (percent)
				0	0	0	0	0%
Total				0	0	0	0	0%

Sample Calculation:
Recovery Rate = Weight of Materials Recovered ÷ Total Waste x 100

Zero mixed solid waste material recovery facilities were operating in the District during the 2019 Reference Year.

APPENDIX D DISPOSAL DATA

A. Reference Year Waste Disposed

Table D-1a Waste Disposed in Reference Year – Publicly-Available Landfills (Direct Haul)¹

Facility Name	Location		Waste Accepted from the SWMD			
	County	State	Residential/Commercial (tons)	Industrial (tons)	Excluded (tons)	Total (tons)
Republic Services	Ottawa	OH	51	1,951		2,001
Republic Services	Lorain	OH				0
Waste Management - Evergreen	Wood	OH	120	9		129
Waste Management - American	Stark	OH		23		23
Sunny Farms	Seneca	OH				0
Cherokee Run Landfill	Logan	OH				0
Liberty Tire Recycling LLC	Stark	OH				0
Rumpke Harvard Road Transfer	Cuyahoga	OH	3			3
Wood County Landfill	Wood	OH	0			0
Erie County Landfill	Erie	OH	57,950	11,042	15,762	84,754
Total			58,124	13,025	15,762	86,910

¹ The facilities listed in Table D-1a and identified as able to accept waste from the SWMD (in Appendix M) will constitute those identified for purposes of Ohio Revised Code Section 3734.53(13)(a).

Source(s) of Information: 2019 Generation Fee Reports and 2019 Annual District Reports.

Sample Calculations: N/A

Assumptions: N/A

Erie County Solid Waste District has flow control in place, all acceptable solid waste generated within the District is required to be brought to the Erie County Landfill for disposal. All other listed facilities took waste that the Erie County Landfill does not accept, or have an approved exemption from the Board of Solid Waste.

Table D-1b Waste Disposed in Reference Year – Captive Landfills¹

Facility Name	Location		Waste Accepted from the District		
	County	State	Industrial (tons)	Excluded (tons)	Total (tons)
					0
					0
Total			0	0	0

¹ The facilities listed in Table D-1b and identified as able to accept waste from the SWMD (in Appendix M) will constitute those identified for purposes of Ohio Revised Code Section 3734.53(13)(a).

Source(s) of Information: N/A

Sample Calculations: N/A

Assumptions: N/A

Zero captive landfills.

Table D-1c Total Waste Disposed in Landfills (Direct Haul)

Residential/Commercial (tons)	Industrial (tons)	Excluded (tons)	Total
59,887	11,146	15,762	86,795

Table D-2: Waste Transferred in Reference Year¹

Facility Name	Location		Waste Received from the SWMD			
	County	State	Residential/Commercial (tons)	Industrial (tons)	Excluded (tons)	Total (tons)
Kelly's Island Transfer Station	Erie	Ohio	75			75
						0
Total			75	0	0	75

¹ The facilities listed in Table D-2 constitute those identified for purposes of Ohio Revised Code Section 3734.53(13)(a).

There is not transfer facility that takes waste out of the county. Kelley's Island does have a transfer facility on the island to collect waste and transfer it to the Erie County Landfill. Kelley's Island is an island located in Lake Erie, this island is only accessible by boat, or plane. There are no bridges to this island, which is why a transfer facility is a necessity. In 2019 75.11 tons were collected by the Kelley's Island Transfer Facility and transferred to the Erie County Landfill.

Source(s) of Information: N/A

Sample Calculations: N/A

Assumptions: N/A

Zero waste transferred

Table D-3: Waste Incinerated/Burned for Energy Recovery in Reference Year¹

Facility Name	Facility Type	Location		Waste Accepted from the SWMD			
		County	State	Residential/Commercial (tons)	Industrial (tons)	Excluded (tons)	Total (tons)
							0
							0
Total				0	0	0	0

¹ The facilities listed in Table D-3 constitute those identified for purposes of Ohio Revised Code Section 3734.53(13)(a).

Source(s) of Information: N/A

Sample Calculations: N/A

Assumptions: N/A

Zero waste incinerated/burned

Table D-4: Total Waste Disposed in Reference Year

	Residential/Commercial (tons)	Industrial (tons)	Excluded (tons)	Total (tons)
Direct Hauled	58,124	13,025	15,762	86,910
Transferred	75	0	0	75
Incinerated	0	0	0	0
Total	58,199	13,025	15,762	86,985

Appendix D Disposal Data

Percent of Total	67%	15%	18%	100%
------------------	-----	-----	-----	------

Source(s) of Information: 2019 Generation Fee Reports and 2019 Annual District Reports.

Sample Calculations: N/A

Assumptions: N/A

Direct hauled data for 2019 Reference Year.

Supplement to Table D-4 (Incinerated and Excluded Wastes as Percentages of Total Waste Disposed)

	Residential/ Commercial (tons)	Industrial (tons)	Excluded (tons)	Total (tons)
Direct Hauled	58,124	13,025	15,762	86,910
Transferred	75	0	0	75
Incinerated	0	0	0	0
Total	58,199	13,025	15,762	86,985
Percent of Total	67%	15%	18%	100%

Source(s) of Information: 2019 Generation Fee Reports and 2019 Annual District Reports.

Sample Calculations: N/A

Assumptions: N/A

Direct hauled data for 2019 Reference Year.

B. Historical Waste Analysis

Table D-5: Historical Disposal Data

		Residential/ Solid Waste	Commercial Solid Waste	Industrial Solid Waste	Excluded Waste	Total Waste
Year	Population	Rate (ppd)	Weight (tons)	Weight (tons) ²	Weight (tons) ³	Weight (tons) ⁴
2015	73,569	6.07	81,550	12,646	17,520	111,716
2016	75,107	6.42	88,032	12,883	14,773	115,688
2017	70,195	5.22	66,889	12,203	53,712	132,804

Page D-4

Appendix D Disposal Data

2018	74,615	6.01	81,819	12,665	45,400	139,884
2019	69,678	4.58	58,214	13,016	38,302	109,532

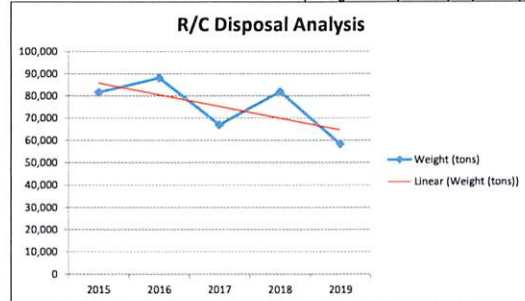
Source(s) of Information: <https://www.census.gov/> and 2019 Annual District Reports

Sample Calculations: OEPA Formula- Residential/Commercial Weight * 2,000/ 365/ Population

Assumptions: N/A

1. Residential/Commercial Waste

In the Reference Year 2019 residents were disposing of 4.58 pounds per person per day.

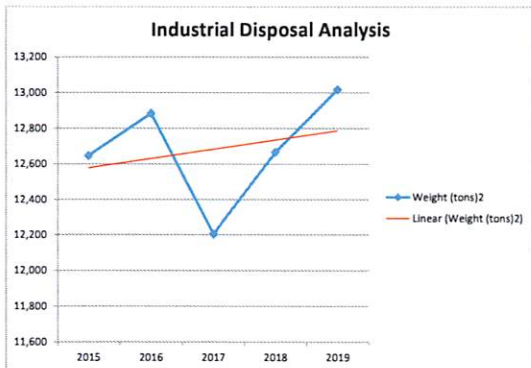


2. Industrial Waste

In the Reference Year 2019 industrial waste stayed consistent with previous years at 13,016 tons.

Page D-5

Appendix D Disposal Data

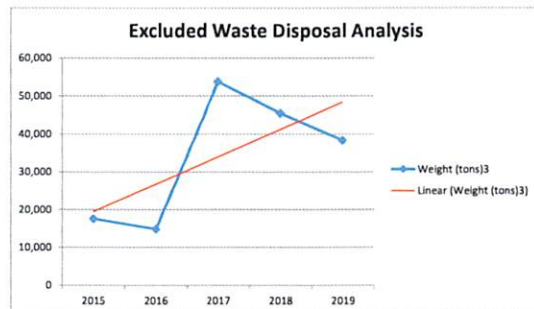


3. Excluded Waste

In the Reference Year 2019 the Erie County Landfill was continuing to use exempt waste from local projects as alternative daily cover. As projects come and go throughout the years this tonnage will fluctuate.

Page D-6

Appendix D Disposal Data



C. Disposal Projections

Note: table on next page

Page D-7

Table D-7 Waste Imports

Year	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037
Facility Name																							
Erie County Sanitary Landfill	53,758	60,472	62,410	29,901	24,297	26,757	26,985	26,985	26,985	26,985	26,985	26,985	26,985	26,985	26,985	26,985	26,985	26,985	26,985	26,985	26,985	26,985	26,985
Total Imports	53,758	60,472	62,410	29,901	24,297	26,757	26,985	26,985	26,985	26,985	26,985	26,985	26,985	26,985	26,985	26,985	26,985	26,985	26,985	26,985	26,985	26,985	26,985

Given the huge discrepancies in waste imported prior to 2017 and from 2018 onward, waste imports were projected at the average of imports from 2018 to 2020.

Source(s) of Information:

Sample Calculations:

Assumptions:

Data was provided by OEPA.

Table D-6 Projections for Waste to be Disposed and Transferred

Year	Residential/ Commercial Solid Waste	Industrial Solid Waste	Excluded Waste	Total Waste
	Weight (tons)	Weight (tons)	Weight (tons)	Weight (tons)
2019	59,887	11,146	15,762	86,795
2020	58,668	9,955	28,019	96,643
2021	70,195	11,319	20,000	101,514
2022	70,195	11,407	33,000	114,602
2023	70,195	11,495	28,000	109,690
2024	70,195	11,584	23,000	104,779
2025	67,575	11,674	18,000	97,249
2026	67,575	11,765	13,000	92,340
2027	67,575	11,856	8,000	87,431
2028	67,575	11,948	3,000	82,523
2029	67,575	12,040	100	79,715
2030	64,893	12,134	100	77,127
2031	64,893	12,228	100	77,221
2032	64,893	12,323	100	77,316
2033	64,893	12,418	100	77,411
2034	64,893	12,514	100	77,507
2035	61,985	12,611	100	74,696
2036	66,163	12,709	100	78,972
2037	65,626	12,808	100	78,534

Source(s) of Information: 2019 Annual Waste Summary

Sample Calculations: N/A

Assumptions:

Throughout the past years before the 2019 Reference Year both residential/commercial and industrial has not fluctuated a significant amount. Going forward the District has used the OEPA formula for predicting residential/commercial tonnage and industrial tonnage. The District used its own projections for the exempt waste. In the reference year 2019 the Erie County Landfill was continuing to use exempt waste from local projects as alternative daily cover. As projects come and go throughout the years this tonnage will fluctuate.

assumptions

Source(s) of information: Ohio EPA Reports

Agency	Agency Type	Agency Address	Agency Phone	Agency Fax	Agency Email	Agency Website	Agency Description	Agency Status	Agency Notes
1	2	3	4	5	6	7	8	9	10
11	12	13	14	15	16	17	18	19	20
21	22	23	24	25	26	27	28	29	30
31	32	33	34	35	36	37	38	39	40
41	42	43	44	45	46	47	48	49	50
51	52	53	54	55	56	57	58	59	60
61	62	63	64	65	66	67	68	69	70
71	72	73	74	75	76	77	78	79	80
81	82	83	84	85	86	87	88	89	90
91	92	93	94	95	96	97	98	99	100
101	102	103	104	105	106	107	108	109	110
111	112	113	114	115	116	117	118	119	120
121	122	123	124	125	126	127	128	129	130
131	132	133	134	135	136	137	138	139	140
141	142	143	144	145	146	147	148	149	150
151	152	153	154	155	156	157	158	159	160
161	162	163	164	165	166	167	168	169	170
171	172	173	174	175	176	177	178	179	180
181	182	183	184	185	186	187	188	189	190
191	192	193	194	195	196	197	198	199	200
201	202	203	204	205	206	207	208	209	210
211	212	213	214	215	216	217	218	219	220
221	222	223	224	225	226	227	228	229	230
231	232	233	234	235	236	237	238	239	240
241	242	243	244	245	246	247	248	249	250
251	252	253	254	255	256	257	258	259	260
261	262	263	264	265	266	267	268	269	270
271	272	273	274	275	276	277	278	279	280
281	282	283	284	285	286	287	288	289	290
291	292	293	294	295	296	297	298	299	300
301	302	303	304	305	306	307	308	309	310
311	312	313	314	315	316	317	318	319	320
321	322	323	324	325	326	327	328	329	330
331	332	333	334	335	336	337	338	339	340
341	342	343	344	345	346	347	348	349	350
351	352	353	354	355	356	357	358	359	360
361	362	363	364	365	366	367	368	369	370
371	372	373	374	375	376	377	378	379	380
381	382	383	384	385	386	387	388	389	390
391	392	393	394	395	396	397	398	399	400
401	402	403	404	405	406	407	408	409	410
411	412	413	414	415	416	417	418	419	420
421	422	423							

Reduction and Recycling Data

Appendix E Residential/Commercial Waste

Reduction and Recycling Data

Appendix E Residential/Commercial Waste

This data was requested by the District to recycling factors within the District. The data reflected in the chart is the data of the recycling factors that participated in the 2019 Annual Survey.

suogduysey

Sample Calculations: N/A

Source(s) of information: 2018 Annual Survey

Program and/or Source of Materials/Class Goods*	Aggravated* Violence	Explosives	Lethal/Al	Bioterror	Food	Class	Revised Materials	Non- Materials	Cardboard	All Other Paper	Plastics	Textiles	Wood	Rubber	Commingled (Stamps)	VA
Biobacks																
Scrap Yards	250		50													
Sanitary Items Culinary Supplies	250							240	3,500							
Bricklars																
Proclamation/Memo's																
(Un)altered Tokens	200	0	50	0	0	0	0	240	3,500	0	0	0	0	0	0	0
Adjusted Tokens	200								3,500							

Reduction and Recycling Data

Appendix E Residential/Commercial Waste

100

Assurance: Nil

Samuel C. Johnson

Source(s) of information: 2019 Annual District Survey Results

This data was requested by the District to commercial businesses within the District. The data reflected in the chart is the data of the commercial businesses that participated in the 2019 Annual Survey.

Table E-6 Quantities Recovered by Program/Source

Program/Source of R/C Recycling Data	Quantities Recovered by Program/Source (Tons)
Commercial Survey	486
Data from Other Recycling Facilities	0
Ohio EPA Commercial Retail Data	1,793
Curbside Recycling Services	318
Drop-off Recycling Locations	1,755
Composting Facilities	7,461
Other Food and Yard Waste Management Activities	415
Ohio EPA Scrap Tire Data	942
Household Hazardous Waste Collection	16
Community Clean Up Collections	27
Total	13,212

Source(s) of information: 2019 Annual District Report

Sample Calculations: N/A

Assumptions: N/A

B. Historical Recovery

Table E-7 Historical Residential/Commercial Recovery by Program/Source

Year	Commercial Survey	Onsite Data from Recycling Facilities	Ohio EPA Commercial Retail Data	Curbside Recycling Services	Drop-off Recycling Locations	Composting Facilities	Other Food and Yard Waste Management Activities	Ohio EPA Scrap Tire Data	Household Hazardous Waste Collection
2015	18,129			1,335	1,190			44	4
2016	9,926			1,476	372	15,619		17	5
2017	24,920			3	515			56	10
2018	24,478			3	1,729	7,461	415	947	16
2019	0	1,793	208	1,729	7,461	415	947	16	

Source(s) of information: 2015-2019 Annual District Reports

Sample Calculations: N/A

Assumptions

[illegible]

Source(s) of information: 2019 Annual District Report.

Sample Calculations: N/A

Assumptions

Totals of recycling tonnage in the 2019 Reference Year based on 2019 Annual District Report

For the 2019 Reference Year the District saw a low participation in the 2019 Annual District Survey. The District believes this was due to the COVID-19 Pandemic. The COVID-19 Pandemic caused a shut down to the majority of commercial businesses during the time when the survey was due back to the District.

Table E-5 Residential/Commercial Material Recovered in Reference Year

Material	Quantity (tons)
Appliances "White Goods"	260
Household Hazardous Waste	10
Used Motor Oil	0
Electronics	0
Scrap Tires	942
Dry Cell Batteries	3
Lead-Acid Batteries	83
Food	579
Glass	0
Ferrous Metals	0
Non-Ferrous Metals	283
Corrugated Cardboard	5,348
All Other Paper	200
Plastics	37
Textiles	0
Wood	0
Rubber	0
Commingled Recyclables (Mixed)	2,114
Yard Waste	7,402
Other (Aggregated)	0
Total	17,261

Source(s) of information: Combination of 2019 commercial survey results, data from scrap yards, CEPA data, and other programs.

Sample Calculations: N/A

Assumptions:

Residential/commercial recycling tonnage for 2019 Reference year 42,261

C. Residential/Commercial Recovery Projections

Table: E-8 Residential/Commercial Recovery Projections by Program/Source

Year	Commercial Survey	Data from Recycling Facilities	Circular Economy Initiatives	Drop-off Recycling Locations	Composting Programs	Other Food Waste Activities	Organic Food Waste	Household Clean Up	Community Cleanups	Totals
2019	482	0	1,742	318	1,755	7,461	415	842	16	12,312
2020	465	1	1,809	318	1,760	7,810	425	842	27	12,312
2021	478	1	1,856	318	1,812	7,918	440	842	38	13,772
2022	516	1	1,903	318	1,862	7,918	440	899	16	14,508
2023	526	2	1,941	318	1,900	8,078	449	1,019	16	14,285
2024	548	2	2,019	318	1,978	8,402	461	1,061	17	14,855
2025	558	2	2,059	318	1,978	8,402	478	1,062	17	15,160
2026	568	2	2,101	318	2,058	8,742	488	1,104	17	15,461
2027	589	2	2,143	318	2,098	9,082	498	1,146	17	15,762
2028	604	2	2,185	318	2,139	9,395	508	1,148	17	16,071
2029	616	2	2,274	318	2,226	9,462	528	1,184	18	16,382
2030	616	2	2,274	318	2,226	9,462	528	1,184	18	16,382
2031	634	2	2,316	318	2,268	9,529	548	1,220	18	16,693
2032	654	2	2,413	318	2,362	10,042	558	1,268	18	17,395
2033	654	2	2,413	318	2,362	10,042	558	1,268	18	17,395
2034	664	2	2,461	318	2,409	10,242	568	1,293	18	17,748
2035	667	2	2,461	318	2,409	10,242	568	1,293	18	17,748
2036	684	2	2,503	318	2,451	10,442	578	1,318	18	18,059
2037	684	2	2,503	318	2,451	10,442	578	1,318	18	18,059
2038	684	2	2,503	318	2,451	10,442	578	1,318	18	18,059
2039	684	2	2,503	318	2,451	10,442	578	1,318	18	18,059
2040	684	2	2,503	318	2,451	10,442	578	1,318	18	18,059
2041	684	2	2,503	318	2,451	10,442	578	1,318	18	18,059
2042	684	2	2,503	318	2,451	10,442	578	1,318	18	18,059
2043	684	2	2,503	318	2,451	10,442	578	1,318	18	18,059
2044	684	2	2,503	318	2,451	10,442	578	1,318	18	18,059
2045	684	2	2,503	318	2,451	10,442	578	1,318	18	18,059
2046	684	2	2,503	318	2,451	10,442	578	1,318	18	18,059
2047	684	2	2,503	318	2,451	10,442	578	1,318	18	18,059
2048	684	2	2,503	318	2,451	10,442	578	1,318	18	18,059
2049	684	2	2,503	318	2,451	10,442	578	1,318	18	18,059
2050	684	2	2,503	318	2,451	10,442	578	1,318	18	18,059

Source(s) of Information: 2019 Annual District Report

Sample Calculations:
Commercial, Drop-off, Food/Yard waste, Composting, - 2% increase throughout the planning period
Household Hazardous Waste, 1% increase throughout the planning period
Source: California Department of Resources, 1994. The information was obtained by the researchers for this study.

community clean up grants: 10% increase throughout the planning period.

APPENDIX F INDUSTRIAL WASTE REDUCTION AND RECYCLING DATA

A. Reference Year Recovery Data

Note: table on next page

Appendix F: Industrial Waste Reduction and Recycling Data

Table F-1 Industrial Survey Results

[illegible]

Source(s) of Information: 2019 Annual District Survey Results.

Source(s) of information: N/A

Assumptions: N/A

This data was requested by the District to industrial businesses within the District. The data reflected in the chart is the data of the industrial businesses that participated in the 2019 Annual Survey.

Table F-2 Data from Other Recycling Facilities

Program and/or Source of Materials Data	Food	Glass	Ferrous Metals	Non-Ferrous Metals	Commingled Recyclables (Mixed)	All Other Paper	Plastics	Textiles	Wood	Rubber	Commingled Recyclables (Mixed)	Ash	Non-Excluded Foundry Sand	Flue Gas Desulfurization Waste	Other
Recycling															
Scrap Yard															
Scrap Yard Steel															
Crashway Brothers															
Shelburne															
Producers Refractories															
Unadjusted Totals	0	0	25,000	0	25,000	0	0	0	0	0	0	0	0	0	0
Adjustments	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Adjusted Totals	0	0	25,000	0	25,000	0	0	0	0	0	0	0	0	0	0

Source(s) of Information: 2019 Annual Survey

Sample Calculations: Ash

Assumptions: N/A

The data was requested by the District for recycling facilities within the District. The data included in the chart is the data of the recycling facilities that participated in the 2019 Annual Survey.

Page F-3

Table F-3 Other Recycling Programs/Other Sources of Data

Other Recycling Programs or Other Sources of Data	Food	Glass	Ferrous Metals	Non-Ferrous Metals	Corrugated Cardboard	All Other Paper	Plastics	Textiles	Wood
Rumpke Waste Recycling-Columbus		15	22	297	6,718	1,512	25		20
Waste Management Recycling-Columbus					19,384				
Unadjusted Total	0	15	22	297	26,102	1,512	25	0	20
Adjustments	0	0	0	0	0	0	0	0	0
Adjusted Total	0	15	22	297	26,102	1,512	25	0	20

Unadjusted Total	Adjustments	Adjusted Total
8,609		8,609
19,384		19,384
27,993	0	27,993
0		
27,993		

These totals should match

Source(s) of Information: OEPA Sent data.

Sample Calculations: N/A

Assumptions: N/A

Table F-4 Industrial Material Recovered in Reference Year

Material	Quantity (tons)
Food	260
Glass	982
Ferrous Metals	151
Non-Ferrous Metals	270
Corrugated Cardboard	67

Page F-4

All Other Paper	25,011
Plastics	240
Textiles	3,666
Wood	0
Rubber	23
Commingled Recyclables (Mixed)	0
Ash	620
Non-Excluded Foundry Sand	0
Flue Gas Desulfurization	1
Other (Aggregated)	58
Total	31,349

Source(s) of Information: Combination of 2019 commercial survey results, data from scrap yards, OEPA data, and other programs.

Sample Calculations: N/A

Assumptions:

Industrial recycling tonnage for 2019 Reference year 31,349

Table F-5 Quantities Recovered by Program/Source

Program/Source of Industrial Recycling Data	Quantity (Tons)
Industrial survey	2,169
Data from other recycling facilities	0
	0
	0
	0
	0
	0
	0
	0
	0
	0
	0
	0
	0
	0

Page F-5

0	0
0	0
0	0
0	0
Total	2,169

Page F-6

B. Historical Recovery

Table F-6 Historical Industrial Recovery by Program/Source

Year	Industrial survey	Data from other recycling facilities	Totals
2015	10,006		10,006
2016	1,278		1,278
2017	43,493		43,493
2018	15,819		15,819
2019	2,169	0	2,169

Source(s) of Information: 2015-2019 Annual District Reports

Sample Calculations: N/A

Assumptions:

For the 2019 Reference Year the District saw a low participation in the 2019 Annual District Survey. The District believes this was due to the COVID-19 pandemic. The COVID-19 pandemic caused a shut down to a lot of industrial businesses during the time when the survey was due back to the District. The District believes that out of the industrial businesses that were operating during the pandemic that they were short staffed and other tasks took priority over the survey.

Table: F-7 Industrial Recovery Projections by Program/Source

Year	Industrial survey	Data from other recycling facilities	Totals
2019	2,169	0	2,169
2020	2,212		2,212
2021	2,256		2,256
2022	2,302		2,302
2023	2,348		2,348
2024	2,395		2,395
2025	2,442		2,442
2026	2,491		2,491
2027	2,541		2,541
2028	2,592		2,592
2029	2,644		2,644
2030	2,697		2,697
2031	2,751		2,751
2032	2,806		2,806
2033	2,862		2,862
2034	2,919		2,919
2035	2,977		2,977
2036	3,037		3,037
2037	3,098		3,098

Source(s) of Information: 2019 Annual District Report

Sample Calculations:
2% increase throughout the planning period.

Assumptions:
Consistent increase of 2% with more industrial businesses moving to "green models".

APPENDIX G WASTE GENERATION

A. Historical Year Waste Generated

Table G-1 Reference Year and Historical Waste Generated

Year	Population	Residential/ Commercial				Industrial			Excluded (tons)	Total (tons)
		Disposed (tons)	Recycled (tons)	Generated (tons)	Per Capita Generated (ppd)	Disposed (tons)	Recycled (tons)	Generated (tons)		
2015	73,569	81,550	20,702	102,252	7.62	12,646	10,006	22,652	17,520	142,424
2016	75,107	88,032	9,926	97,958	7.15	12,883	1,278	14,161	14,773	126,892
2017	70,195	66,889	38,409	105,298	8.22	12,203	43,493	55,696	53,712	214,706
2018	74,615	81,819	25,061	106,880	7.85	12,665	15,819	28,484	45,400	180,764
2019	69,678	58,199	17,261	75,459	5.93	13,025	55,162	68,186	15,762	159,408

Annual % Change (tons)		
Residential/ Commercial	Industrial	Excluded
-	-	-
-4%	-37%	-16%
7%	293%	264%
2%	-49%	-15%
-29%	139%	-65%

Source(s) of Information: Ohio EPA

Sample Calculations:

Page G-1 |

Appendix G Waste Generation

Per capita generation rate = ((tons generated x 2000) + 365) + population)
Annual percentage change = ((New year – old year) + old year) x 100

Assumptions: N/A

1. Residential/Commercial Waste

In the 2019 reference year the District saw a d in recycling tonnage and a decrease in disposed tonnage.

2. Industrial Waste

In the 2019 reference year the District saw a large increase in recycling tonnage and a slight increase in disposed tonnage.

3. Excluded Waste

In the reference year 2019 the Erie County Landfill was continuing to use exempt waste from local projects as alternative daily cover. As projects come and go throughout the years this tonnage will fluctuate.

B. Generation Projections

Table G-2 Generation Projections

Year	Population	Residential/ Commercial				Industrial			Excluded Waste (tons)
		Disposed (tons)	Recycled (tons)	Generated (tons)	Per Capita Generated (ppd)	Disposed (tons)	Recycled (tons)	Generated (tons)	
2019	68,746	58,124	19,487	77,611	6.19	13,025	30,162	43,186	15,762
2020	68,312	58,668	13,472	72,140		9,955	2,212	12,167	28,019
2021	70,333	70,195	13,373	83,932		11,319	2,256	13,575	20,000
2022	72,355	70,195	14,008	84,203		11,407	2,302	13,709	33,000
2023	74,378	70,195	14,285	84,480		11,495	2,348	13,843	28,000

Page G-2 |

Appendix G Waste Generation

2024	76,402	70,195	14,567	84,762		11,584	2,395	13,979	23,000
2025	65,762	67,575	14,855	82,430		11,674	2,442	14,116	18,000
2026	67,788	67,575	15,150	82,725		11,765	2,491	14,256	13,000
2027	69,815	67,575	15,451	83,026		11,856	2,541	14,397	8,000
2028	71,843	67,575	15,758	83,333		11,948	2,592	14,540	3,000
2029	73,872	67,575	16,071	83,646		12,040	2,644	14,684	100
2030	63,152	64,893	16,392	81,285		12,134	2,697	14,831	100
2031	65,183	64,893	16,720	81,613		12,228	2,751	14,979	100
2032	67,215	64,893	17,054	81,947		12,323	2,806	15,129	100
2033	69,248	64,893	17,396	82,289		12,418	2,862	15,280	100
2034	71,282	64,893	17,746	82,639		12,514	2,919	15,433	100
2035	60,322	61,985	18,103	80,088		12,611	2,977	15,588	100
2036	64,388	66,163	18,669	84,632		12,709	3,037	15,746	100
2037	63,866	65,626	18,433	84,469		12,808	3,098	15,906	100

Source(s) of Information: 2019 Annual District Report

Sample Calculations: Per capita generation rate = ((tons generated x 2000) + 365) + population)

Assumptions:

Throughout the past years before the 2019 reference year both residential/commercial and industrial has not fluctuated a significant amount. Going forward the District has used the OEPA formula for predicting residential/commercial tonnage and industrial tonnage. The District used its own projections for the exempt waste. In the reference year 2019 the Erie County Landfill was continuing to use exempt waste from local projects as alternative daily cover. As projects come and go throughout the years this tonnage will fluctuate.

Page G-3 |

C. Waste Composition

Table G-3 Composition of Residential/Commercial Waste

Material	Percent of Total Generation ¹	Year													
		2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030		
Paper and newspaper ²	23.10	13443	135	162	162	162	156	156	156	158	149	149	149	143	152
Glass	4.20%	2444	324	410	410	410	399	399	399	383	383	383	383	383	383
Ferrous	6.60%	3941	387	463	463	463	445	445	445	445	428	428	428	428	428
Aluminum	1.30%	7563	762	912	912	912	878	878	878	878	843	843	843	805	860
Other Nonferrous	0.90%	89227	523	631	631	631	608	608	608	608	584	584	584	557	595
Plastics	12.20	7100	715	856	856	856	825	825	825	824	791	791	791	756	807
Rubber	3.10%	1804	181	217	217	217	209	209	209	209	201	201	201	192	205
Leather	3.72	3829	382	464	464	464	446	446	446	446	428	428	428	428	428
Textiles	5.80%	3375	340	407	407	407	391	391	391	391	376	376	376	359	383
Wood	6.20%	3608	363	435	435	435	418	418	418	418	403	403	403	384	408
Other	1.50%	8879	880	105	105	105	101	101	101	101	973	973	973	929	992

Appendix H Strategic Evaluation

amount of material collected is expected to change relative to population changes. According to the Ohio County Indicators Report from the Ohio Department of Development, Office of Statistical Research, Huron's population: 7,184 in 2010, 6,895 in 2018, and 6,869 in 2019 or -0.4% per year. Assuming this same growth factor applies throughout the planning period, the annual growth in materials recovered through curbside recycling in Huron will also decrease by -0.4% per year.

- 721 tons of recyclables collected in 2014 (2015 Solid Waste Plan Reference Year).
- 761 tons of recyclables collected in 2019 (2020 solid waste plan reference year).

This is a 5.5% increase in the tonnage collected from previous reference year to current reference year. The District estimates the city of Huron's curbside recycling program at 741 tons annually (approximate average of 2015-2019 tonnages).

Village of Berlin Heights curbside recycling program

The village of Berlin Heights is expected to continue its curbside recycling program throughout the planning period. Since the village's non-subscription program is available to all residents, amount of material collected is expected to change relative to population changes. According to the Ohio County Indicators Report from the Ohio Department of Development, Office of Statistical Research, Village of Berlin Heights' population: 714 in 2010, 716 in 2018, and 713 in 2019 or 0% per year. Assuming this same growth factor applies throughout the planning period, the annual growth in materials recovered through curbside recycling in the Village of Berlin Heights should remain the same.

- 23 tons of recyclables collected in 2019 (2020 Solid Waste Plan Reference Year).

The District estimates the village of Berlin Heights curbside recycling program at 23 tons annually.

Benchmark for Non-subscription Curbside Program- the District will be evaluating the City of Huron's and the Village of Berlin Heights non-subscription curbside service against similar services in other SWMDs. If other services have higher recovery rates and/or, better participation, then there may be opportunities to apply findings to Huron and Berlin Heights' service to achieve similar results.

ID #	Name of Curbside Service	Service Provider	County	How Service is Provided	Collection Frequency	Materials Collected ⁽¹⁾	Type of Collection	PA Y/N	Weight of Materials Collected from SWMD (tons)	Service will Continue Throughout Planning Period (Y/N)
------	--------------------------	------------------	--------	-------------------------	----------------------	------------------------------------	--------------------	--------	--	--

Page H-3

Appendix H Strategic Evaluation

NCS1	Berlin Village	Republic Services	Erie	Contract between political jurisdiction and private hauler.	weekly	Cardboard, Paper, Metal/Aluminum, Plastic, Glass	Single Stream	N	23	Y
NCS2	Huron City	Republic Services	Erie	Contract between political jurisdiction and private hauler.	weekly	Cardboard, Paper, Metal/Aluminum, Plastic, Glass	Single Stream	N	761	Y
Total									784	

New Strategies for Non-Subscription Curbside Recycling

Any interested municipality in the Erie County Solid Waste District can ask the district for technical assistance regarding request for bidding documents, and contract documents to move forward with non-subscription curbside recycling. The District will be encouraging municipalities to keep all existing non-subscription curbside programs that are operated under the district open for the 2020 Solid Waste Plan duration. The District will encourage and provide technical assistance to the largest municipality in the District (city of Sandusky) to move forward with non-subscription curbside recycling if the resident demand is high.

Subscription Curbside Recycling

Erie County residents in the city of Sandusky, Perkins Township, Milan Township, village of Milan, Berlin Township, village of Berlin Heights, village of Bay View, Margaretta Township, Vermilion Township, Groton Township, Huron Township and the village of Castalia currently have subscription curbside recycling services available. Subscription curbside recycling in Erie County collected a total 617 tons during the previous reference year (2014) and 318 tons were collected in current reference year (2019) for the above mentioned municipalities. The decrease in subscription curbside was due to price increase throughout the county from an average of \$55 per quarter to \$83 per quarter.

In the previous Plan, the Erie County Solid Waste Management District Policy Committee set the following goal:

1. To provide recycling to 90% of the residential population by 2016 by updating the District's Service Provider Agreements and the Solid Waste Rules to require all trash hauling service providers in Erie County to provide non-subscription curbside recycling. If non-subscription curbside recycling results in unreasonable rates and charges for trash hauling service, as determined in the sole discretion of the District,

Page H-4

Appendix H Strategic Evaluation

the District reserves the right to amend the Service Provider Agreements to require subscription curbside recycling instead.

The District did not reach the 2016 goal; however, the District did increase recycling opportunities to the residents of Erie County by 39%.

ID #	Name of Curbside Service	County	How Service is Provided	Collection Frequency	Materials Collected ⁽¹⁾	Type of Collection	PA Y/N	Weight of Materials Collected from SWMD (tons)	Service will Continue Throughout Planning Period (Y/N)
SC1	Bay View Village	Erie	Private Hauler	Weekly	Cardboard, Paper, Metal/Aluminum, Plastic, Glass	Single Stream	N		Y
SC2	Berlin Township	Erie	Private Hauler	Weekly	Cardboard, Paper, Metal/Aluminum, Plastic, Glass	Single Stream	N	40	Y
SC3	Castalia Village	Erie	Private Hauler	Weekly	Cardboard, Paper, Metal/Aluminum, Plastic, Glass	Single Stream	N	19	Y

Page H-5

Appendix H Strategic Evaluation

SC4	Sandusky City	Erie	Private Hauler	Weekly	Cardboard, Paper, Metal/Aluminum, Plastic, Glass	Single Stream	N	172	Y
SC5	Florence Township	Erie	Private Hauler	Weekly	N/A	N/A	N	N/A	N/A
SC6	Groton Township	Erie	Private Hauler	Weekly	Cardboard, Paper, Metal/Aluminum, Plastic, Glass	Single Stream	N	28	Y
SC7	Margaretta Township	Erie	Private Hauler	Weekly	Cardboard, Paper, Metal/Aluminum, Plastic, Glass	Single Stream	N	19	Y
SC8	Milan Township	Erie	Private Hauler	Weekly	Cardboard, Paper, Metal/Aluminum, Plastic, Glass	Single Stream	N	36	Y
SC9	Milan Village	Erie	Private Hauler	Weekly	Cardboard, Paper, Metal/Aluminum, Plastic, Glass	Single Stream	N		Y
SC10	Oxford Township	Erie	Private Hauler	Weekly	Cardboard, Paper, Metal/Aluminum, Plastic, Glass	Single Stream	N		Y

Page H-6

SC11	Perkins Township	Erie	Private Hauler	Weekly	Cardboard, Paper, Metal/Auminum, Plastic, Glass	Single Stream	N		Y
SC12	Vermilion Township	Erie	Private Hauler	Weekly	Cardboard, Paper, Metal/Auminum, Plastic, Glass	Single Stream	N	4	Y
SC13	Huron Township	Erie	Private Hauler	Weekly	Cardboard, Paper, Metal/Auminum, Plastic, Glass	Single Stream	N		Y
SC14	Kelley's Island Village	Erie	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Total								318	

New Strategies for Subscription Curbside Recycling:

The district will continue to seek out opportunities to bring new recycling haulers to the district along with working with current haulers to encourage providing services to more municipalities.

Benchmark for Subscription Curbside Program- the District will be evaluating the subscription curbside service against similar services in other SWMDs. If other services have higher recovery rates and/or, better participation, then there may be opportunities to apply findings to service to achieve similar results.

2. Commercial/Institutional Sector Analysis

Goal #1 Infrastructure — the SWMD shall ensure that there is adequate infrastructure to give residents and commercial businesses opportunities to recycle solid waste.

School Recycling:

Two school districts (5 buildings) reported that they have a recycling program for the 2019 Reference Year. A total of 44.78 tons of recycled materials were collected from the districts in 2019. In the previous Reference Year a total of 8 school buildings were participating in the program with a total of 25.70 tons collected. Seeing a 42% increase in school recycling due to vendor changes. The district would like to see a 2% increase through the planning period.

The District currently offers the following programs to schools within the District:

- SMART Board lessons
- Virtual field trips
- In person presentations
- Media resources
- Technical assistance with recycling programs

New Strategies for School Recycling:

In addition to the current programs offered by the District, during the planning period the District will be offering the following to increase school recycling:

- Sharing information on economic incentives provided by various recycling companies.
- Offer teacher workshops to provide educational tools to teacher on rules of recycling.
- Sharing information and providing technical assistance with available grants for recycling programs.

Benchmark for School Recycling Program- the District will be evaluating school recycling programs in other SWMDs. If other schools have higher participation, then there may be opportunities to apply findings to service to achieve similar results.

Government Agencies:

Five government buildings reported recycling programs for the 2019 Reference Year. A total of 153.76 tons of recycled materials were collected from these buildings.

The District currently offers the following programs to governmental agencies within the District:

- In person presentations
- Media Resources
- Technical assistance with recycling programs

New Strategies for Governmental Agency Recycling:

In addition to the current programs offered by the District, during the planning period the District will be offering the following to increase governmental agencies recycling:

- Sharing information on economic incentives provided by various recycling companies.
- Sharing information and providing technical assistance with available grants for recycling programs.

Benchmark for Governmental Agency Recycling- the District will be evaluating the government agency recycling against similar services in other SWMDs. If other services have better participation, then there may be opportunities to apply findings to service to achieve similar results.

Commercial Business Recycling:

Although it is likely that a great deal more commercial recycling occurred than was reported on the District's survey, waste haulers and commercial businesses reported that 19,077.90 tons of commercial waste was recycled in the 2019 Reference Year. This is an increase of 2% from the previous reference year. The District will keep this projected increase and a 2% increase will be added for the remainder of the planning period.

The District currently offers the following programs to commercial businesses within the District:

- In person presentations
- Media resources
- Technical assistance with recycling programs
- Liaison with recycling companies
- Technical assistance with grant programs
- Surveys

New Strategies for Commercial Business Recycling:

In addition to the current programs offered by the District, during the planning period the District will be offering the following to increase commercial recycling:

- Sharing information on economic incentives provided by various recycling companies.
- Share information on the benefit of manufacturing with recycled products
- Provide information on energy saving projects
- District would like to establishing a revolving loan fund for commercial businesses

Benchmark for Commercial Recycling-the District will learn how other SWMDs that have higher response rates to surveys and investigate other communication avenues achieve those results

3 Industrial Sector Analysis

Goal #5 Waste Reduction and Recycling Rates - the SWMD shall incorporate strategic initiative for the industrial sector into its solid waste management plan.

Although it is likely that a great deal more industrial recycling occurred than was reported on the District's survey, waste haulers and industrial businesses reported that 2,655.50 tons of industrial waste was recycled in the 2019 reference year. This is a decrease of 97% from the previous reference year. The District would like to see a projected increase and a 2% increase will be added for the remainder of the planning period. The most recycled materials were ferrous metals and cardboard.

The District currently offers the following programs to commercial businesses within the District:

- In person presentations
- Media resources
- Technical assistance with recycling programs
- Liaison with recycling companies
- Technical assistance with grant Programs
- Surveys

New Strategies for Commercial Business Recycling:

In addition to the current programs offered by the District, during the planning period the District will be offering the following to increase governmental agencies recycling:

- Collaborating with industries through the Ohio Materials Marketplace
- District would like to establishing a revolving loan fund for industrial businesses
- Work with industries and consultants on waste assessments

Benchmark for Industrial Recycling-the District will learn how other SWMDs that have higher response rates to surveys and investigate other communication avenues achieve those results

4. Residential/Commercial Waste Composition Analysis

Goal #2- The SWMD shall reduce and recycle at least 25 percent of the solid waste generated by the residential/ commercial sector.

Appendix H Strategic Evaluation

In the 2019 Reference Year the District met the requirements of Goal #2 by achieving at 25% reduction and recycling rate for residential/commercial sector.

Year	Population	Recycled	Disposed	Total Generated	Waste Reduction & Recycling Rate (%)
2019	68,746	19,487	58,199	77,686	25.08%

For the planning period the District would like to opt in to achieving goal #2 vs. goal #1. The rate of 25% has been consistent over the last several years.

Yard Waste:

In the 2019 Reference Year the District reported 7,427.66 tons diverted from the landfill. This is a 99% increase from the previous reference year. Factors that contributed to the increase in yard waste diversion include:

- Increase in funding of Community Clean Up Grant monies for municipalities
- City of Huron curbside yard waste program
- District maintaining close partnerships with local yard/composting facilities

New Strategies for Yard Waste:

In addition to the current programs offered by the District, during the planning period the District will be offering the following to divert yard waste from the landfill by:

- Increase in funding of Community Clean Up Grant monies for municipalities from \$2,500 to up to \$10,000 yearly
- Promote/Advertise yard waste collections using media outlets

Food Waste Composting:

In the 2019 Reference Year the District reported 414.80 tons diverted from the landfill. This is a 95% decrease from the previous reference year. Factors that contributed to the decrease in composting diversion include:

- Lack of survey reporting
- Lack of infrastructure and tools to provide residential/commercial food composting

New Strategies for Food Waste Composting:

In addition to the current programs offered by the District, during the planning period the District will be offering the following to divert food waste from the landfill by:

- Partnering with local agencies to provide composting workshops
- Sharing information and providing technical assistance with available grants for recycling programs.

Fiber:

In the 2019 Reference Year the District reported 1839.77 tons diverted from the landfill through recycling. This is a 70% decrease from the previous reference year. Factors that contributed to the decrease in fiber recycling:

- Market conditions- cost of recycling cardboard and paper increased by an average of 85%.
- Lack of recycling haulers in the district
- Closure of Oxford Township Drop-Off recycling bin due to illegal dumping

New Strategies for Fiber Recycling:

Appendix H Strategic Evaluation

In addition to the current programs offered by the District, during the planning period the District will be offering the following to increase fiber recycling:

- The District will continue to seek out opportunities to bring new recycling haulers to the district along with working with current haulers to encourage providing services to more municipalities.

Benchmark for Residential/Commercial Waste Composition Analysis -the District will learn how other SWMDs have a higher participation and recycle rate and investigate how to implement those programs for similar results.

5. Economic Incentive Analysis

Goal #7 Economic Incentives- the SWMD shall explore how to incorporate economic incentives into source reduction and recycling programs.

The District currently meets the requirements of Goal #6 through:

1. Emphasize the importance of non-subscription curbside recycling programs.
2. Promote pay-as-you-throw programs.
3. Advocate programs such as Recycle Bank to local political subdivisions looking to start curbside recycling.
4. Utilizing curbside recycling programs that use carts (or similar containers used for automation).

New Strategies:

The District will meet the requirement of Goal #6 through implementation of the following new strategies:

1. The District will continue to seek out opportunities to bring new recycling haulers to the district along with working with current haulers to encourage providing services to more municipalities.
2. In partnership with Erie County Regional Planning establish a Revolving Loan Fund for Commercial Businesses/Institutions/Industries to create a recycling program at their facility and/or address a specific material. The District will talk to several SWMD that currently have this available to model the program.
3. Utilizing online surveys for all surveys to make the process easier and more likely for anyone to fill out.

Appendix H Strategic Evaluation

Benchmark for Economic Incentive Analysis -the District will attend workgroup meetings with other SWMD to learn about opportunities for programs that provide economic incentives and may incorporate these incentives to existing programs.

6. Restricted and Difficult to Manage Waste Streams Analysis

Goal #6-The SWMD shall provide strategies for managing scrap tires, yard waste, lead-acid batteries, household hazardous waste, and obsolete/end-of-life electronic devices.

Tires

For the Reference Year 2019 941.85 tons of tires were collected throughout the District. These tires were collected through community clean-ups, District drop-off program and private sectors. The District's tire management strategy will include maintaining a list of legal scrap tire recycling and disposal opportunities, and the continuation of the tire recycling program at the Erie County Sanitary Landfill.

The tire recycling program at the Erie County Sanitary Landfill is funded through a user fee. Below is a chart with the cost charged to residents recycling tires at the Erie County Sanitary Landfill. The program is self-sufficient with revenues and expenses nearly balancing.

Passenger Tires- \$3.00 without rim	Passenger Tires- \$4.00 with rim
Light Truck Tires- \$5.50 without rim	Light Truck Tires- \$6.50 with rim
Semi- Truck Tires- \$16.00 without rim	Semi- Truck Tires- \$25.00 with rim
Tractor Tires- \$220.00 without rim	No rims accepted

To estimate annual scrap tire recycling the average 941.85 will be used as the reference year and 2% increases will be projected throughout the planning period. The District may consider a subsidy to this program is needed to help incentivize tire collections.

Yard Waste

Yard waste recovery figures vary widely from year to year depending on weather, economic conditions and the accuracy of reporting. Since these variables cannot be predicted, the SWMD will use averages from the Annual District Reports from 2014 to 2019 residential/commercial yard waste figures and compare the Barnes Regional Compost Facility reports and land application averaged numbers reported by cities, villages and townships from 2014 to 2019 throughout the planning period.

In the 2019 Reference Year the District reported 7,427.66 tons

Land Application of Yard Waste

There is no data that this occurred for the reference year and will not be projected through the planning period. Drop-off of yard waste is publicly-available Barnes Regional Composting Facility. The District's cities, villages and some townships provide pickup of leaves and brush for their residents, then chip and/or land apply the material.

Lead Acid Batteries

Lead acid batteries and yard waste are banned from disposal at the Erie County landfill, and all landfills in Ohio. Recycling opportunities are readily available at area scrapyards, automotive service businesses and the Erie County landfill for lead-acid batteries.

Lead acid battery generation has remained fairly constant at 1% residential/commercial waste generation for several years according to the US EPA report: Municipal Solid Waste in the United States: 2019 Facts & Figures. Therefore, generation throughout the planning period will be assumed to remain fairly constant also. The District will use the 1% increase to calculate through the planning period.

Household Hazardous Waste

The District previously held one day collections for Household Hazardous Waste (HHW) five times per year from June- October. In 2020, the District revamped the program to hold one annual collection. This was due to the cost of the program and the low participation. Since the new system has been in place; the attendance, materials, and cars are steady. In 2019, the District held one HHW Collection. The collection materials totaled 16 tons with 153 cars in attendance costing the District \$24,908.71

The District will use 16 tons throughout the planning period. The purpose for these collections is to minimize the amount and the District statistics are showing that we are starting to plateau for this material.

Electronics

In 2020, the District promoted Goodwill Industries, Staples, and Best Buy's programs for electronic waste. Therefore, the District will not include any electronic waste collection in current projections.

Batteries

In 2009, the District revamped the battery program to pay a contractor to pick up 12 sites throughout Erie County on a regular basis. Currently the district still operates under this programs but as reduced the number of battery recycling sites to 6 locations due to cost and participation.

All Restricted Solid Wastes

The District will continue to maintain a list of legal recycling opportunities for restricted wastes and publish in the recycling guide and Web site information on the proper management of these restricted wastes.

Benchmark for Restricted and Difficult to Manage Waste Streams Analysis -the District will learn how other SWMDs manage difficult/restricted waste. The District will research how other Districts provide funding and programing for these waste streams. The District may apply the findings to improve or change current programs.

7. Diversion Analysis

In the 2019 Reference Year the District met the requirements of Goal #2 by achieving at 25% reduction and recycling rate for residential/commercial sector.

In the 2019 Reference Year the District met the requirements of Goal #2 by achieving at 25% reduction and recycling rate for residential/commercial sector.

Year	Population	Recycled	Disposed	Total Generated	Waste Reduction & Recycling Rate (%)
2019	68,746	19,487	58,124	77,611	25.11%

For the planning period the District would like to opt in to achieving goal #2 vs. goal #1. The rate of 25% has been consistent over the last several years.

For the planning period the District would like to opt in to achieving goal #2 vs. goal #1. The rate of 25% has been consistent over the last several years. The materials that make up the largest amounts of recyclables in the District are yard waste and non-ferrous metals.

Benchmark for Diversion Analysis -the District compare waste reduction and recycling rate with other SWMD and analysis programs that more successful districts have in place. The District may use these findings to improve/enhance current programs.

8. Special Program Needs Analysis**Litter Law Enforcement**

The District provides funding to the Erie County Sheriff deputy's wages and fringes that operates the community service litter collection trailer not cover by grant fund from the Common Pleas Court. The District will also provide funding to the investigating and enforcing litter and related solid waste laws. The combined funding will be up to \$150,000.00 annually throughout the planning period. The following MOU will be used starting in 2025 when current MOU is expired.

MEMORANDUM OF UNDERSTANDING

THIS MEMORANDUM OF UNDERSTANDING (MOU), made and entered into by and between the Solid Waste Management District of Erie County, Ohio, hereinafter referred to as "SWMD" and the Erie County Sheriff, hereinafter referred to as "Sheriff", on this ____ day of _____.

WHEREAS, the SWMD on the 27th day of June, 2017, adopted Resolution No. 117-1, amending the Solid Waste Management Plan section VIII.B., to provide funding to the Sheriff for litter monitoring and law enforcement efforts throughout the County, including in and around Erie County's active landfill site located at 10102 Hoover Rd. in Milan Township, according to Ohio Revised Code sections 3734.57(G)(4) and (7);

NOW THEREFORE, in consideration of the mutual covenants and promises herein set forth, the parties hereto understand as follows:

Section 1. TERM

This MOU shall commence on the 1st day of January, and remain in effect through December 31, . The MOU can be automatically renewed in three year increments upon written, or otherwise, approval by both parties prior to the expiration of an existing term.

Section 2. FUNDING

The SWMD agrees to remit to the Sheriff, up to one hundred fifty thousand dollars (\$150,000.00) per calendar year, no later than December 31 each year. The Sheriff shall provide an invoice each year for such services outlined in Section 3. The SWMD Coordinator, County Administrator, and the Sheriff or his designee shall determine the annual amount.

Section 3. DUTIES OF THE SHERIFF

In consideration of the contributions received from the SWMD, the Sheriff agrees to provide an enhanced effort to enforce anti-littering laws and ordinances throughout Erie County, and in and around the County's active landfill site. These efforts include, but is not limited to:

- investigating illegal dump sites and filing appropriate criminal charges against those responsible for illegal dumping; and/or
- patrolling for, and taking appropriate enforcement actions against vehicle operators with unsecured loads; and/or
- monitoring vehicles operated by waste haulers transferring solid waste from Huron county Transfer station to the Erie County Landfill to ensure loads are carried by those vehicles are properly secured; and/or

-investigating general litter complaints received throughout Erie County and taking appropriate enforcement actions at the conclusion of the investigation

The Sheriff will assemble and supervise community service workers to provide litter clean-up duties throughout Erie County, and in and around the active landfill site.

The Sheriff will provide annual reports to the SWMD to document the services provided under this MOU.

Section 3. Deposit of Moneys and Record Keeping The Grantee agrees to maintain detailed records itemizing specifically:

- any monies disbursed to it under this Agreement,
- the purpose for which any such moneys are expended, and
- the balance of any such moneys that remain unexpended (those unexpended moneys, for the purpose of this Agreement, being deemed to constitute and hereinafter referred to as the "Solid Waste Assistance Account").

All books, records and materials, financial or otherwise, pertinent to the financial assistance provided by the District to the Sheriff under this Agreement shall upon reasonable notice by the Board of Directors or any authorized representative thereof be available for inspection by the Board of Directors or any authorized representative thereof, including without limitation the Coordinator of the District. The Board of Directors or its representative shall, at the cost and expense of the District, be entitled to make, or to receive upon reasonable request, copies of those records. The provisions of this Section 3 shall survive the termination of this Agreement.

Section 4. EQUIPMENT –

Notice of Purchase, Ownership and Use; Disposition and Insurance 4.01 The Sheriff shall notify the District promptly in writing of the use by the Sheriff of any monies disbursed to the Sheriff under this Agreement to purchase equipment. That notice shall include a description of the equipment, the manufacturer's serial or other identification number, the date of purchase, the name of the seller or supplier of the equipment, the cost of the equipment and the portion of the purchase price of the equipment paid or reimbursed from monies disbursed to the Sheriff under this Agreement.

4.02 The Sheriff shall be the owner of any equipment purchased by the Sheriff with monies disbursed to it under this Agreement. The proportionate use by the County Sheriff of any equipment purchased in whole or in part with monies disbursed to the Sheriff under this Agreement for the performance of the Statutory Purposes, on average over any one-year period that the equipment is owned by the Sheriff, shall not be less than the percentage of the purchase price of that equipment paid or reimbursed from any such monies.

4.03 The Sheriff shall not sell or otherwise transfer ownership of any equipment purchased in whole or in part with monies disbursed to the Sheriff under this Agreement without giving prior notice in writing to the District of the proposed sale or transfer and obtaining permission for same from the District. Any such equipment may be traded by the Sheriff for equipment of equal or greater value, provided that the equipment acquired shall be deemed to have been purchased with monies disbursed to the Sheriff under this Agreement to the extent of the value of the equipment traded that is allocable to the expenditure of monies disbursed to the Sheriff under this Agreement for its purchase and shall be subject to the terms and provisions of this Agreement. The Sheriff may sell any equipment purchased in whole or in part with monies disbursed to the County under this Agreement, provided that the proceeds of that sale, to the extent of any monies disbursed to the Sheriff under this Agreement that were used or are deemed to have been used in accordance with the preceding sentence to purchase that property, shall be paid to the District or, with the prior written consent of the District, may be used for any purpose within the scope of the Statutory Purposes.

SECTION 6. LIABILITY INDEMNIFICATION

The Sheriff agrees and acknowledges that the Board of Directors, any committee or subcommittee of the Board of Directors, the District, all officers, employees and agents of the foregoing (collectively the "Indemnitees"), shall not be liable for losses, penalties, damages, settlements, costs or liabilities of any kind or character arising out of or in connection with any acts or omissions of the Sheriff, negligent or otherwise, or of its employees, officers, agents or independent contractors including without limitation any damages or costs, including attorney's fees, or other

expenses incurred in defending against any action arising out of any such act or omission and that the Sheriff shall indemnify and hold the Indemnitees harmless from the same.

SECTION 7. TERMINATION: Repayment to the District 7.01 Either the District or the Sheriff may terminate this Agreement at its option and discretion, with or without cause, by providing not fewer than 30 days written notice to the other party. Upon receipt by the Sheriff or the giving by the Sheriff of any such notice of termination, Sheriff shall not incur any additional obligations, and shall use its best efforts to cancel any obligations previously incurred.

7.02 The Sheriff shall repay to the District, on the effective date of any termination, the balance in the Solid Waste Account subject to the provisions below. The Sheriff may retain a portion of the balance in the Solid Waste Assistance Account equal to any amount which is encumbered for the payment of no cancelable obligations properly incurred by the Sheriff for the performance of the Grant Purposes prior to its receipt or giving of notice of termination, provided however that the Sheriff shall provide to the District a complete accounting of any such amounts including the names and contact information for the relevant contracting parties. If the Sheriff shall retain any portion of the Solid Waste Account under this Section 7, the Sheriff shall waive any and all claims it may have against the District or the Board of Directors with reference to the obligation for which it retains sums and the Sheriff hereby agrees to hold the District and Board of Directors harmless from any liabilities arising under such obligations. The provisions of this Section 7.02 shall survive the termination of this Agreement.

7.03 The Sheriff shall repay the District all sums received pursuant to this program if the District determines the monies have not been used in compliance with the program purposes. All sums used in a non-conforming manner will be repaid to the District within thirty (30) days of the Sheriff's receipt of the Districts written demand for the same.

Section 8. MISCELLANEOUS

This MOU may be changed only by an instrument in writing signed by both parties.

No waiver of any breach shall affect or alter this MOU, but each and every covenant, agreement, term and condition of this MOU shall continue in full force and effect.

This MOU constitutes all promises, conditions, inducements and understandings between the SWMD and the Sheriff.

In the event any term or provision of this MOU shall for any reason be held invalid, illegal, or unenforceable, such invalidity, illegality or unenforceability shall not affect any other term or provision herein. This MOU shall be governed by the laws of the State of Ohio.

IN WITNESS THEREOF, the parties have executed this MOU in duplicate, this ____ day of _____,

Signed in the presence of:

SOLID WASTE MANAGEMENT
DISTRICT OF ERIE COUNTY, OHIO

ERIE COUNTY SHERIFF

APPROVED AS TO FORM:

Assistant Prosecuting Attorney

Sheriff Litter Trailer

In 2016, the District purchased a litter trailer for the Sheriff's Office to use with inmates that have minor offenses to pick up litter along Erie County's roadsides, public lands, and waterways.

In the 2019 reference year the Sheriff Litter Trailer collected 2.19 tons of litter, and put in 265.25 collection hours. Estimated 1% increase will be added for the remainder of the planning period.

Disaster Debris Management

The District has worked with Erie County Emergency Management Agency to create the Erie County Debris Management Resource Book. The information contained within this Resource Book is intended to assist local officials responsible for all or a portion of the issues relating to managing all types of waste/debris resulting from a disaster of significant emergency. Removal, reduction, recycling, temporary sites, contracting and disposal data as well as points of contact

The Erie County Solid Waste Management District plans to allocate \$25,000.00 annually throughout the planning period for managing all types of waste/debris resulting from a disaster or significant emergency. The funding is only available after an emergency declaration has been made by the Board of Commissioners of Erie County where the disaster took place. The Board of Erie County Solid Waste Management District is not required to call a special session of the Board to activate funding.

Other District Funded Programs:

- **Community Clean up Grants-** in the 2019 Reference year the District offered local political subdivisions of Erie County Solid Waste District a \$2,500 grant to aid with their community's recycling collection. A total of 48.85 tons was collected from eleven out of the sixteen municipalities for the 2019 Reference Year. Going forward the District would like to offer up to \$10,000 in grant monies annually to local political subdivisions of Erie County Solid Waste District. With the increase in funds a projected 10% increase of tonnage collected will be added for the remainder of the planning period.

- **Recycled Material Grant-** in the 2019 Reference year the District offered \$5,000 annually in grant form as a Recycled Materials Grant to encourage the purchase of recycled-content products. This grant is offered to public and private entities.

Going forward the District would like to offer up to \$250,000.00 in grant monies annually to public and private entities within Erie County Solid Waste District.

- **Tire Credit-** in the 2019 Reference year the District offered local political subdivisions of Erie County Solid Waste District an annual \$1,000 credit for tire recycling to reduce the amount of roadside tires throughout the District. Going forward the District would like to keep the tire credit at \$1,000 annually for each local political subdivisions of Erie County Solid Waste District.
- **Household Hazardous Waste Collection-** the District previously held one day collections for Household Hazardous Waste (HHW) five times per year from June- October. In 2020, the District revamped the program to hold one annual collection each year in October. This was due to the cost of the program and the low participation. Since the new system has been in place; the attendance, materials, and cars are steady. In 2019, the District held one HHW Collection. The collection materials totaled 16 tons with 153 cars in attendance costing the District \$24,908.71

The District will use 16 tons throughout the planning period. The purpose for these collections is to minimize the amount of HHW throughout the District and the District statistics are showing that we are starting to plateau for this material.

- **GREEN Bean-** in the 2019 Reference Year, the G.R.E.E.N. Bean provided 140 volunteers the necessary tools to pick up 3,840 pounds of litter and 14 tires along Erie County's roadsides, public lands, and waterways. Throughout the planning period the District will continue to purchase materials needed to supply the GREEN Bean annually.

The Board of Solid Waste will have the authority to add and remove programs as they see fit throughout planning period.

Benchmark for Special Program Needs Analysis -the District will investigate how other SWMDs manage contracts with sheriff's departments and the sheriffs' responsibilities under those contracts. The District will identify strategies for incorporating behavior change techniques into education and outreach programs.

9. Financial Analysis

District Disposal Fees (ORC Section 3734.57(B))

The District does not currently collect or propose to collect District Disposal Fee at the Erie County Landfill.

Generation Fees (ORC Section 3734.573)

The District currently collects a \$6.00 per ton generation fee on solid waste generated within the Solid Waste District and disposed in landfills located within the State of Ohio. The generation fee is charged only on solid waste, not exempt waste, and only on waste disposed in Ohio, not out-of-state. Therefore to determine the amount of waste subject to the generation fee exempt waste projections and estimated out-of-state disposal amounts are subtracted from total waste disposal projections to determine the amount of waste subject to generation fees annually.

The District will remain at \$6.00 per ton of waste generated throughout the planning period. The Board reserves the right to raise or lower the fees depending on the needs of the District. Program funding may fluctuate between line items depending on the focus of the Board of Directors deem necessary.

Summary of District Revenues

The District is currently funded by 1) a \$6.00 per ton generation fee, 2) a contract with the Erie County Landfill on out-of-District solid waste to remit the difference between \$2.00 per ton and the originating-District's fee (if any) to the Erie County SWMD, and 3) grant funds from various sources.

Beginning in the reference year 2019, the District funds plan implementation throughout the planning period with 1) generation fees and 2) contract fees from the existing contract with the Erie County Landfill on out-of-District solid waste. The amount of revenue from contract fees is estimated at 3% of the annual tonnage.

As previously stated the District is unsure of the amount of grant funding that will be applied for annually and does not need to rely on grants to maintain operation of the District therefore the amount will not be shown.

Cost to the District

Throughout the planning period, the District will incur expenses for office and staff, plan preparation at five-year intervals, and the following activities and programs.

- District Coordinator
- Office supplies
- Office overhead
- Travel
- Repairs and maintenance
- Equipment

- Plan update
- SWMD drop-off program
- Special events
- Outreach & marketing
- Advertising
- Sheriff litter trailer
- G.R.E.E.N. Bean Community Trailer
- Debris Management Plan
- Community grants
- Household Battery Collection
- Household Hazardous Waste Collections
- Municipality tire credit
- Sheriff litter aide
- Recycled Materials Grant
- Revolving Loan Fund
- Community Clean Up Grants

The following projections have been made regarding these activities:

**The Board will meet annually to determine the amount for each line item. **

- District Coordinator
 - \$34,095.88 (\$22.61 per hour x 29 hours a week x 52 weeks a year) per year including payroll and benefits
 - Staff costs, including payroll and benefits, will increase at 3% per year beginning in 2016.
 - These wages will be set and approved by the Board.
- Office Supplies
 - 500.00 per year
- Office Overhead
 - 4,000 per year
- Travel
 - 500.00 per year
- Repairs and Maintenance
 - 20,000 per year
- Equipment
 - Year by year basis under circumstance where new equipment is needed
- Plan Update
 - 5% of the District Coordinator's total salary beginning 2021

- SWMD Drop-Off Program
 - 100,000 per year
- Special Events- \$1,000.00 per year and will increase 5% over the planning period
 - Earth Day Extravaganza \$1,000 per year beginning 2020 and remaining constant throughout the planning period
- Outreach & Marketing Plan- Total \$600.00 and increase 5% annually throughout the planning period
 - Give-A-Way Items- \$100.00 per year
 - Printing- \$500.00 per year
- Advertising- Up to \$75,000 annually throughout the planning period
 - Newspaper
 - Mailers
 - Commercials
- Sheriff Litter Trailer- \$5,000 and increase 5% annually throughout the planning period per year.
 - \$5,000 for maintenance and restocking
- G.R.E.E.N. Bean Community Trailer- \$1,000 and increase 5% over the planning period.
 - \$1,000 for maintenance and restocking
- Debris Management Plan- \$25,000 annually
 - \$25,000 annually for managing all types of waste/debris resulting from a disaster or significant emergency
- Household Battery Collections (Drop-Off Sites)- \$30,000.00 annually increase of 5% annually throughout the planning period per year.
 - \$30,000- to pay private contractor to collect, haul and properly dispose of batteries collected at 6 drop-off sites throughout the county.
- Household Hazardous Waste Collections- \$30,000.00 annually increase of 5% annually throughout the planning period per year.
 - \$30,000 annually for one annual collection.
- Municipality Tire Credit- \$16,000 annually
 - \$1,000 credit for tire recycling to reduce the amount of roadside tires throughout the District.

- Community Clean Up Grants- \$160,000 annually
 - Up to \$10,000 in grant monies annually to local political subdivisions of Erie County Solid Waste District (16).
- Sheriff Litter Aide- \$150,000 annually
 - The District provides funding to the Erie County Sheriff deputy's wages and fringes that operates the community service litter collection trailer not cover by grant fund from the Common Pleas Court. The District will also provide funding to the investigating and enforcing litter and related solid waste laws. The combined funding will be \$150,000.00 annually throughout the planning period.
- Recycled Materials Grant- \$250,000 annually
 - \$250,000 annually to encourage the purchase of recycled-content products. This grant is offered to public and private entities.
- Revolving Loan Fund- Up to \$75,000 annually
 - Up to \$75,000 annually for businesses

Carry Over Balance

Throughout the previous planning period the district saw a consistent carry over quarter to quarter and year to year. This carry over was due to decreased expenditures:

- Reduction in staff, salary, HHW Collections and battery drop-offs
- Partnering with local entities to provide no cost workshops
- Fundraising and sponsorships to reduce cost for events
- Renewing expired contracts to reduce cost and lock in pricing

Going forward the District has implemented increases in funding for programing to spend down some of the excess carry over balanced that it has accumulated throughout the years. Program funding increases include:

- Community Clean Up Grants- \$2,500 annually per municipality to be increased to up to \$10,000 annually per municipality.
- Advertising- \$ 100 annually increased up to \$75,000 annually.
- Recycled Materials Grant- \$5,000 annually increased up to \$250,000 annually.
- Revolving loan fund- up to \$75,000 annually

Benchmark for Financial Analysis -the District maintain a balanced budget year to year. The District will be sending some excess carry over that have accumulated thought the years. This excess carry over has allowed the District to add new and innovative programs that will lead to an increase in recycling, behavior change and awareness. The District will maintain a balanced budget and not go into the negative. The District's spending is regulated by the Erie County Solid Waste Board.

10. Regional Analysis

The District currently and will continue to throughout the planning period collaborate with neighboring SWMD. The District maintains these relationships by:

- Sharing resources
- Attending SWMD workgroup meetings
- Open communication via phone, email, meetings, etc.
- Open to partnerships for workshops with common messaging for residents

Benchmark Regional Analysis -the District will work with SWMD throughout the state of Ohio to share and hear ideas that may lead to opportunities to apply new ideas to current programs.

11. Data Collection Analysis

Residential:

The District sends out a survey to haulers annually to get data on the tonnage of material being recycled in the District and the number of household participating in a recycling program. There are gaps in this data as only one out of four haulers in the District participated in this survey during the 2019 Reference Year. The District also uses the published Ohio EPA data annually. The District takes both sources of data and completes the OEPA Annual District Report and also uses the data to evaluate the performance programs within the District.

Commercial:

The District sends out a survey to commercial business that operate in the District annually to get data on the tonnage of material being recycled in the District. The District has compiled a list of 201 commercial businesses from use of the Chamber of Commerce website as a resource. 201, 12 question surveys are sent out via email and a mailed letter to commercial business annually and for the 2019 Reference year 20% filled out and returned the survey via online submission, mailed, emailed, phone, drop-off and fax. A major problem the District encounters with the survey responses are lack of participation and inaccuracy of the data provided. To solve this issue the District would like to see a possibility of the OEPA sending out these surveys or collaborating with the District to send out these surveys as the OEPA has more authority than the District. The District also uses the published Ohio EPA data annually. The District takes both sources of data and completes the OEPA Annual District Report and also uses the data to evaluate the performance programs within the District.

Benchmark for Data Collection Analysis- the District will learn how other SWMDs that have higher response rates to surveys achieve those results.

12. Education/Outreach Analysis

Goal #4 Outreach and Education: Outreach Plan and General Requirements - the SWMD shall provide education, outreach, marketing, and technical assistance regarding reduction, recycling, composting, reuse, and other alternative waste management methods to identified target audiences using best practices.

Target Audiences:

- **Residents:**
 - Programs- We offer requested programs as requested free of charge, any time of the year. Collaboration with organizations including: Erie MetroParks, Friend of Old Woman Creek and Erie County Soil & Water. The District attends and puts on events such as Earth Day.
 - Outreach and Marketing- Our main outreach methods are newspaper online sources (webpage or social media), and attending public meetings.
 - Technical Assistance- Most technical assistance is provided through our websites. On there, residents are able to find businesses that take specific items. Our phone system is also valuable to providing technical assistance. All phone messages are returned and we are able to help residents with questions/issues. Social Media is another great outlet where we can connect with people and try to engage the technology focused audience. We have also implemented new signage and brochures for our residents at all drop-off locations to help with the rules of recycling.
 - New Strategies- the District will be implementing more advertising to share information on recycling rules and promote social media resources.
- **Schools:**
 - Programs- We currently do requested programs and class visits. If a recycling program is not established in the school we offer technical assistance if requested. Teacher resources are available by request.
 - Outreach and Marketing- Currently, our biggest source of outreach is through our website.
 - Technical Assistance- Most technical assistance is provided through our website. We will help implement school recycling programs if they do not have one. We offer assistance with special collection and our recycling bins are available to use at events.
 - New Strategies- the District will be implementing outlets for virtual learning opportunities.
- **Commercial and Industrial :**
 - Programs- We provide a connection between businesses and recycling haulers. We will meet with businesses as needed to discuss which recycling options and avenues are best for them. We provide the bridge to connect businesses with the correct haulers to provide recycling.
 - Outreach and Marketing- Currently, our biggest source of outreach is through our website which provides information regarding

businesses and where materials can be recycled. We have an online survey for industrial and commercial businesses to fill out.

- Technical Assistance- the District is available to help with hauler concerns and questions on how things may be recycled or disposed of. The websites is available to see what other businesses are doing locally. Waste audits are sent out annually by the District.
- New Strategies- the District to utilize the Ohio Materials Marketplace.
- **Communities and Elected Officials:**
 - Programs- We currently have a \$2,500 community grant available to each municipality in the District to aid in municipality run collections. We also have a \$1,000 tire credit available to each municipality to reduce roadside tires.
 - Outreach and Marketing- the District attends meetings as needed for each municipality.
 - Technical Assistance- Our website provides information regarding what and where materials can be recycled as well as different collection events coming up.
 - New Strategies- the district will be raising the Community Clean Up Grants up to \$10,000 in grant monies annually to local political subdivisions of Erie County Solid Waste District (16) \$160,000 annually. Increase the Recycled Materials Grant to \$250,000 annually to encourage the purchase of recycled-content products. This grant is offered to public and private entities.

Benchmark for Education/Outreach Analysis- the District will identify strategies for incorporating behavior change techniques into education and outreach programs.

13. Processing Capacity Analysis

The District is serviced by private contractors for recycling haulers/processors. The nearest recycling facility is owned and operated by Republic Services in Lorain County. The capacity of this facility is unknown.

Benchmark for Processing Capacity Analysis- the District will reach out to haulers outside of the District to inquire about interest in servicing the Erie County Solid Waste Management District.

APPENDIX I ACTIONS, PRIORITIES, AND PROGRAM DESCRIPTIONS

A. Actions and Priorities

1. Actions

- Advertising Campaign- Up to \$75,000 annually throughout the planning period to have consistent messaging on recycling rules. The district will use this money to promote advertisements to lower contamination with the curbside and drop-off programs. The advertisements will be an assortment of the following: displaying items that can vs. cannot be recycled in curbside programs and drop-off programs. Advertisements will include rules to follow such as items must be clean, dry and empty AND items cannot be bagged, boxed or bundled. The District will keep data on contamination fees charged (drop-offs) in each quarter throughout the planning period to determine if advertisements are having impact on contamination.
- Sheriff Litter Trailer- \$5,000 and increase 5% annually throughout the planning period per year. This will be a continuing program from previous planning period. The Sheriff Litter Trailer is used to complete litter pick-ups throughout the district. In the 2019 reference year 4,380 pounds of litter was collected and 265.25 hours were spent conducting litter clean ups. Nine townships were serviced by the litter trailer in 2019. The District will continue to purchase supplies needed for this trailer for the planning period. Items may include gloves, vests, trash bags, litter grabber, etc.
- G.R.E.E.N. Bean Community Trailer- \$1,000 and increase 5% over the planning period. This will be a continuing program from previous planning period. This is a fully stocked trailer that is available to residents within the district to rent out for free to conduct their own litter clean ups throughout the district. During the 2019 reference year the trailer was used for 6 events, 140 volunteers, 1,290 volunteer hours with a collection total of 3,840 pounds of trash and 14 tires recycled. Areas that were serviced by the trailer include 12 parks, 2 miles of streets, 1 mile of shoreline, 1 mile of stream and 1 wetland. The District will continue to purchase supplies needed for this trailer for the planning period. Items may include gloves, vests, trash bags, litter grabber, etc.
- Debris Management Plan- \$25,000 annually for managing all types of waste/debris resulting from a disaster or significant emergency. The District has a currently updated debris management plan and will continue to work with Erie County Emergency Management to update this plan as needed.
- Household Battery Collections (Drop-Off Sites) - \$30,000.00 annually increase of 5% annually throughout the planning period per year. Fund will be used to pay

private contractor to collect, haul and properly dispose of batteries collected at 6 drop-off sites throughout the county. This will be a continuing program from previous planning period. In 2019 the District had 14 drop-off locations for residents to drop batteries off at, during this year there were 2.95 tons of batteries collected. Since 2019 the cost of battery drop-off sites have increased dramatically causing the District to consolidate drop-off locations to 6. In 2022 the price increase by 15%, the District will continue to monitor this cost and may need to consolidate more.

- Household Hazardous Waste Collections- \$30,000.00 annually increase of 5% annually throughout the planning period per year. This will be a continuing program from previous planning period. During the 2019 reference year the District held two collections per year. This is a free event to residents within the District to bring an unlimited amount of household hazardous waste (HHW). Events in the reference year were in June and October totaling 153 participants and 9.70 tons of HHW collected. Due to the 15% increase in cost the District had to change to 1 collection per year. The District will continue to offer 1 HHW collection per year throughout the planning period.
- Municipality Tire Credit- \$1,000 credit to each municipality in the District (\$16,000 total) for tire recycling to reduce the amount of roadside tires throughout the District. This will be a continuing program from previous planning period. In the 2019 reference year \$0 were spend for this credit. The District will promote this credit to municipalities. This credit is only for roadside tires brought to the landfill by the municipality.
- Community Clean Up Grants- Up to \$10,000 in grant monies annually to local political subdivisions of Erie County Solid Waste District (\$160,000.00 total). This will be a continuing program from previous planning period, with an increase in funds. This grant will allow municipalities to host their own clean up events. To be eligible for this grant the clean-up must take place within the current calendar year, qualifying clean-ups include the collection of tires, appliances, scrap metal, yard waste, leaves, recyclables, household hazardous waste, and rubbish. Municipalities must submit an invoice to the district with the description of their event, tonnage collected and paid invoice copies to the District by December 1st of that calendar year to be eligible for grant funds. In the 2019 11 out of 16 municipalities applied and received this grant, collecting 129.56 tons. The total amount of money given by the District to municipalities through this grant was \$27,500, however the total cost for municipalities was \$34,852.30. The invoice copies and feedback we have been receiving from the municipalities is that the \$2,500 grant per year is not enough. The District will raise the grant up to \$10,000 per municipality to cover entire cost of clean-up events and to get more frequent events throughout the year and/or more participation.
- Sheriff Litter Aide- \$150,000 annually

- o The District provides funding to the Erie County Sheriff deputy's wages and fringes that operates the community service litter collection trailer not cover by grant fund from the Common Pleas Court. The District will also provide funding to the investigating and enforcing litter and related solid waste laws. The combined funding will be \$150,000.00 annually throughout the planning period. This will be a continuing program from previous planning period. In the 2019 reference year 4,380 pounds of litter was collected and 265.25 hours were spent conducting litter clean ups. Nine townships were serviced by the Sheriff in 2019. The Sheriff is also responsible for enforcing our no dumping policies and contamination violations at our drop-off locations.

Recycled Materials Grant- Up to \$250,000 annually to encourage the purchase of recycled-content products. This grant is offered to public and private entities. This grant has an application process in order to be awarded (application to be filled out, Board to approve, communication back to awarded entity, proof of purchase sent to District, funds distributed by District). Any public or private entity that would like to apply for this grant must fill out the required application that request the following information:

(1) Proposal narrative (not to exceed 2 pages) answering the following, in this order: (please note that products purchased with grant money must be made from recycled material)

- Summarize the purpose of your project and explain how this grant will be used?
 - Who will this project benefit and in what ways?
 - How will ECSWMD grant funds be used? How will this project be funded?
 - if the grant is made?
 - if the grant is denied?
 - if other sources of funding are needed for the project? Are these funds pending or have they been obtained, and from what sources?
 - If partial amount of funds are granted will the project still continue?
- (2) Completed Budget Form

- Total Project Cost** Please list the entire cost of the project. The combined amounts of Column C and Column D will equal the total listed in Column B.
- ECSWMD Grant Request** Please list the funds requested from ECSWMD only in Column C.
- Other Funding for Project** Please list in Column D any additional funds from other sources needed to complete this project.

ECSWMD Grant Funding is limited to the following (please note that products purchased with grant funds must be made from recycled material):

Services

Any contracted services (for example, printing, professional advice, presenters, or independent contractor fees) to be funded with this grant.

Supplies

Any supplies for the project to be paid for with funds from this grant.

Capital Improvements Any property purchase, equipment, building materials or facility improvements of the project to be funded with this grant.

Other Any costs that do not fit into the above categories. Please explain these costs in the program narrative.

Please note: ECSWMD grant funds may not be used for salaries/benefits for organization employees.

In 2019 the district did not have public or private entries apply for the grant. The District will promote this grant throughout the planning period to increase recycling awareness.

- Revolving Loan Fund- Up to \$75,000 annually for businesses wishing to start at a recycling program. The revolving loan would be eligible to private or public entities wishing to purchase materials to start a recycling program. The District will create an application process where a business can apply for this loan and the Board can loan this money. The recycling programs could include, but are not limited to materials needed such as compactors, roll-offs, curbside carts, shredders, etc.

2. Priorities

- Advertising campaign- Goals 2,3,4,5
- Sheriff litter trailer- Goal 2
- G.R.E.E.N. Bean community trailer- Goals 2,4
- Debris Management Plan- Goals 2,5
- Household Battery Collections (drop-off sites) - Goal 5
- Household Hazardous Waste Collections- Goal 5
- Municipality tire credit- Goal 5
- Community Clean Up Grants- Goals 2,5
- Sheriff litter aide- Goal 2
- Recycled Materials Grant- Goals 3,4,5, 6, 8, 9
- Revolving loan fund- Goals 1,2,3, 4, 5, 6, 8, 7

B. Programs

Residential Recycling Infrastructure

Curbside Recycling Services

Non-Subscription Curbside Recycling

ID	Name	Start Date	End Date	Goal(s)
NCS1	Berlin Village	Existing	Ongoing	Goal 1 and 2
NCS2	Huron City	Existing	Ongoing	Goal 1 and 2

Contract between political jurisdiction and private hauler. Weekly pick up of the following materials: Cardboard, Paper, Metal/Aluminum, Plastic, and Glass.

Subscription Curbside Recycling

ID	Name	Start Date	End Date	Goal(s)
SC1	Bay View Village	Existing	Ongoing	Goal 1 and 2
SC2	Berlin Township	Existing	Ongoing	Goal 1 and 2
SC3	Castalia Village	Existing	Ongoing	Goal 1 and 2
SC4	Sandusky City	Existing	Ongoing	Goal 1 and 2
SC6	Groton Township	Existing	Ongoing	Goal 1 and 2
SC7	Margaretta Township	Existing	Ongoing	Goal 1 and 2
SC8	Milan Township	Existing	Ongoing	Goal 1 and 2
SC9	Milan Village	Existing	Ongoing	Goal 1 and 2
SC10	Oxford Township	Existing	Ongoing	Goal 1 and 2
SC11	Perkins Township	Existing	Ongoing	Goal 1 and 2
SC12	Vermilion Township	Existing	Ongoing	Goal 1 and 2
SC13	Huron Township	Existing	Ongoing	Goal 1 and 2

Private hauler provides weekly pick up of the following materials: Cardboard, Paper, Metal/Aluminum, Plastic, and Glass.

Drop-off Recycling Locations

Full-Time, Urban Drop-offs

ID	Name	Start Date	End Date	Goal(s)
FTU1	Sandusky (Service Center)	Existing	Ongoing	Goal 1 and 2
FTU2	Sandusky Steel	Existing	Ongoing	Goal 1 and 2

FTU1- Contract between political jurisdiction and private hauler. Open 24 hours a day 7 days a week. The following material is collected: Cardboard, Paper, Metal/Aluminum, Plastic, and Glass.

FTU2- Private Collector, open 8.5 hours a day 5 days a week and 3.5 hours 1 day a week. The following material is collected: Cardboard, Paper, Metal/Aluminum.

Part-Time, Urban Drop-offs

No program available

Full-Time, Rural Drop-offs

ID	Name	Start Date	End Date	Goal(s)
FTR1	Erie County Landfill	Existing	Ongoing	Goal 1 and 2
FTR2	Groton Township	Existing	Ongoing	Goal 1 and 2
FTR3	Margaretta Township	Existing	Ongoing	Goal 1 and 2
FTR4	Berlin Township	Existing	Ongoing	Goal 1 and 2
FTR5	Florence Township	Existing	Ongoing	Goal 1 and 2

FTR1 and FTR2- Contract between SWMD and private hauler. Open 24 hours a day 7 days a week. The following material is collected: Cardboard, Paper, Metal/Aluminum, Plastic, and Glass.

FTR3- Contract between political jurisdiction and private hauler. Open 24 hours a day 7 days a week. The following material is collected: Cardboard, Paper, Metal/Aluminum, Glass and Plastic.

FTR4 and FTR5- Contract between private organization and private hauler. Open 24 hours a day 7 days a week. The following material is collected from FTR4: Metal/Aluminum and the following is collected from FTR5: paper. FTR4 and FTR5 do not meet the minimum standards.

Part-Time, Rural Drop-offs

No program available

Mixed solid waste materials recovery facility

No program available

Multi-Family Unit Recycling

No program available

Other Residential Recycling Programs (list individually below)
No program available

Commercial/Institutional Sector Reduction and Recycling Programs

School Recycling

Appendix I Conclusions, Priorities, and Program Descriptions

Name	Start Date	End Date	Goal
Perkins Local Schools	Existing	Ongoing	Goal 2
EHOVE Career Center	Existing	Ongoing	Goal 2

Perkins Local Schools- The following material is collected: Cardboard, Paper, Metal/Aluminum, and Plastic.
EHOVE Career Center- The following material is collected: cardboard.

Collection Services (small businesses, government offices, etc)

Name	Start Date	End Date	Goal
Erie County Job and Family Services	Existing	Ongoing	Goal 2
Erie County Services	Existing	Ongoing	Goal 2
Erie County Jail	Existing	Ongoing	Goal 2
Erie County Juvenile Correction Center	Existing	Ongoing	Goal 2
Erie County Department of Environmental Services	Existing	Ongoing	Goal 2

Contract between Erie County and private hauler. The following material is collected: Cardboard, Paper, Metal/Aluminum, Plastic, and Glass.

Large Venue Recycling

No program available

Waste Assessments/Waste Audits

Name	Start Date	End Date	Goal
Gateway Recycling	Existing	Ongoing	Goal 2

The District will refer businesses to Gateway Recycling to preform waste assessments and waste audits to determine what type of recycling services Gateway can provide.

Contracting Assistance

Name	Start Date	End Date	Goal
Erie County SWMD	Existing	Ongoing	Goals 1,2,5

The District provides technical assistance for contracting to any commercial/ industrial and municipality within the District.

Workgroup/Roundtable

No program available

Award/Recognition

Appendix I Conclusions, Priorities, and Program Descriptions

No program available

Other Programs (list individually with a table and description)

No program available

Industrial Sector Reduction and Recycling Programs

Waste Assessments/Waste Audits

Name	Start Date	End Date	Goal
Gateway Recycling	Existing	Ongoing	Goal 5

The District will refer businesses to Gateway Recycling to preform waste assessments and waste audits to determine what type of recycling services Gateway can provide

Collection Services

Name	Start Date	End Date	Goal
Private Haulers	Existing	Ongoing	Goal 5

The District will refer industrial business to a list of haulers that provide services within the District.

Contracting Assistance

Name	Start Date	End Date	Goal
Erie County SWMD	Existing	Ongoing	Goal 5

The District provides technical assistance for contracting to any commercial/ industrial and municipality within the District.

Workgroup/Roundtable

No program available

Award/Recognition

No program available

Other Programs

No program available

Restricted/Difficult to Manage Wastes

Yard Waste

Appendix I Conclusions, Priorities, and Program Descriptions

Name	Start Date	End Date	Goal
Barnes Nursery and Compost	Existing	Ongoing	Goal 6

Barnes Nursery and Compost is a facility within the District that offers an outlet for recycling yard waste. Residents can drop-off yard waste themselves during normal business hours for a fee. Municipalities can also provide a collection service to their residents for a fee.

Household Hazardous Waste

Name	Start Date	End Date	Goal
Annual Household Hazardous Waste Collection	Existing	Ongoing	Goal 6

The District holds an annual Household Hazardous Waste Collection that is open to all residents throughout the District. The collection accepts all household hazardous waste.

Scrap Tires

Name	Start Date	End Date	Goal
Landfill Collection and Recycling	Existing	Ongoing	Goal 6

The tire recycling program at the Erie County Sanitary Landfill is funded through a user fee. Below is a chart with the cost charged to residents recycling tires at the Erie County Sanitary Landfill. The program is self-sufficient with revenues and expenses nearly balancing. The Solid Waste Board has the authority to raise and/or decrease rates and subsidize as needed.

Passenger Tires- \$3.00 without rim	Passenger Tires- \$4.00 with rim
Light Truck Tires- \$5.50 without rim	Light Truck Tires- \$6.50 with rim
Semi- Truck Tires- \$16.00 without rim	Semi- Truck Tires- \$25.00 with rim
Tractor Tires- \$220.00 without rim	No rims accepted

Electronic Equipment

Name	Start Date	End Date	Goal
Private Entities	Existing	Ongoing	Goal 6

District promotes Goodwill Industries, Staples, and Best Buy's programs for electronic waste.

Lead-Acid Batteries

Name	Start Date	End Date	Goal
BGSU Firelands	Existing	Ongoing	Goal 6
Erie County Board of DD	Existing	Ongoing	Goal 6

Appendix I Conclusions, Priorities, and Program Descriptions

Erie County Sewer and Water Billing Office	Existing	Ongoing	Goal 6
Erie MetroParks	Existing	Ongoing	Goal 6
Goodwill Dollar Store	Existing	Ongoing	Goal 6
Huron Ace Hardware	Existing	Ongoing	Goal 6

Lead acid batteries and yard waste are banned from disposal at the Erie County landfill, and all landfills in Ohio. Recycling opportunities are readily available at area scrapyards, automotive service businesses and the Erie County landfill for lead-acid batteries. The listed facilities above are contracted out by Erie County Solid Waste District and are open to the public.

Appliances

Name	Start Date	End Date	Goal
Private Scrap Yards	Existing	Ongoing	Goal 6

There are two major scrap yards within the District that will accept all appliances for recycling.

Pharmaceuticals

Name	Start Date	End Date	Goal
Erie County Health Department	Existing	Ongoing	Goal 6

The Erie County Health Department operates a drop-off bin and local police stations and Sheriff's Department for pharmaceuticals.

Others (list individually with a table and description)

No program available

Other Material Specific Programs

Food Waste

Name	Start Date	End Date	Goal
Barnes Nursery and Compost	Existing	Ongoing	Goal 6

Barnes Nursery and Compost is a facility within the District that offers an outlet for recycling food waste. Residents and businesses can drop-off food waste themselves during normal business hours for a fee. Municipalities can also provide a collection service to their residents for a fee.

Glass

Name	Start Date	End Date	Goal
------	------------	----------	------

Republic Services	Existing	Ongoing	Goal 1 and 2
-------------------	----------	---------	--------------

Republic Services offers glass recycling to residents within the District.

Funding/Grants

Incentive Based Grants
No program available

Improvement Grants

Name	Start Date	End Date	Goal
Recycled Materials Grant	Existing	Ongoing	Goal 7 and 9

Annually the District offers a Recycled Materials Grant to encourage the purchase of recycled-content products. This grant is offered to public and private entities.

Going forward the District will be offering up to \$250,000.00 in grant money annually to public and private entities within Erie County Solid Waste District.

Other Funding/Grant Programs (list individually with a table and description)

Name	Start Date	End Date	Goal
Community Clean Up Grant	Existing	Ongoing	Goal 1, 2, 6, 7
Municipality Tire Credit	Existing	Ongoing	Goal 1, 2, 6, 7

- Community Clean up Grants-** District will be offering up to \$10,000 in grant monies annually to local political subdivisions of Erie County Solid Waste District to host their own clean up and collection events.
- Tire Credit-** \$1,000 credit for each local political subdivisions of Erie County Solid Waste District to reduce the amount of roadside tires throughout the District. Political subdivisions that wish to receive this credit must bring the collected tires to the Erie County Sanitary Landfill for recycling.

Economic Incentives

Volume-Based Billing/Pay-As-You-Throw Trash Collection Services

Name	Start Date	End Date	Goal
Private Haulers	Existing	Ongoing	Goal 7

Different haulers throughout the District offer volume bases trash collection services to residents.

Financial Award Programs (e.g. RecycleBank, "Get Caught Recycling")
No program available

Other Economic Incentive Programs (list individually with a table and description)

No program available

Market Development Programs

Name	Start Date	End Date	Goal
Recycled Materials Grant	Existing	Ongoing	Goal 7 and 9

Annually the District offers a Recycled Materials Grant to encourage the purchase of recycled-content products. This grant is offered to public and private entities.

Going forward the District will be offering up to \$250,000.00 in grant monies annually to public and private entities within Erie County Solid Waste District.

Feasibility Studies

No program available

Facilities

Materials Recovery Facilities/Recycling Centers

No program available

Landfills

Name	Start Date	End Date	Goal
Erie County Sanitary Landfill	Existing	Ongoing	

Erie County Sanitary Landfill is open to all residents, businesses and municipalities throughout the District Monday- Friday 7AM-3PM and Saturday 8AM-12PM. Waste Streams- municipal solid waste, industrial solid waste, construction and demolition debris and exempt waste. Prohibited Waste- hazardous (ignitable, corrosive, reactive, TCLP toxic), polychlorinated biphenyls (PCB's), liquids, refrigerants, radioactive, blood borne pathogens, yard waste, and tires.

Flow Control- the Board of Directors of the Solid Waste Management District of Erie County Ohio passes Resolution 197-3 in 1997 implementing Flow Control for the District. The Resolution (197-3) and Flow Control Rules will remain in effect.

Closed Facility Maintenance (Closure/Post-Closure Care)

Going forward the District will be offering up to \$250,000.00 in grant money annually to public and private entities within Erie County Solid Waste District.

Ohio Administrative Code Rules 3745-27-10(M)(6), 3745-29-10(M)(6), and 3745-30-14(M)(6) require the annual operating report for landfill facilities to include the most recent final closure and post-closure care cost estimates and corrective measures cost estimates, if applicable. Complete the checklist at the bottom of this page and submit the required (revised) cost estimates after using the checklist. NOTE: Do not include the actual financial assurance instrument with this report. The original signed instrument should be sent directly to Ohio EPA's financial assurance specialist.

The rule references below summarize what information should be included in this section of the annual operations report:

Municipal solid waste landfills: OAC Rule 3745-27-10(M)(6). The most recent updated final closure cost estimate, post-closure care cost estimate, and, if applicable, corrective measures cost estimate, adjusted for inflation and for any change in final closure cost estimate, post-closure care cost estimate, or corrective measures cost estimate required by rules 3745-27-13, 3745-27-16, and 3745-27-18 of the Administrative Code.

Industrial solid waste landfills: OAC Rule 3745-29-10(M)(6). The most recent updated final closure cost estimate and post-closure care cost estimate, adjusted for inflation and for any change in final closure cost estimate, post-closure care cost estimate required by rules 3745-27-15 and 3745-27-18 of the Administrative Code.

Residual solid waste landfills: OAC Rule 3745-30-14(M)(6). The most recent final closure cost estimate and post-closure care cost estimate which have been revised in accordance with paragraph (E)(14)(x) of this rule.

The checklist below is provided to help ensure you have completed the financial assurance requirements as required by OAC rules 3745-27-13, 3745-27-16, and 3745-27-18, where applicable. The checklist addresses several common errors and omissions and helps to ensure that this section is properly evaluated by Ohio EPA. Please complete the checklist and refer to the associated Rules for additional details. Once again, this list applies to the financial assurance instrument that you submitted to Ohio EPA on your instrument's anniversary date.

Transfer Facilities

No Program Available. There is not transfer facility that takes waste out of the county. Kelley's Island does have a transfer facility on the island to collect waste and transfer it to the Erie County Landfill. Kelley's Island is an island located in Lake Erie, this island is only accessible by boat, or plane. There are no bridges to this island, which is why a transfer facility is a necessity.

Composting Facilities

Name	Start Date	End Date	Goal
Barnes Nursery and Compost	Existing	Ongoing	Goal 6

Barnes Nursery and Compost is a facility within the District that offers an outlet for recycling food waste and yard waste. Residents and businesses can drop-off waste themselves during normal business hours for a fee. Municipalities can also provide a collection service to their residents for a fee.

Data Collection

No program available

Health department support (Allowable Use 3)

No program available

County Assistance

No program available

Open Dumping/Litter Enforcement

Name	Start Date	End Date	Goal
Erie County Sheriff Department	Existing	Ongoing	Goal 2 and 6

- Sheriff Litter Trailer- \$5,000 and increase 5% annually throughout the planning period per year.
 - \$5,000 for maintenance and restocking
- Sheriff Litter Aide- \$150,000 annually
 - The District provides funding to the Erie County Sheriff deputy's wages and fringes that operates the community service litter collection trailer not cover by grant fund from the Common Pleas Court. The District will also provide funding to the investigating and enforcing litter and related solid waste laws. The combined funding will be \$150,000.00 annually throughout the planning period.

Open dump/tire dump cleanup

No Programs Available

Litter law enforcement (boards of health and sheriff offices) (allowable use 7)

Name	Start Date	End Date	Goal
Erie County Sheriff Department	Existing	Ongoing	Goal 2 and 6

- Sheriff Litter Trailer- \$5,000 and increase 5% annually throughout the planning period per year.
 - \$5,000 for maintenance and restocking
- Sheriff Litter Aide- \$150,000 annually
 - The District provides funding to the Erie County Sheriff deputy's wages and fringes that operates the community service litter collection trailer not cover by grant fund from the Common Pleas Court. The District will also provide funding to the investigating and enforcing litter and related solid waste laws.

waste laws. The combined funding will be \$150,000.00 annually throughout the planning period.

Municipal Corporation/Township Assistance

Name	Start Date	End Date	Goal
Community Clean Up Grant	Existing	Ongoing	Goal 1, 2, 6, 7
Municipality Tire Credit	Existing	Ongoing	Goal 1, 2, 6, 7

- Community Clean up Grants-** District will be offering up to \$10,000 in grant monies annually to local political subdivisions of Erie County Solid Waste District to host their own clean up and collection events.
- Tire Credit-** \$1,000 credit for each local political subdivisions of Erie County Solid Waste District to reduce the amount of roadside tires throughout the District. Political subdivisions that wish to receive this credit must bring the collected tires to the Erie County Sanitary Landfill for recycling.

Disaster debris/disaster assistance

Name	Start Date	End Date	Goal
Disaster Debris Management	2022	Ongoing	Goal 2.6

Disaster Debris Management

The District has worked with Erie County Emergency Management Agency to create the Erie County Debris Management Resource Book. The information contained within this Resource Book is intended to assist local officials responsible for all or a portion of the issues relating to managing all types of waste/debris resulting from a disaster of significant emergency. Removal, reduction, recycling, temporary sites, contracting and disposal data as well as points of contact

The Erie County Solid Waste Management District plans to allocate \$25,000.00 annually throughout the planning period for managing all types of waste/debris resulting from a disaster or significant emergency. The funding is only available after an Emergency Declaration has been made by the Board of Commissioners of Erie County where the disaster took place. The Board of Erie County Solid Waste Management District is not required to call a special session of the Board to activate funding.

Closed Facility Maintenance/Post-Closure Care

SCHEDULE A
2020 COST ESTIMATE - 30 YEAR POST-CLOSURE
ERIE COUNTY LANDFILL
CLOSED LANDFILL

SURFACE WATER DRAINAGE SYSTEM				
DESCRIPTION	UNIT	QUANTITY	UNIT PRICE	COST
maintenance	yr	1	\$ 2,500.00	\$ 2,500.00
				SUBTOTAL \$ 2,500.00
LEACHATE TESTING AND DISPOSAL				
DESCRIPTION	UNIT	QUANTITY	UNIT PRICE	COST
removal, treatment and disposal	gal	250,000	\$ 0.05	\$ 12,500.00
annual sample	yr	3	\$ 1,750.00	\$ 5,250.00
				SUBTOTAL \$ 17,750.00
EXPLOSIVE GAS MONITORING SYSTEM				
DESCRIPTION	UNIT	QUANTITY	UNIT PRICE	COST
annual maintenance	yr	1	\$ 1,000.00	\$ 1,000.00
				SUBTOTAL \$ 1,000.00
GROUNDWATER MONITORING SYSTEM (5 WELLS)				
DESCRIPTION	UNIT	QUANTITY	UNIT PRICE	COST
semi-annual sampling	1 yr	10	\$ 1,750.00	\$ 17,500.00
				SUBTOTAL \$ 17,500.00
FINAL CAP				
DESCRIPTION	UNIT	QUANTITY	UNIT PRICE	COST
moving	yr	1	\$ 5,000.00	\$ 5,000.00
maintenance and repair	yr	1	\$ 5,000.00	\$ 5,000.00
				SUBTOTAL \$ 10,000.00
SURFACE WATER DRAINAGE SYSTEM				
DESCRIPTION	UNIT	QUANTITY	UNIT PRICE	COST
quarterly inspection and report	qtr	4	\$ 2,000.00	\$ 8,000.00
				SUBTOTAL \$ 8,000.00

ANNUAL COSTS FOR 30-YEAR POST-CLOSURE PERIOD -	\$ 56,750.00
1995-2002 INFLATION FACTOR (@ 2.0% FOR 8 YEARS)	X 1.17166
CONSTANT INFLATION FACTOR OF 2.0% / YEAR	
2003 INFLATION FACTOR 1.10%	X 1.0110
2004 INFLATION FACTOR 1.60%	X 1.0160
2005 INFLATION FACTOR 2.10%	X 1.0210
2006 INFLATION FACTOR 2.70%	X 1.0270
2007 INFLATION FACTOR 2.90%	X 1.0290
2008 INFLATION FACTOR 2.65%	X 1.0265
2009 INFLATION FACTOR 2.11%	X 1.0211
2010 INFLATION FACTOR 1.10%	X 1.0110
2011 INFLATION FACTOR 0.90%	X 1.0090
2012 INFLATION FACTOR 2.10%	X 1.0210
2013 INFLATION FACTOR 1.70%	X 1.0170
2014 INFLATION FACTOR 1.40%	X 1.0140
2015 INFLATION FACTOR 1.40%	X 1.0140
2016 INFLATION FACTOR 1.00%	X 1.0100
2017 INFLATION FACTOR 1.30%	X 1.0130
2018 INFLATION FACTOR 1.90%	X 1.0190
2019 INFLATION FACTOR 2.20%	X 1.0220
2020 INFLATION FACTOR 1.70%	X 1.0170
ESTIMATED SUM OF COSTS FOR 30-YEAR POST-CLOSURE -	\$ 273,447.90
ESTIMATED SUM OF COSTS FOR REMAINING 5 YEARS POST CLOSURE (WHICH BEGAN IN 1995)	\$ 455,745.41

Civil Environmental Consultants, Inc.
CEC Project 100-929

March 2021

Facility Ownership/Operations
No program available

Waste-to-energy projects

No program available

APPENDIX J REFERENCE YEAR OPPORTUNITY TO RECYCLE AND DEMONSTRATION OF ACHIEVING GOAL 1

A. Residential Sector Opportunity to Recycle

Note: table on next page

<i>Full-time, rural drop-off</i>									
<i>Part-time, rural drop-off</i>									
<i>Mixed municipal waste material recovery facility</i>									
Total County Population							11678		
Total Population Credit							69,678		
Percent of Population							27,610		
							40%		

During the 2019 Reference year the District did not achieve Goal #1. Going forward the District will be opting to achieve Goal #2 instead of Goal #1.

Table J-1 Demonstration of Residential Opportunity to Recycle

ID #	Erie County Name of Community (City, Village, Township)	2019 Community Population	Population Credit
<i>Non-subscription curbside</i>			
NC1	Berlin Village	713	713
NC2	Huron City	6869	6869
<i>Subscription curbside</i>			
SC1	Bay View Village	602	0
SC2	Berlin Township	2933	169
SC3	Castalia Village	815	163
SC4	Sandusky City	24564	1447
SC5	Florence Township	2364	0
SC6	Groton Township	1367	240
SC7	Margaretta Township	4389	163
SC8	Milan Township	2535	310
SC9	Milan Village	984	0
SC10	Oxford Township	1162	0
SC11	Perkins Township	11678	0
SC12	Vermilion Township	4763	36
SC13	Huron Township	3609	0
<i>Full-time, urban drop-off</i>			
FTU2	Sandusky (Service Center)	24564	5000
FTU3	Sandusky Steel	24564	5000
<i>Part-time, urban drop-off</i>			
FTR3	Margaretta Township	4389	2500
FTR1	Erie County Landfill	2535	2500
FTR2	Groton Township	1367	2500

Table J-2 Population Credit for Drop-offs Evaluated Using the Weight of Material Collected Method

N/A

Sample Calculations:

Sources of Information:

Assumptions:

The District did not use this method.

Table J-3 Population Credit for Drop-offs Evaluated Using the Survey Method

N/A

Sample Calculations:

Sources of Information:

Assumptions:

The District did not use this method

B. Commercial Sector Opportunity to Recycle

Table J-4 Demonstration of Commercial Opportunity to Recycle

The District is choosing to opt out of achieving Goal #1 and instead will be opting into Goal #2.

C. Demonstration of Meeting Other Requirements for Achieving Goal 1

1. Residential/Commercial Waste Reduction and Recycling Rate
2. Industrial Waste Reduction and Recycling Rate
3. Encouraging Participation

The District is choosing to opt out of achieving Goal #1 and instead will be opting into Goal #2.

APPENDIX K WASTE REDUCTION AND RECYCLING RATES AND DEMONSTRATION OF ACHIEVING GOAL 2

Table K-1 Annual Rate of Waste Reduction: Residential/Commercial Solid Waste

Year	Population	Recycled	Disposed	Total Generated	Waste Reduction & Recycling Rate (%)	Per Capita Waste Reduction & Recycling Rate (ppd)
2019	68,746	19,487	58,199	77,686	28.08%	1.55
2020	68,312	26,528	58,668	85,196	31.14%	2.13
2021	70,333	27,058	70,195	97,254	27.82%	2.11
2022	72,355	27,600	70,195	97,795	28.22%	2.09
2023	74,378	28,152	70,195	98,347	28.63%	2.07
2024	76,402	28,715	70,195	98,910	29.03%	2.06
2025	65,762	29,289	67,575	96,864	30.24%	2.44
2026	67,768	29,875	67,575	97,450	30.66%	2.41
2027	69,815	30,472	67,575	98,047	31.08%	2.39
2028	71,843	31,082	67,575	98,657	31.51%	2.37
2029	73,872	31,704	67,575	99,279	31.93%	2.35
2030	63,152	32,338	64,893	97,231	33.26%	2.81
2031	65,183	32,984	64,893	97,877	33.70%	2.77
2032	67,215	33,644	64,893	98,537	34.14%	2.74
2033	69,248	34,317	64,893	99,210	34.59%	2.72
2034	71,282	35,003	64,893	99,896	35.04%	2.69
2035	60,322	35,703	61,985	97,688	36.55%	3.24
2036	64,388	36,417	66,163	102,580	35.50%	3.10
2037	63,866	37,146	65,626	102,772	36.14%	3.19

Sources of information: <https://www.census.gov/programs-surveys/ipeds/technical-documentation/methodology.html>
 Sample Calculations: 2% increase for recycling throughout the planning period.
 Assumptions: The District met Goal #2 in the 2019 Reference Year and the projections show that the District should meet Goal #2 throughout the planning period.

Table K-2 Annual Rate of Waste Reduction: Industrial Solid Waste

Year	Waste Reduced and Recycled (tons)	Waste Disposed (tons)	Non-Recyclable Waste (tons)	Waste Generated and Recycling Rate (percent)
2019	30,162	13,025	43,186	69.84%
2020	30,765	9,955	40,720	75.55%
2021	31,380	11,319	42,699	73.49%
2022	32,008	11,407	43,415	73.73%
2023	32,648	11,495	44,143	73.96%
2024	33,301	11,674	44,975	74.19%
2025	33,967	11,854	45,821	74.42%
2026	34,646	11,765	46,411	74.65%
2027	35,339	11,856	47,195	74.88%
2028	36,046	11,948	47,994	75.11%
2029	36,767	12,040	48,807	75.33%
2030	37,502	12,134	49,636	75.55%
2031	38,252	12,228	50,480	75.78%
2032	39,017	12,323	51,340	76.00%
2033	39,798	12,418	52,216	76.22%
2034	40,594	12,514	53,108	76.44%
2035	41,406	12,611	54,017	76.65%
2036	42,234	12,709	54,943	76.87%
2037	43,078	12,808	55,886	77.08%

Year	Population	Recycled	Disposed	Total Generated	Waste Recycling Rate (%)
2019	68,746	19,487	58,199	77,686	25.08%

In the 2019 Reference Year the District met the requirements of Goal #2 by achieving at 25% reduction and recycling rate for residential/commercial sector.

District should meet Goal #2 throughout the planning period.

Assumptions: The District met Goal #2 in the 2019 Reference year and the projections show that the

Sources of information: <https://www.census.gov/programs-surveys/popexp/technical-documentation/technology.html>

Sample Calculations: 25% increase for recycling throughout the planning period.

Appendix K Waste Reduction Rates and Demonstration of Achieving Goal 2

Year	Waste Reduced and Recycled (tons)	Waste Disposed (tons)	Waste Generated and Recycling Rate (percent)
2019	49,649	120,872	41.08%
2020	57,293	125,916	45.50%
2021	58,439	139,953	41.76%
2022	59,608	141,210	42.21%
2023	60,800	142,490	42.67%
2024	62,016	143,795	43.13%
2025	63,256	142,505	44.39%
2026	64,521	143,861	44.85%
2027	65,812	145,243	45.31%
2028	67,128	146,651	45.77%
2029	68,470	148,085	46.24%
2030	69,840	149,547	46.71%
2031	71,237	148,358	48.02%
2032	72,661	149,877	48.48%
2033	74,115	151,426	48.94%
2034	75,597	153,004	49.41%
2035	77,109	151,705	50.83%
2036	78,651	157,523	49.93%
2037	80,224	158,658	50.56%

Page K-2

Appendix K Waste Reduction Rates and Demonstration of Achieving Goal 2

Year	Waste Reduced and Recycled (tons)	Waste Disposed (tons)	Waste Generated and Recycling Rate (percent)
2019	49,649	120,872	41.08%
2020	57,293	125,916	45.50%
2021	58,439	139,953	41.76%
2022	59,608	141,210	42.21%
2023	60,800	142,490	42.67%
2024	62,016	143,795	43.13%
2025	63,256	142,505	44.39%
2026	64,521	143,861	44.85%
2027	65,812	145,243	45.31%
2028	67,128	146,651	45.77%
2029	68,470	148,085	46.24%
2030	69,840	149,547	46.71%
2031	71,237	148,358	48.02%
2032	72,661	149,877	48.48%
2033	74,115	151,426	48.94%
2034	75,597	153,004	49.41%
2035	77,109	151,705	50.83%
2036	78,651	157,523	49.93%
2037	80,224	158,658	50.56%

Sources of information: <https://www.census.gov/programs-surveys/popexp/technical-documentation/technology.html>

Sample Calculations: 25% increase for recycling throughout the planning period.

Assumptions: The District met Goal #2 in the 2019 Reference year and the projections show that the

District should meet Goal #2 throughout the planning period.

Year	Waste Reduced and Recycled (tons)	Waste Disposed (tons)	Waste Generated and Recycling Rate (percent)
2019	49,649	120,872	41.08%
2020	57,293	125,916	45.50%
2021	58,439	139,953	41.76%
2022	59,608	141,210	42.21%
2023	60,800	142,490	42.67%
2024	62,016	143,795	43.13%
2025	63,256	142,505	44.39%
2026	64,521	143,861	44.85%
2027	65,812	145,243	45.31%
2028	67,128	146,651	45.77%
2029	68,470	148,085	46.24%
2030	69,840	149,547	46.71%
2031	71,237	148,358	48.02%
2032	72,661	149,877	48.48%
2033	74,115	151,426	48.94%
2034	75,597	153,004	49.41%
2035	77,109	151,705	50.83%
2036	78,651	157,523	49.93%
2037	80,224	158,658	50.56%

Page K-3

Page K-5

APPENDIX L MINIMUM REQUIRED EDUCATION PROGRAMS: OUTREACH AND MARKETING PLAN AND GENERAL EDUCATION REQUIREMENTS

A. Minimum Required Education Programs

Web Page

Name	Start Date	End Date	Goal
Solid Waste District / Recycling (oh.gov)	Existing	Ongoing	3

The District currently maintains its website with information on recycling rules, where to recycle, reducing and reusing information, contact information, and events.

Infrastructure Inventory

Name	Start Date	End Date	Goal
Solid Waste District / Recycling (oh.gov)	Existing	Ongoing	3

On the Districts website the following information is listed: landfill facilities and contacts, trash/curbside recycling options and contacts, yard/composting facility contacts, drop-off recycling locations.

Resource Guide

Name	Start Date	End Date	Goal
https://filecabinet9.echoesview.com/48D1DF08-A331-4FC0-B509-BA56998FA512/9e17ad2a-a751-4483-b575-d9c88b7168c.pdf	Existing	Ongoing	3

Our comprehensive resource guide is on our website, it is also at our office, distributed to entities that would like to provide this information (libraries, schools, government buildings, etc.) Our resource guide is a compilation of outlets for recycling hazardous waste, propane tanks, pharmaceutical drugs, bulbs, plastic bags, etc.

Speaker/Presenter

Name	Start Date	End Date	Goal
District Coordinator	Existing	Ongoing	3

The District Coordinator is available to speak at events within the District on a variety of topics including: rules of recycling, where to recycle, impact of recycling, litter awareness, etc. The District Coordinator is available to speak at all type of events including: festivals, libraries, club meetings, church meetings, classrooms, etc.

B. Outreach and Marketing Plan

Residential Sector

Name	Start Date	End Date	Goal
Curbside Recycling Information	Existing	Ongoing	4
Drop-Off Locations	Existing	Ongoing	4
Community Clean Up Grants	Existing	Ongoing	4
Battery Recycling Program	Existing	Ongoing	4
Compost Facility Information	Existing	Ongoing	4
Household Hazards Waste Annual Collection	Existing	Ongoing	4
Programs/ Events/ Speakers/ Workshops	Existing	Ongoing	4
Green BEAN	Existing	Ongoing	4
Advertising	Existing	Ongoing	4
Flyers	Existing	Ongoing	4
Social Media/ Website	Existing	Ongoing	4
Tire Collection	Existing	Ongoing	4
Technical Assistance	Existing	Ongoing	4
Electronics Recycling Outlets	Existing	Ongoing	4
Community Outreach	Existing	Ongoing	4

Curbside Recycling Information- Information is provided to District residents on private haulers that provide recycling services and how/what they can recycle.

Drop-Off Locations- The District provides three District operated recycling drop-off locations, open to all residents. The District shares information on other government and private operated drop-off recycling locations.

Community Clean Up Grants- Up to \$10,000 in grant monies annually to local political subdivisions of Erie County Solid Waste District (\$160,000.00 total). This grant will allow municipalities to host their own clean up events. This will be a continuing program from previous planning period, with an increased funds.

Battery Recycling Program- Battery program to pay a contractor to pick up designated sites throughout Erie County on a regular basis. Residents can drop-off batteries at designated sites.

Compost Facility Information- Information is provided to District residents on yard waste and composting facilities within the District.

Household Hazards Waste Annual Collection- at least one annual collection per year for residents to dispose of HHW at no cost.

Programs/ Events/ Speakers/ Workshops- Throughout the year the District will speak at requested events, and will share or partner with local entities to provide workshops.

Green BEAN- Available to rent out for free to host own litter collection events.

Advertising- Up to \$75,000 annually throughout the planning period to have consistent messaging on recycling rules.

Flyers- Flyers on recycling rules are handed out at events and are also free to take at all recycling locations operated by the District.

Social Media/ Website- The District promotes recycling locations, rules and events.

Technical Assistance- Most technical assistance is provided through our websites. On there, residents are able to find businesses that take specific items. Our phone system is also valuable to providing technical assistance. All phone messages are returned and we are able to help residents with questions/issues.

Social Media is another great outlet where we can connect with people and try to engage the technology focused audience. We have also implemented new signage and brochures for our residents at all drop-off locations to help with the rules of recycling.

Tire Collection- The tire recycling program at the Erie County Sanitary Landfill is funded through a user fee. Below is a chart with the cost charged to residents recycling tires at the Erie County Sanitary Landfill. The program is self-supporting with revenues and expenses nearly balancing.

Electronics Recycling Outlets- District promotes Goodwill Industries, Staples, and Best Buy's programs for electronic waste.

Community outreach- The District reaches out to municipalities within the District to inquire about interest in starting recycling programs for both drop-off and curbside. The District attends municipality meetings throughout the year as well as a great open line of communication through email, phone and mail. Due to the main concern of the municipalities being the cost of a recycling program the District reaches out to haulers outside the district to inquire about any interest they might have in bringing their business to the District. The District will continue to encourage other recycling haulers to bring business to the area to provide options and completion to help bring cost down and make programs more affordable.

Commercial/Institutional Sector

Name	Start Date	End Date	Goal
Curbside Recycling Information	Existing	Ongoing	4
Compost Facility Information	Existing	Ongoing	4
Programs/ Events/ Speakers/ Workshops	Existing	Ongoing	4
Green BEAN	Existing	Ongoing	4
Advertising	Existing	Ongoing	4
Flyers	Existing	Ongoing	4
Social Media/ Website	Existing	Ongoing	4
Tire Collection	Existing	Ongoing	4
Electronics Recycling Outlets	Existing	Ongoing	4
Recycled Materials Grant	Existing	Ongoing	4
Technical Assistance	Existing	Ongoing	4
Waste Audits	Existing	Ongoing	4
Business Outreach	Existing	Ongoing	4
Revolving Loan Fund	2023		4

Curbside Recycling Information- Information is provided to District residents on private haulers that provide recycling services and how/what they can recycle.

Compost Facility Information- Information is provided to District residents on yard waste and composting facilities within the District.

Programs/ Events/ Speakers/ Workshops- Throughout the year the District will speak at requested events, and will share or partner with local entities to provide workshops.

Green BEAN- Available to rent out for free to host own litter collection events.

Advertising- Up to \$75,000 annually throughout the planning period to have consistent messaging on recycling rules.

Flyers- Flyers on recycling rules are handed out at events and are also free to take at all recycling locations operated by the District.

Social Media/ Website- The District promotes recycling locations, rules and events.

Recycled Materials Grant- Up to \$250,000 annually to encourage the purchase of recycled-content products. This grant is offered to public and private entities. The Board has the right to increase amount if they see a need.

Revolving Loan Fund- Up to \$75,000 annually for businesses wishing to start at a recycling program.

Technical Assistance- The District is available to help with hauler concerns and questions on how things may be recycled or disposed of. The websites is available to see what other businesses are doing locally. Waste audits are sent out annually by the District.

Tire Collection- The tire recycling program at the Erie County Sanitary Landfill is funded through a user fee. Below is a chart with the cost charged to residents recycling tires at the Erie County Sanitary Landfill. The program is self-supporting with revenues and expenses nearly balancing.

Electronics Recycling Outlets- District promotes Goodwill Industries, Staples, and Best Buy's programs for electronic waste.

Waste audits- The District has partnered with Gateway Recycling to perform waste audits to business that have inquired through our website, email or phone. The District also uses the Annual District Survey to inquire about any interest in waste audits. Businesses that indicate that they are not interested in a waste audit still receive a phone call to explain the benefits.

Business outreach- The District reaches out to businesses within the District to inquire about any interest in starting a recycling program, or if they would be interested in a waste audit. The District also reaches out to businesses with ongoing recycling programs to see if they need any assistance with messaging, or contamination concerns. The District provides resources where needed to help programs be successful.

Industrial Sector

Name	Start Date	End Date	Goal
Curbside Recycling Information	Existing	Ongoing	4
Compost Facility Information	Existing	Ongoing	4
Programs/ Events/ Speakers/ Workshops	Existing	Ongoing	4
Green BEAN	Existing	Ongoing	4
Advertising	Existing	Ongoing	4
Flyers	Existing	Ongoing	4
Social Media/ Website	Existing	Ongoing	4
Tire Collection	Existing	Ongoing	4
Electronics Recycling Outlets	Existing	Ongoing	4
Recycled Materials Grant	Existing	Ongoing	4
Technical Assistance	Existing	Ongoing	4
Waste Audits	Existing	Ongoing	4
Business Outreach	Existing	Ongoing	4
Revolving Loan Fund	2023		4

Curbside Recycling Information- Information is provided to District residents on private haulers that provide recycling services and how/what they can recycle.

Compost Facility Information- Information is provided to District residents on yard waste and composting facilities within the District.

Programs/ Events/ Speakers/ Workshops- Throughout the year the District will speak at requested events, and will share or partner with local entities to provide workshops.

Green BEAN- Available to rent out for free to host own litter collection events.

Advertising- Up to \$75,000 annually throughout the planning period to have consistent messaging on recycling rules.

Flyers- Flyers on recycling rules are handed out at events and are also free to take at all recycling locations operated by the District.

Social Media/ Website- The District promotes recycling locations, rules and events.

Recycled Materials Grant- Up to \$250,000 annually to encourage the purchase of recycled-content products. This grant is offered to public and private entities. The Board has the right to increase amount if they see a need.

Revolving Loan Fund- Up to \$75,000 annually for businesses wishing to start at a recycling program.

Technical Assistance- The District is available to help with hauler concerns and questions on how things may be recycled or disposed of. The websites is available to see what other businesses are doing locally. Waste audits are sent out annually by the District.

APPENDIX L Minimum Required Education Programs:

Tire Collection-The tire recycling program at the Erie County Sanitary Landfill is funded through a user fee. Below is a chart with the cost charged to residents recycling tires at the Erie County Sanitary Landfill. The program is self-supporting with revenues and expenses nearly balancing

Electronics Recycling Outlets- District promotes Goodwill Industries, Staples, and Best Buy's programs for electronic waste

Waste audits- The District has partnered with Gateway Recycling to perform waste audits to business that have inquired through our website, email or phone. The District also uses the Annual District Survey to inquire about any interest in waste audits. Businesses that indicate that they are not interested in a waste audit still receive a phone call to explain the benefits.

Business outreach- The District reaches out to businesses within the District to inquire about any interest in starting a recycling program, or if they would be interested in a waste audit. The District also reaches out to businesses with ongoing recycling programs to see if they need any assistance with messaging, or contamination concerns. The District provides resources where needed to help programs be successful.

Political Leaders

Name	Start Date	End Date	Goal
Curbside Recycling Information	Existing	Ongoing	4
Compost Facility Information	Existing	Ongoing	4
Programs/ Events/ Speakers/ Workshops	Existing	Ongoing	4
Green BEAN	Existing	Ongoing	4
Advertising	Existing	Ongoing	4
Flyers	Existing	Ongoing	4
Social Media/ Website	Existing	Ongoing	4
Tire Collection	Existing	Ongoing	4
Electronics Recycling Outlets	Existing	Ongoing	4
Recycled Materials Grant	Existing	Ongoing	4
Technical Assistance	Existing	Ongoing	4
Community Outreach	Existing	Ongoing	4
Curbside Recycling Information- Information is provided to District residents on private haulers that provide recycling services and how/what they can recycle.			
Compost Facility Information- Information is provided to District residents on yard waste and composting facilities within the District.			
Household Hazards Waste Annual Collection- At least one annual collection per year for residents to dispose of HHW at no cost.			
Programs/ Events/ Speakers/ Workshops- Throughout the year the District will speak at requested events, and will share or partner with local entities to provide workshops.			
Green BEAN- Available to rent out for free to host own litter collection events.			
Advertising- Up to \$75,000 annually throughout the planning period to have consistent messaging on recycling rules.			
Flyers- Flyers on recycling rules are handed out at events and are also free to take at all recycling locations operated by the District.			
Social Media/ Website- The District promotes recycling locations, rules and events.			
Recycled Materials Grant- Up to \$250,000 annually to encourage the purchase of recycled-content products. This grant is offered to public and private entities. The Board has the right to increase amount if they see a need.			
Technical Assistance-- The District is available to help with hauler concerns and questions on how things may be recycled or disposed of. The websites is available to see what other businesses are doing locally. Waste audits are sent out annually by the District.			
Tire Collection-The tire recycling program at the Erie County Sanitary Landfill is funded through a user fee. Below is a chart with the cost charged to residents recycling tires at the Erie County Sanitary Landfill. The program is self-supporting with revenues and expenses nearly balancing			
Electronics Recycling Outlets- District promotes Goodwill Industries, Staples, and Best Buy's programs for electronic waste			

Page L-5

APPENDIX L Minimum Required Education Programs:

Community outreach- The District reaches out to municipalities within the District to inquire about interest in starting recycling programs for both drop-off and curbside. The District attends municipality meetings throughout the year as well as a great open line of communication through email, phone and mail. Due to the main concern of the municipalities being the cost of a recycling program the District reaches out to haulers outside the district to inquire about any interest they might have in bringing their business to the District. The District will continue to encourage other recycling haulers to bring business to the area to provide options and completion to help bring cost down and make programs more affordable.

Schools

Name	Start Date	End Date	Goal
Curbside Recycling Information	Existing	Ongoing	4
Compost Facility Information	Existing	Ongoing	4
Programs/ Events/ Speakers/ Workshops	Existing	Ongoing	4
Green BEAN	Existing	Ongoing	4
Advertising	Existing	Ongoing	4
Flyers	Existing	Ongoing	4
Social Media/ Website	Existing	Ongoing	4
Tire Collection	Existing	Ongoing	4
Electronics Recycling Outlets	Existing	Ongoing	4
Recycled Materials Grant	Existing	Ongoing	4
Technical Assistance	Existing	Ongoing	4
Educational Outreach	Existing	Ongoing	4
Revolving Loan Fund	2023		4

Curbside Recycling Information- Information is provided to District residents on private haulers that provide recycling services and how/what they can recycle.

Compost Facility Information- Information is provided to District residents on yard waste and composting facilities within the District.

Programs/ Events/ Speakers/ Workshops- Throughout the year the District will speak at requested events, and will share or partner with local entities to provide workshops.

Green BEAN- Available to rent out for free to host own litter collection events.

Advertising- Up to \$75,000 annually throughout the planning period to have consistent messaging on recycling rules.

Flyers- Flyers on recycling rules are handed out at events and are also free to take at all recycling locations operated by the District.

Social Media/ Website- The District promotes recycling locations, rules and events.

Recycled Materials Grant- Up to \$250,000 annually to encourage the purchase of recycled-content products. This grant is offered to public and private entities. The Board has the right to increase amount if they see a need.

Revolving Loan Fund- Up to \$75,000 annually for businesses wishing to start at a recycling program.

Technical Assistance-- The District is available to help with hauler concerns and questions on how things may be recycled or disposed of. The websites is available to see what other businesses are doing locally. Waste audits are sent out annually by the District.

Tire Collection-The tire recycling program at the Erie County Sanitary Landfill is funded through a user fee. Below is a chart with the cost charged to residents recycling tires at the Erie County Sanitary Landfill. The program is self-supporting with revenues and expenses nearly balancing

Electronics Recycling Outlets- District promotes Goodwill Industries, Staples, and Best Buy's programs for electronic waste

Page L-6

APPENDIX L Minimum Required Education Programs:

Education Outreach- The District does school visits and outreach programs to all schools throughout the District whether the school has a recycling program or not. Some students in the school might not have recycling at school, but do at home and vice versa. The District has a wide range of topics that the school can pick from to discuss. One of the popular topics is how to pack a waste free lunch. This topic focuses on what we can do to reuse and reduce our waste and recycling is the last step. The District also continues to reach out to schools annually to gauge interest in starting recycling programs. The major concern schools face is the cost. The District continues to try to find ways to reduce the cost by trying to bring more recycling haulers into the District.

C. Outreach Priority

Name	Start Date	End Date	Goal
Advertising Campaign	Existing	Ongoing	4
The District will continue to campaign to reduce contamination in materials collected through curbside and drop-off recycling programs. The District will use clear messaging with examples of what can and cannot be recycled. The District will promote recycling rules "Items must be dry, clean and empty", "Items cannot be bagged, boxed or bundled". The District will keep data on contamination fees charged (drop-offs) in each quarter throughout the planning period and analyze this data determine if advertisements are having impact on contamination. The District will also be reaching out to Republic Services to see if they are willing to provide their data as a resource for the District to use to determine the success of this campaign.			

Page L-7

Appendix M Waste Management Capacity Analysis

APPENDIX M WASTE MANAGEMENT CAPACITY ANALYSIS

A. Access to Publicly Available Landfill Facilities

Table M-1 Remaining Operating Life of Publicly Available Landfills

Facility	Location	Years of Remaining Capacity	Status (enter no change, planned expansion, pending expansion, or closing)	Applicable Dates
Erie County Sanitary Landfill	Erie County	49	No change	Current
Crawford County Landfill	Crawford County	22	Unknown	Unknown
Port Clinton Landfill	Ottawa County	83	Unknown	Unknown
Noble Road Landfill	Richland County	20	Unknown	Unknown
Sunny Farms Landfill	Seneca County	8	Unknown	Unknown
American Landfill	Stark County	70	Unknown	Unknown
Evergreen Recycling	Wood County	38	Unknown	Unknown

Page M-1

and Disposal	Wood County Landfill	Wood County	Unknown	Unknown	Unknown
--------------	----------------------	-------------	---------	---------	---------

Source(s) of Information: Information for table M-1 was supplied by Ohio EPA.

Sample Calculations: N/A

Assumptions: N/A

The District will have adequate available capacity at Erie County Landfill.

B. Access to Captive Landfill Facilities

Table M-3 Remaining Operating Life of Privately Available Landfills

N/A- No privately operated landfills within the District.

C. Incinerators and Energy Recovery Facilities

N/A- No incinerators and energy recovery facilities within the District.

APPENDIX N EVALUATING GREENHOUSE GAS EMISSIONS

GHG Emissions Analysis -- Summary Report

Version 5

GHG Emissions Waste Management Analysis for

Prepared by:

Project Period for this Analysis: 01/00/00 to 01/00/00

Note: If you wish to save these results, rename this file (e.g., WARMARJ) and save it. Then the "Output Report" sheet of the "WARMARJ" file will be blank when you are ready to make another iteration.

GHG Emissions from Baseline Waste Management (MTCO₂E):

524.56

Material	Tons Recycled	Tons Landfilled	Tons Composted	Tons Anaerobically Digested	Total MTCO ₂ E
Corrugated Containers	-	1,704.99	-	N/A	N/A
Household Appliances	-	134.18	-	N/A	N/A
Household Plastic	-	30.33	-	N/A	N/A
Household Glass	-	6,508.10	-	N/A	N/A
Household Metals	-	3.06	-	N/A	N/A
Tires	-	541.85	-	N/A	N/A
Household Recyclables	-	1,556.11	-	N/A	N/A

GHG Emissions from Alternative Waste Management Scenario (MTCO₂E):

(70,571.37)

Material	Tons Source Reduced	Tons Recycled	Tons Landfilled	Tons Composted	Tons Anaerobically Digested	Total MTCO ₂ E	Change (Alt - Base) MTCO ₂ E
Corrugated Containers	-	1,704.99	-	-	N/A	N/A	-1,704.99
Household Appliances	-	134.18	-	-	N/A	N/A	-134.18
Household Plastic	-	30.33	-	-	N/A	N/A	-30.33
Household Glass	-	6,508.10	-	-	N/A	N/A	-6,508.10
Household Metals	-	3.06	-	-	N/A	N/A	-3.06
Tires	-	541.85	-	-	N/A	N/A	-541.85
Household Recyclables	-	1,556.11	-	-	N/A	N/A	-1,556.11

Total Change in GHG Emissions (MTCO₂E):

(70,571.87)

This is equivalent to...

Removing annual emissions from 14,963 Passenger Vehicles

Conserving 7,541,623 Gallons of Gasoline

Conserving 2,540,495 Cylinders of Propane Used for Home Barbeques

6.60396% Annual CO₂ emissions from the U.S. transportation sector

8.80750% Annual CO₂ emissions from the U.S. electricity sector

APPENDIX O FINANCIAL PLAN

The budget tables prepared for this Plan demonstrate that the District has the financial funding throughout the planning period to implement the planned programs and initiatives. Nothing contained in these budget projections should be construed as a binding commitment by the District to spend a specific amount of money on a particular strategy, facility, program and/or activity. The Board, will review and revise the budget as needed to implement the planned strategies, facilities, programs and/or activities as effectively as possible with the funds available. Revenues, not otherwise committed to an existing strategy, facility, program or activity may be used to increase funding to improve the effectiveness of an existing strategy, facility, program or activity and to provide funding for a new strategy, facility, program or activity. The District reserves the right to revise the budget and reallocate funds as programs change or when otherwise determined to be in the best interest of the District. If the budget in this Plan is effected to the point that it must be revised, the District will first determine if a material change in circumstance has occurred. If a material change in circumstance has not occurred but budget revisions are needed that go beyond normal adjustments, the District may revise the budget per ORC Section 3734.56(E) and follow the appropriate ratification requirements to finalize the budget revisions. The District is committed to implementing planned strategies, facilities, programs and/or activities in a cost-effective manner. The District is committed to improving the effectiveness and reduce the cost of all District strategies, facilities, programs and activities. The District Board is authorized to expand District funds among other uses included in the Plan when costs are reduced. Additionally, the Board is authorized to use reduced costs to provide grant funds or direct funding to evaluate, test and/or implement new strategies, facilities, programs and activities that are in compliance with this Plan are not a "material change in circumstance" regarding the implementation of this Plan Update.

A. Funding Mechanisms and Revenue Generated

1. Disposal Fee- N/A

Table O-1 Disposal Fee Schedule and Revenue (in accordance with ORC Section 3734.57(B))
N/A

Assumptions:
Revenue has been consistent throughout the years. The Solid Waste District will be increasing some expenses throughout the planning period to use up some of the savings it has acquired throughout the years.

Sample Calculations: Ohio EPA Formula.

Source(s) of Information: Quarterly Fee Reports

Historical Revenue Analysis (Revenue \$)				
Average revenue received	Annual change in revenue received	Year	Year	%
\$535,048	2018	2017	2016	2015
	2017	2016	2015	2014
	2016	2015	2014	2013
	2015	2014	2013	2012
	2014	2013	2012	2011
Assumptions: Revenue has been consistent throughout the years. The Solid Waste District will be increasing some expenses throughout the planning period to use up some of the savings it has acquired throughout the years.				

Assumptions: Revenues continue to come in throughout the planning period

Sample Calculations: Ohio EPA Formula.

Source(s) of Information: 2019 Quarterly Fee Reports

Year	User Fee	Reimbursements	Enter Revenue Source C	Enter Revenue Source D	Enter Revenue Source E	Total Other Revenue
2015	\$4,000	\$611				\$4,611
2016	\$871	\$0				\$871
2017	\$986	\$650				\$1,636
2018	\$1,723	\$1,060				\$2,783
2019	\$6,447	\$775				\$7,222
2020	\$6,640	\$791				\$7,431
2021	\$6,840	\$806				\$7,646
2022	\$7,045	\$822				\$7,867
2023	\$7,256	\$839				\$8,095
2024	\$7,474	\$856				\$8,330
2025	\$7,698	\$873				\$8,571
2026	\$7,929	\$890				\$8,819
2027	\$8,167	\$908				\$9,075
2028	\$8,412	\$926				\$9,338
2029	\$8,664	\$945				\$9,609
2030	\$8,924	\$964				\$9,888
2031	\$9,192	\$983				\$10,175
2032	\$9,468	\$1,003				\$10,470
2033	\$9,752	\$1,023				\$10,774
2034	\$10,044	\$1,043				\$11,087
2035	\$10,346	\$1,064				\$11,409
2036	\$10,656	\$1,085				\$11,741
2037	\$10,976	\$1,107				\$12,082

Table O-5 Other Sources of Revenue

N/A

Table O-4 - Loans

Debt/Loans

N/A

Table O-3 Designation Fee Schedule and Revenue

Designation Fees

Year	Generation Fee (\$ per ton)	Total Revenue from Generation Fee (\$)
2015	\$5.00	\$512,878
2016	\$5.00	\$504,857
2017	\$5.00	\$479,841
2018	\$5.00	\$515,262
2019	\$5.00	\$462,404
2020	\$5.00	\$462,404
2021	\$5.00	\$462,404
2022	\$5.00	\$462,404
2023	\$5.00	\$462,404
2024	\$5.00	\$462,404
2025	\$5.00	\$462,404
2026	\$5.00	\$462,404
2027	\$5.00	\$462,404
2028	\$5.00	\$462,404
2029	\$5.00	\$462,404
2030	\$5.00	\$462,404
2031	\$5.00	\$462,404
2032	\$5.00	\$462,404
2033	\$5.00	\$462,404
2034	\$5.00	\$462,404
2035	\$5.00	\$462,404
2036	\$5.00	\$462,404
2037	\$5.00	\$462,404

Table O-2 Generation Fee Schedule and Revenue

Generation Fee

Appendix O Financial Data

User fees are for tire collections. The District charges residents to recycle tires to offset the cost of this service to the District. Reimbursements are sponsors, vendors for Annual Earth Day Extravaganza Festival.

User fee will be predicted to increase by 3% only if cost to the district will increase.
2% increase for EDX Sponsors

6 Summary of District Revenues

Table O-6 Total Revenue

Year	Disposal Fees	Generation Fees	Designation Fees	Other Revenue	Total Revenue
2015	\$0	\$512,878	\$0	\$4,811	\$517,689
2016	\$0	\$604,857	\$0	\$871	\$605,728
2017	\$0	\$479,841	\$0	\$1,636	\$481,477
2018	\$0	\$615,262	\$0	\$2,783	\$618,045
2019	\$0	\$462,404	\$0	\$7,222	\$469,626
2020	\$0	\$462,404	\$0	\$7,431	\$469,835
2021	\$0	\$462,404	\$0	\$7,646	\$470,050
2022	\$0	\$462,404	\$0	\$7,867	\$470,272
2023	\$0	\$462,404	\$0	\$8,095	\$470,499
2024	\$0	\$462,404	\$0	\$8,330	\$470,734
2025	\$0	\$462,404	\$0	\$8,571	\$470,975
2026	\$0	\$462,404	\$0	\$8,819	\$471,224
2027	\$0	\$462,404	\$0	\$9,075	\$471,479
2028	\$0	\$462,404	\$0	\$9,338	\$471,742
2029	\$0	\$462,404	\$0	\$9,609	\$472,013
2030	\$0	\$462,404	\$0	\$9,888	\$472,292
2031	\$0	\$462,404	\$0	\$10,175	\$472,579
2032	\$0	\$462,404	\$0	\$10,470	\$472,875
2033	\$0	\$462,404	\$0	\$10,774	\$473,179
2034	\$0	\$462,404	\$0	\$11,087	\$473,492
2035	\$0	\$462,404	\$0	\$11,409	\$473,814
2036	\$0	\$462,404	\$0	\$11,741	\$474,145
2037	\$0	\$462,404	\$0	\$12,082	\$474,487

Source(s) of Information:

Sample Calculations:

Assumptions:

User fee will be predicted to increase by 3% only if cost to the district will increase.

2% increase for EDX Sponsors

At this time the District does not need to increase generation fees, but if needed the District will look into this option. The Solid Waste Board has the authority to raise rates as needed.

Appendix O Financial Data

B. Cost of Implementing Plan Cost to the District

Throughout the planning period, the District will incur expenses for office and staff, plan preparation at five-year intervals, and the following activities and programs. Expenses will be divided into two categories: operating cost, and supplemental programs. Each expense will be explained in further detail in this section of the plan. Supplemental programs are in order by priority spending if additional money is carried over from following the following year. The Board of Directors and Solid Waste Coordinator will meet annually to create a fiscally reasonable budget for the year. To allow more than the minimum budgeted amount (Table O-7) to be spent the following criteria must be met: 1. Operating cost must be budgeted for by minimum budgeted amount 2. The Solid Waste fund balance must not be below the total minimum budgeted expenses (Table O-7). 3. The access spending must not exceed the maximum budgeted amount (pages O-14 – O-16).

Operating Cost:

- District Coordinator
- Office supplies
- Office overhead
- Travel
- Repairs and maintenance
- Equipment
- Plan update

Supplemental Programs:

1. SWMD Drop-Off Program
2. Sheriff litter aide
3. Sheriff litter trailer
4. Household Hazardous Waste Collections (HHW)
5. Household battery collection
6. Community clean up grants
7. Municipality tire credit
8. Recycled materials grant
9. Special events
10. Outreach & marketing
11. Advertising
12. G.R.E.E.N. Bean community trailer
13. Debris Management Plan
14. Revolving loan fund

Appendix O Financial Data

Appendix O Financial Data

Line #	Category/Program	2015	2016	2017	2018	2019	2020	2021	2022
1.1	Plan Monitoring/Prep	\$3,330	\$3,542	\$11,353	\$6,091	\$3,978	\$4,314	\$5,192	\$4,577
1.a	Plan Preparation	\$3,092	\$3,542	\$3,187	\$3,148	\$727		\$749	\$0
1.b	Plan Monitoring	\$238	\$0	\$8,166	\$1,942	\$3,252	\$4,314	\$4,444	\$4,577
1.c	Other	\$2,848							
2.2	Plan Implementation	\$288,695	\$140,778	\$277,135	\$407,290	\$417,486	\$219,828	\$313,024	\$356,686
2.a	District Administration	\$67,451	\$61,301	\$129,625	\$126,887	\$60,415	\$65,779	\$65,780	\$57,453
2.a.1	Personnel	\$63,404	\$44,012	\$98,437	\$48,017	\$33,816	\$36,073	\$36,073	\$37,773
2.a.2	Office Overhead	\$17,048	\$17,292	\$30,009	\$80,850	\$25,847	\$19,107	\$19,107	\$19,680
2.a.3	Other			\$3,119		\$762			
2.b	Facility Operation	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
2.b.1	MRF/Recycling Center								
2.b.2	Compost								
2.b.3	Transfer								
2.b.4	Special Waste								
2.c	Landfill Closure/Post-Closure								
2.d	Recycling Collection	\$108,563	\$0	\$120,885	\$184,935	\$52,227	\$58,545	\$59,716	\$100,000
2.d.1	Curbside								
2.d.2	Drop-off	\$108,563	\$17,042,26	\$120,885	\$128,096	\$52,227	\$58,545	\$59,716	\$100,000
2.d.3	Combined Curbside/Drop-off								
2.d.4	Municipality								
2.d.5	Business/Institutional								
2.d.6	Other				\$5,940				
2.e	Special Collections	\$49,716	\$37,604	\$18,123	\$63,763	\$52,672	\$53,344	\$67,035	\$68,705
2.e.1	Tire Collection	\$16,436	\$8,296	\$4,691	\$10,575	\$3,478	\$6,600	\$22,732	\$23,187
2.e.2	HHW Collection	\$33,280	\$29,308	\$13,432	\$53,081	\$56,810	\$23,146	\$24,303	\$25,518
2.e.3	Electronics Collection								
2.e.4	Appliance Collection								
2.e.5	Other Collection Items				\$2,226	\$32,384	\$23,600	\$40,000	\$40,000
2.f	Waste/Other Operations								
2.g	Education/Awareness	\$2,965	\$41,873	\$8,502	\$2,680	\$2,157	\$60,493	\$60,508	
2.g.1	Education Staff	\$2,965	\$41,873	\$8,502	\$2,680	\$1,539	\$479	\$483	\$508
2.g.2	Advisement/Promotion							\$60,000	\$60,000
2.g.3	Other			\$2,826		\$1,411	\$1,879	\$10,000	\$10,000
2.h	Recycling Market Development	\$0	\$0	\$0	\$0	\$200,170	\$50,000	\$50,000	\$50,000
2.h.1	General Market Development Activities						\$50,000	\$50,000	\$50,000
2.h.2	ORCA fees through grant					\$200,170			
2.i	Service Contracts								
2.j	Feasibility Studies						\$8,500		
2.k	Waste Assessments/Audits								
2.l	Dump Cleanup				\$17,500				
2.m	Litter Collection/Education								\$0
2.n	Emergency Debris Management								
2.o	Loan Payment					\$61,525	\$552		
2.p	Other								
3.3	Health Dept. Enforcement	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
	Health Department Name:								
	Health Department Name:								
	Health Department Name:								
	Health Department Name:								
4.4	County Assistance	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
4.a	Maintaining Roads								
4.b	Maintaining Public Facilities								
4.c	Providing Emergency Services								
4.d	Providing Other Public Services								
5.6	Well Testing								
6.6	Out-of-State Waste Inspection								
7.7	Open Dump, Litter Law Enforcement	\$0	\$0	\$75,000	\$150,000	\$150,000	\$150,000	\$150,000	\$150,000
7.a	Health Department			\$75,000	\$150,000	\$150,000	\$150,000	\$150,000	\$150,000
7.b	Local Law Enforcement								
7.c	Other								
8.6	Health Department Training								
9.9	Municipal/Township Assistance	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
9.a	Maintaining Roads								
9.b	Maintaining Public Facilities								
9.c	Providing Emergency Services								
9.d	Providing other Public Services								
10	Compensation to Affected Community (ORCA Section 3734.36)								
	Total Expenses	\$294,625	\$150,320	\$303,484	\$652,381	\$571,465	\$374,142	\$469,216	\$511,243

Carry Over Balance

Throughout the previous planning period the district saw a consistent carry over quarter to quarter and year to year. This carry over was due to decreased expenditures:

- Reduction in staff, salary, HHW Collections and battery drop-offs
- Partnering with local entities to provide no cost workshops
- Fundraising and sponsorships to reduce cost for events
- Renewing expired contracts to reduce cost and lock in pricing

Going forward the District has implemented cost increase in funding for programming to spend down some of the excess carry over balanced that it has accumulated throughout the years. Program funding increases include:

- Community Clean Up Grants- \$2,500 annually per municipality to be increased to up to \$10,000 annually per municipality.
- Advertising- \$100 annually increased up to \$75,000 annually.
- Recycled Materials Grant- \$5,000 annually increased up to \$250,000 annually.
- Revolving loan fund- up to \$75,000 annually.

The District will meet with the Board annually to determine the budget for each line item and will make a determination each year for the amount to be allocated.

- Office supplies
 - 500.00 per year
- Office overhead
 - 4,000 per year
- Travel
 - 500.00 per year
- Repairs and maintenance
 - 20,000 per year
 - The District feels like \$20,000 per year to budget for repairs in maintenance is a safe number as you cannot predict what repairs will be needed from year to year. The District will allocate \$20,000 for repairs in their budget each for this plan not to accumulate year to year.

25. Equipment

1. Year by year basis under circumstance where new equipment is needed.
 2. \$100,000 annually will be allocated to equipment if needed. Equipment is not per chance every year and will only be purchased when necessary.
- Plan update
 - 5% of the District Coordinator's total salary beginning 2021
 - 5% projected increase has been used in the past to manage this budget. With the current market conditions it is hard to predict how much of an increase the District will see in pricing. The District feels that 5% is a safe increase to use.
 - SWMD Drop-Off Program
 - 100,000 per year
 - With increasing cost (about \$10,000 per year) the District feels that allocating \$100,000 per year for drop-off programs is a safe number.
 - Special events- \$1,000.00 per year and will increase 5% over the planning period
 - Earth Day Extravaganza \$1,000 per year beginning 2020 and remaining consistent throughout the planning period
 - 5% projected increase has been used in the past to manage this budget. With the current market conditions it is hard to predict how much of an increase the District will see in pricing. The District feels that 5% is a safe increase to use.
 - Outreach & marketing plan- Total \$600.00 and increase 5% annually throughout the planning period
 - Give-A-Way Items- \$100.00 per year
 - Printing- \$500.00 per year
 - 5% projected increase has been used in the past to manage this budget. With the current market conditions it is hard to predict how much of an increase the District will see in pricing. The District feels that 5% is a safe increase to use.
 -
 - Advertising- The District will meet with the Board annually to determine the budget for this line item, but will plan no less than \$5,000 and up to \$75,000 annually throughout the planning period
 - Newspaper
 - Makers
 - Commercial
 - Sheriff litter trailer- \$5,000 and increase 5% annually throughout the planning period per year.

Explanation of Expenses**1 Plan Monitoring/Prep.**

- 1.a Plan Preparation-The cost to the District for the Coordinator to prepare plan and make any changes.
- 1.b Plan Monitoring-The cost to the District for the Coordinator to monitor plan.
- 1.c Other

2 Plan Implementation**2.a District Administration**

2.a.1 Personnel- Currently the District has one employee: The District Coordinator, \$34,095.88 (\$22.61 per hour x 29 hours a week x 52 weeks a year) per year including payroll and benefits. Staff costs, including payroll and benefits, will increase at 3% per year beginning in 2023.

2.a.2 Office Overhead- Items include office supplies, utility expenses, county services, equipment, repairs/maintenance. Increase of 3% throughout the planning period.

2.a.3 Other-NA

2.b Facility Operation

2.b.1 MSRF/Recycling Center-NA

2.b.2 Compost-NA

2.b.3 Transfer-NA

2.b.4 Special Waste-NA

2.c Landfill Closure/Post-Closure-NA**2.d Recycling Collection**

2.d.1 Curbside-NA

2.d.2 Drop-off- Cost to the District of operating two drop-off locations throughout the District. Increase of 2% throughout the planning period.

2.d.3 Combined Curbside/Drop-off-NA

2.d.4 Multi-family-NA

2.d.5 Business/Institutional-NA

2.d.6 Other-NA

- \$5,000 for maintenance and restocking
- 5% projected increase has been used in the past to manage this budget. With the current market conditions it is hard to predict how much of an increase the District will see in pricing. The District feels that 5% is a safe increase to use.
- G.R.E.E.N. Bean community trailer- \$1,000 and increase 5% over the planning period.
 - \$1,000 for maintenance and restocking
 - 5% projected increase has been used in the past to manage this budget. With the current market conditions it is hard to predict how much of an increase the District will see in pricing. The District feels that 5% is a safe increase to use.
- Debris Management Plan- The District will meet with the Board annually to determine the budget for this line item, but will plan no less than \$5,000 and up to \$25,000 annually
 - \$25,000 annually for managing all types of waste/debris resulting from a disaster or significant emergency
- Household battery collections (Drop-Off Sites)- \$30,000.00 annually increase of 5% annually throughout the planning period per year.
 - \$30,000.00 to pay private contractor to collect, haul and properly dispose of batteries collected at designated drop-off sites throughout the county.
 - 5% projected increase has been used in the past to manage this budget. With the current market conditions it is hard to predict how much of an increase the District will see in pricing. The District feels that 5% is a safe increase to use.
- Household Hazardous Waste Collections- \$30,000.00 annually increase of 5% annually throughout the planning period per year.
 - \$30,000.00 to pay private contractor to collect, haul and properly dispose of hazardous waste collected at designated drop-off sites throughout the county.
 - 5% projected increase has been used in the past to manage this budget. With the current market conditions it is hard to predict how much of an increase the District will see in pricing. The District feels that 5% is a safe increase to use.
- Municipality tire credit- \$16,000 annually
 - \$1,000 credit for tire recycling to reduce the amount of roadside tires throughout the District.
- Community clean up grants- The District will meet with the Board annually to determine the budget for this line item, but will plan no less than \$40,000 and up to \$160,000 annually
 - Up to \$10,000 in grant monies annually to local political subdivisions of Erie County Solid Waste District (16)
- Sheriff litter aide- The District will meet with the Board annually to determine the budget for this line item, but will plan no less than \$150,000 annually for years 2023-2027, no less than \$140,000, but up to \$150,000 for year 2028, no less than \$130,000 up to \$150,000 for year 2029, no less than \$120,000 up to \$150,000 for year 2030, no less than \$110,000 and up to \$150,000 for year 2031, no less than \$100,000 and up to \$150,000 for years 2032 and 2033, no less than \$90,000 up to \$150,000 for year 2034, no less than \$85,000 and up to \$150,000 for year 2035, no less than \$75,000 and up to \$150,000 for year 2036, no less than \$67,000 and up to \$150,000 for year 2037.
 - The District provides funding to the Erie County Sheriff deputy's wages and fringes that operates the community service litter collection trailer not cover by grant fund from the Common Pleas Court. The District will also provide funding to the investigating and enforcing litter and related solid waste laws. The combined funding will be \$150,000.00 annually throughout the planning period.
- Recycled materials grant- The District will meet with the Board annually to determine the budget for this line item, but will plan no less than \$5,000 and up to \$250,000 annually
 - \$250,000 annually to encourage the purchase of recycled-content products. This grant is offered to public and private entities.
- Revolving loan fund- The District will meet with the Board annually to determine the budget for this line item, but will plan no less than \$5,000 and up to \$75,000 annually
 - Up to \$75,000 annually for businesses

9 c Providing Emergency Services-N/A9 d Providing other Public Services-N/A**1 Compensation to Affected Community (ORC Section 3734.35)**

Table O-8 Budget Summary

Year	Revenue	Expenses	Annual Surplus/Deficit (\$)	Balance (\$)
2014			Ending Balance	\$597,533
2015	\$517,489	\$294,825	\$222,664	\$1,119,896
2016	\$605,728	\$150,320	\$455,408	\$1,575,304
2017	\$481,477	\$363,488	\$117,989	\$1,693,294
2018	\$618,045	\$662,381	\$55,654	\$1,748,948
2019	\$459,826	\$875,465	-\$415,638	\$1,333,310
2020	\$469,835	\$374,142	\$95,693	\$1,428,993
2021	\$470,050	\$468,216	\$1,834	\$1,430,827
2022	\$470,272	\$511,243	-\$40,972	\$1,389,855
2023	\$470,499	\$435,630	\$34,870	\$1,424,725
2024	\$470,734	\$441,104	\$29,630	\$1,454,355
2025	\$470,975	\$448,343	\$22,632	\$1,476,987
2026	\$471,224	\$454,200	\$17,024	\$1,494,011
2027	\$471,479	\$461,883	\$9,596	\$1,503,607
2028	\$471,742	\$469,154	\$2,588	\$1,506,195
2029	\$472,013	\$466,315	\$5,698	\$1,511,893
2030	\$472,292	\$463,030	\$9,262	\$1,519,155
2031	\$472,578	\$461,704	\$10,874	\$1,528,029
2032	\$472,875	\$448,900	\$23,975	\$1,551,004
2033	\$473,179	\$468,124	\$5,055	\$1,556,059
2034	\$473,492	\$455,839	\$17,653	\$1,573,712
2035	\$473,814	\$440,656	\$13,158	\$1,586,870
2036	\$474,145	\$458,930	\$15,215	\$1,602,085
2037	\$474,487	\$461,380	\$13,107	\$1,615,192

Source(s) of Information: 2019 Quarterly Fee Reports

Sample Calculations: See above increase in expenses throughout the planning period.

Assumptions:

Carry Over Balance**Carry Over Balance**

Page O-20 |

2 e Special Collections

- 2 e 1 Tire Collection: Cost to the District of operating tire recycling drop-off at the Erie County Landfill. Cost is offset by user fee. Increase of 2% throughout the planning period. Municipality Tire Credit- \$16,000 annually \$1,000 credit for tire recycling to reduce the amount of roadside tires throughout the District.

- 2 e 2 HHW Collection: Cost to the District of hosting annual HHW collection and Household Battery Collections. Increase of 5% throughout the planning period.

- 2 e 3 Electronics Collection

- 2 e 4 Appliance Collection

- 2 e 5 Other Collection Drivers: Community Clean Up Grants- The District will meet with the Board annually to determine the budget for this line item, but will plan no less than \$40,000 and up to \$160,000 annually. Up to \$10,000 in grant monies annually to local political subdivisions of Erie County Solid Waste District (16).

2 f Yard Waste/Other Organics-N/A**2 g Education/Awareness**

- 2 g 1 Education Staff: This portion of the District coordinators salary is for education purposes.

- 2 g 2 Advertisements/Promotion: The District will meet with the Board annually to determine the budget for this line item, but will plan no less than \$5,000 Up to \$75,000 annually throughout the planning period.

- 2 g 3 Other-N/A

2 h Recycling Market Development

- 2 h 1 General Market Development Activities: Recycled Materials Grant- The District will meet with the Board annually to determine the budget for this line item, but will plan no less than \$5,000 Up to \$250,000 annually to encourage the purchase of recycled-content products. This grant is offered to public and private entities.

- 2 h 2 Ohio EPA pass-through grant- No cost to District

2 i Service Contracts-N/A**2 j Feasibility Studies-N/A****2 k Waste Assessments/Audits-N/A****2 l Dump Cleanup-N/A****2 m Litter Collection/Education-N/A**

Page O-18 |

Throughout the previous planning period the district saw a consistent carry over quarter to quarter and year to year. This carry over was due to decreased expenditures:

- Reduction in staff, salary, HHW Collections and battery drop-offs
- Partnering with local entities to provide no cost workshops
- Fundraising and sponsorships to reduce cost for events
- Renewing expired contracts to reduce cost and look in pricing

Going forward the District has implemented cost increase in funding for programing to spend down some of the excess carry over balanced that it has accumulated throughout the years. Program funding increases include:

- Community Clean Up Grants- \$2,500 annually per municipality to be increased to up to \$10,000 annually per municipality.
- Advertising- \$ 100 annually increased up to \$75,000 annually.
- Recycled Materials Grant- \$5,000 annually increased up to \$250,000 annually.
- Revolving loan fund- up to \$75,000 annually.

The District will meet with the Board annually to determine the budget for each line item and will make a determination each year for the amount to be allocated.

Page O-21 |

- 2 n Emergency Debris Management: The District will meet with the Board annually to determine the budget for this line item, but will plan no less than \$5,000 and up to \$25,000 annually for managing all types of waste/debris resulting from a disaster or significant emergency.

2 o Loan Payment-N/A

- 2 p Ohio Revolving Loan Fund: The District will meet with the Board annually to determine the budget for this line item, but will plan no less than \$5,000 and up to \$75,000 annually for businesses to start recycling programs.

3 Health Dept. Enforcement

Health Department: N/A

4 County Assistance**4 a Maintaining Roads-N/A****4 b Maintaining Public Facilities-N/A****4 c Providing Emergency Services-N/A****4 d Providing Other Public Services-N/A****5 Well Testing- N/A****6 Out-of-State Waste Inspection-N/A****7 Open Dump, Litter Law Enforcement****7 a Health Departments**

- 7 b Local Law Enforcement: Sheriff Litter Aide- The District provides funding to the Erie County Sheriff deputy's wages and fringes that operates the community service litter collection trailer not cover by grant fund from the Common Pleas Court. The District will also provide funding to the investigating and enforcing litter and related solid waste laws. The District will meet with the Board annually to determine the budget for this line item, but will plan no less than \$150,000 annually for years 2023-2027, no less than \$140,000, but up to \$150,000 for year 2028, no less than \$130,000 up to \$150,000 for year 2029, no less than \$120,000 up to \$150,000 for year 2030, no less than \$110,000 and up to \$150,000 for year 2031, no less than \$100,000 and up to \$150,000 for years 2032 and 2033, no less than \$90,000 up to \$150,000 for year 2034, no less than \$85,000 and up to \$150,000 for year 2035, no less than \$75,000 and up to \$150,000 for year 2036, no less than \$67,000 and up to \$150,000 for year 2037.

7 c Other-N/A**8 Health Department Training****9 Municipal/Township Assistance****9 a Maintaining Roads-N/A****9 b Maintaining Public Facilities-N/A**

Page O-19 |

C. Alternative Budget-N/A

1. Contingent Funding-N/A

Table O-9 Contingent Funding
N/A

2 Contingent Expenses
N/A

Table O-10 Contingent Expenses
N/A

Explanation of Contingent Expenses

N/A

Table O-11 Contingent Budget Summary

N/A

D. Major Facility Project

N/A

APPENDIX P DESIGNATION

A. Statement Authorizing/Precluding Designation

The Board of Directors of the Erie County Solid Waste Management District is hereby authorized to establish facility designations in accordance with Section 343.014 of the Ohio Revised Code after this plan has been approved by the director of the Ohio Environmental Protection Agency."

B. Designated Facilities

Table P-1 Designated Facilities

Facility Name	County	State	Facility Type	Year Designated
Erie County Sanitary Landfill	Erie	Ohio	Landfill	1997

C. Documents

RESOLUTION NO. 197-3

RESOLUTION OF THE BOARD OF DIRECTORS OF THE SOLID WASTE MANAGEMENT DISTRICT OF ERIE COUNTY, OHIO, FOR THE PURPOSES OF ADOPTING A STRATEGY FOR ENFORCING THE ERIE COUNTY SOLID WASTE MANAGEMENT DISTRICT'S FACILITY DESIGNATION RULE.

The Board of Directors of the Erie County Solid Waste Management District of Erie County, Ohio met this 6th day of February , 1997 in

Special Session with the following members present:

Nancy McKeen, Harold Butcher, Thomas Ferrell
Mr. Ferrell introduced the following resolution and moved its adoption:

WHEREAS, the Erie County Solid Waste Management District, the "District," was established pursuant to O.R.C. 343.01 and 3734.52 for the purposes of preparing, adopting, submitting and implementing the Solid Waste Management Plan for the District, and for the purpose of providing for, or causing to be provided for, the safe and sanitary management of solid waste within all of the incorporated and unincorporated territory of the District that is protective of the public health safety and welfare; and

WHEREAS, the District's Board of Directors has determined that it is necessary to designate the Erie County Sanitary Landfill in order to assure adequate disposal capacity for solid waste generated within the District, as well as to assure that all solid waste generated within the District is disposed of in a safe and sanitary manner; and

WHEREAS, the Board of Directors adopted a Solid Waste Management Plan, the "Plan," that depends upon designation of the Erie County Sanitary Landfill for the implementation of an effective long-term plan that provides for the safe and sanitary management of solid waste generated within the District and, on December 27, 1993, said Plan was approved in order to be implemented by the Director of Ohio EPA; and

WHEREAS, the Board of Directors has adopted and published rules to implement the Plan's designation of the Erie County Sanitary Landfill, which rules require that all solid waste collected within Erie County must be delivered to the Erie County Sanitary Landfill; and

WHEREAS, the Board of Directors desires to implement a policy that all individuals, corporations, and commercial, industrial, and governmental entities subject to the rules adopted and published by the Board of Directors are in compliance therewith; and

WHEREAS, the Board of Directors desires to authorize the District, in conjunction with the Erie County Prosecutor, to take necessary or appropriate enforcement action to ensure compliance with the District's Plan and rules designating the Erie County Sanitary Landfill; NOW THEREFORE,

BE IT RESOLVED BY THE BOARD OF DIRECTORS OF THE ERIE COUNTY SOLID WASTE MANAGEMENT DISTRICT OF ERIE COUNTY, OHIO:

THAT, this Board hereby authorizes the District, in conjunction with the Erie County Prosecutor, to take necessary or appropriate enforcement action including, but not limited to the strategies identified in Exhibit "A" attached hereto, to ensure compliance with the District's Plan and rules designating the Erie County Sanitary Landfill.

THAT, this Board of Directors of the Erie County Solid Waste Management District hereby finds and determines that all formal actions relative to the adoption of this Resolution were taken in an open meeting of this Board; and that all deliberations of this Board and of its committees, if any, which resulted in formal action, were taken in meetings open to the public, in full compliance with applicable legal requirements, including Section 121.22 of the Revised Code.

Mr. Butcher seconded the motion for the adoption of said Resolution; and the roll being called upon its adoption, the vote resulted as follows:

Roll Call: Mr. Butcher - Aye, Mr. Ferrell-Aye, Mrs. McKeen-Aye

Adopted: February 6, 1997

CERTIFICATE

I, Patricia C. Tomazic, Secretary of the Board of Directors of the Erie County Solid Waste Management District, hereby do certify that the above is a true and correct copy of Resolution 197-3 adopted by said Board of February 6, 1997.

Patricia C. Tomazic Secretary
Board of Directors
Erie County Solid Waste Management District

EXHIBIT "A"

**STRATEGY FOR ENFORCING THE ERIE COUNTY SOLID WASTE
MANAGEMENT DISTRICT'S FACILITY DESIGNATION RULE**

- A. **ERIE COUNTY'S FLOW CONTROL RULE** - The District has adopted and published a rule providing that all solid waste collected within Erie County must be delivered to the Erie County landfill.
- B. **LEGALITY OF DESIGNATION FLOW CONTROL** - All persons must comply with the District's designation of the Erie County landfill. O.R.C. §343.01(I)(2) and 343.01(G)(2).
- C. **ENFORCEMENT OF DESIGNATION FLOW CONTROL** -
 1. **Notice Letter** - Informing all solid waste haulers operating in Erie County that they must deliver waste generated within the District to the Erie County landfill.
 2. **Exemption Meetings** - Any person may establish that their waste is exempt or waived from the rule requiring delivery to the Erie County landfill by submitting a written request and by meeting directly with the District Board. Absent an exemption determination by the District Board, a hauler must deliver all solid waste to the Erie County landfill.
 3. **Surveillance, monitoring, and inspection of suspected violators** - A County investigator monitors suspected violators, and documents any violations with notes and photographs.
 4. **Pre-enforcement meeting with documented violator** - Attorneys from the Prosecutor's office, and an official from the District, confront the violator with the investigator's information and describe the potential for criminal or civil prosecution pursuant to O.R.C. §§343.03, 343.99.

Criminal:	Fine of \$5000 for each day of violating facility designation, O.R.C. §343.01(I)(2), O.R.C. §343.99.
	Fine of \$5000 for each day of violating District rules governing the use of solid waste facilities, O.R.C. §343.01(G)(2), O.R.C. §343.99.
Civil:	Temporary restraining order and/or permanent injunction of unlawful activities in violation of facility designation, compensatory damages for tipping fees that the Erie landfill should have received. O.R.C. §343.03.

The objective is for the violator to voluntarily agree to future compliance with the District's rule without prosecution.
 5. **Enforcement** - If the violator does not begin complying with the District's rule, the Erie County Solid Waste Board of Directors must request the Prosecutor's Office to prosecute the violator, or bring a civil action against the violator seeking appropriate relief. O.R.C. §343.03.

**ERIE COUNTY SOLID WASTE MANAGEMENT DISTRICT
DISTRICT RULES
Effective 2023**

RULE 1: DEFINITIONS

Board shall mean the Board of County Commissioners of Erie County, Ohio acting in its capacity as the Board of Directors of the District.

Collection Services shall mean Solid Waste and Source Separated Recyclable Material collection services.

District shall mean the Erie County Solid Waste Management District.

Generator shall mean each Person which generates Solid Waste within the District.

Landfill shall mean the Erie County Sanitary Landfill.

Legitimate Recycling Facility shall mean an engineered facility or site where recycling of material other than scrap tires is the primary objective of the facility, in accordance with the definition set forth in Ohio Administrative Code 3745-27-01(L)(2).

Person shall mean each individual, public or private corporation, partnership, and each other form of entity, including a political subdivision or agency thereof.

Plan shall mean the Solid Waste Management Plan or amended Solid Waste Management Plan of the District

Service Provider shall mean any Person which provides Collection Services to Generators in the District.

Solid Waste shall mean such unwanted residual solid or semisolid material as results from industrial, commercial, agricultural, and community operations, excluding earth or material from construction, mining, or demolition operations, or other waste materials of the type that normally would be included in demolition debris, nontoxic fly ash and bottom ash, including at least ash that results from the combustion of coal and ash that results from the combustion of coal in combination with scrap tires where scrap tires comprise not more than fifty per cent of heat input in any month, spent nontoxic foundry sand, nontoxic, nonhazardous, unwanted fired and unfired, glazed and unglazed, structural products made from shale and clay products, and slag and other substances that are not harmful or inimical to public health, and includes, but is not limited to, garbage, scrap tires, combustible and noncombustible material, street dirt, and debris. Solid Waste does not include any material that is an infectious waste or a hazardous waste.

Source Separated Recyclable Materials shall mean a subset of Solid Waste materials that have been separated from other Solid Waste materials at the location where the materials are generated, for the purpose of recycling such materials at a Legitimate Recycling Facility.

RULE 2: REQUIREMENT FOR DISPOSAL AT THE ERIE COUNTY SANITARY LANDFILL OF SOLID WASTE GENERATED IN THE ERIE COUNTY SOLID WASTE MANAGEMENT DISTRICT.

No Person shall deliver, or cause the delivery of, any Solid Waste generated within the District to any solid waste facility other than the Landfill, the only solid waste facility designated by the Plan, or a solid waste facility outside the boundaries of the State of Ohio, unless a waiver from this rule has been granted by the Board, in accordance with Section 343.01(I)(2) of the Ohio Revised Code. For the purpose of this rule, Solid Waste shall exclude: asbestos, yard waste, hazardous waste, Source Separated Recyclable Material, or any other Solid Waste which the Erie County Utilizes Director has determined is unacceptable at the Landfill.

RULE 3: REQUIREMENT FOR SUBMISSION OF PLANS FOR SOLID WASTE DISPOSAL, TRANSFER, RECYCLING OR RESOURCE RECOVERY FACILITIES TO THE BOARD OF COUNTY COMMISSIONERS.

Any Person proposing to construct, enlarge, or modify any in-District solid waste transfer, disposal, recycling or resource recovery facility shall submit general plans and specifications for the proposed construction, enlargement or modification to the Board for a determination by that Board of whether those plans and specifications comply with the Plan.

No Person shall construct, enlarge or modify any solid waste transfer, disposal, recycling or resource recovery facility until general plans and specifications for the proposed construction, enlargement or modification have been approved by the Board as complying with the Plan.

This rule shall not apply to any facility described in Division (D) of Section 3734.53 of the Ohio Revised Code, which includes captive facilities and facilities exclusively for the disposal of wastes from the combustion of coal.

General plans and specifications shall be submitted to the attention of the Erie County Solid Waste District Coordinator, 554 River Road, Huron, Ohio 44839. All general plans and specifications shall be clearly marked as complying with the requirements of the Rule Number 3 and Section 343.01(G)(2) of the Revised Code.

RULE 4: ESTABLISHMENT AND OPERATION OF DISTRICT SOLID WASTE COLLECTION SYSTEM.

Except as herein provided, each Generator shall utilize the services of a Service Provider to collect the Solid Waste that it generates, OR Generator shall transport waste generated to the Erie County Sanitary Landfill for proper disposal.

No Person which is not a Service Provider shall provide Collection Services to Generators.

RULE 5: WAIVER FROM DESIGNATION

Any Person may request, in writing, that the District grant a waiver permitting the delivery of Solid Waste to a solid waste facility other than a solid waste facility designated in the Plan. All written waiver requests shall include such information and explanation as are required to demonstrate (1) that the requested waiver, if granted, is not inconsistent with the projections contained in the Plan and will not adversely affect the implementation and financing of the Plan as provided in the implementation schedule contained in the Plan; or (2) that the Solid Waste, which is the subject of the waiver request is exempt from delivery to a designated solid waste facility pursuant to applicable law or rules of the District. All such waiver requests shall be submitted to the Erie County Solid Waste Management District, attention: Solid Waste Coordinator, 554 River Road, Huron, Ohio 44839. All such waiver requests shall be clearly marked as complying with the requirements of this Rule Number 5 and Section 343.01(I)(2) of the Ohio Revised Code.

APPENDIX Q DISTRICT RULES

A. Existing Rules- Resolution 197-3

ERIE COUNTY SOLID WASTE MANAGEMENT DISTRICT DISTRICT RULES Effective 2016

RULE 1: DEFINITIONS

Board shall mean the Board of County Commissioners of Erie County, Ohio acting in its capacity as the Board of Directors of the District.

Collection Services shall mean Solid Waste and Source Separated Recyclable Material collection services.

District shall mean the Erie County Solid Waste Management District.

Generator shall mean each Person which generates Solid Waste within the District.

Landfill shall mean the Erie County Sanitary Landfill.

Legitimate Recycling Facility shall mean an engineered facility or site where recycling of material other than scrap tires is the primary objective of the facility, in accordance with the definition set forth in Ohio Administrative Code 3745-27-01(L)(2).

Person shall mean each individual, public or private corporation, partnership, and each other form of entity, including a political subdivision or agency thereof.

Plan shall mean the Solid Waste Management Plan or amended Solid Waste Management Plan of the District

Service Provider shall mean any Person which is party to a contract with the District to provide Collection Services to Generators in the District, and is identified by the District as currently eligible to provide Collections Services.

Solid Waste shall mean such unwanted residual solid or semisolid material as results from industrial, commercial, agricultural, and community operations, excluding earth or material from construction, mining, or demolition operations, or other waste materials of the type that normally would be included in demolition debris, nontoxic fly ash and bottom ash, including at least ash that results from the combustion of coal and ash that results from the combustion of coal in combination with scrap tires where scrap tires comprise not more than fifty per cent of heat input in any month, spent nontoxic foundry sand, nontoxic, nonhazardous, unwanted fired and unfired, glazed and unglazed, structural products made from shale and clay products, and slag and other substances that are not harmful or inimical to public health, and includes, but is not limited to, garbage, scrap tires, combustible and noncombustible material, street dirt, and debris. Solid Waste does not include any material that is an infectious waste or a hazardous waste.

Source Separated Recyclable Materials shall mean a subset of Solid Waste materials that have been separated from other Solid Waste materials at the location where the materials are generated, for the purpose of recycling such materials at a Legitimate Recycling Facility.

RULE 2: REQUIREMENT FOR DISPOSAL AT THE ERIE COUNTY SANITARY LANDFILL OF SOLID WASTE GENERATED IN THE ERIE COUNTY SOLID WASTE MANAGEMENT DISTRICT.

No Person shall deliver, or cause the delivery of, any Solid Waste generated within the District to any solid waste facility other than the Landfill, the only solid waste facility designated by the Plan, or a solid waste facility outside the boundaries of the State of Ohio, unless a waiver from this rule has been granted by the Board, in accordance with Section 343.01(I)(2) of the Ohio Revised Code. For the purpose of this rule, Solid Waste shall exclude: asbestos, yard waste, hazardous waste, Source Separated Recyclable Material, or any other Solid Waste which the Erie County Sanitary Engineer has determined is unacceptable at the Landfill.

RULE 3: REQUIREMENT FOR SUBMISSION OF PLANS FOR SOLID WASTE DISPOSAL, TRANSFER, RECYCLING OR RESOURCE RECOVERY FACILITIES TO THE BOARD OF COUNTY COMMISSIONERS.

Any Person proposing to construct, enlarge, or modify any in-District solid waste transfer, disposal, recycling or resource recovery facility shall submit general plans and specifications for the proposed construction, enlargement or modification to the Board for a determination by that Board of whether those plans and specifications comply with the Plan.

No Person shall construct, enlarge or modify any solid waste transfer, disposal, recycling or resource recovery facility until general plans and specifications for the proposed construction, enlargement or modification have been approved by the Board as complying with the Plan.

This rule shall not apply to any facility described in Division (D) of Section 3734.53 of the Ohio Revised Code, which includes captive facilities and facilities exclusively for the disposal of wastes from the combustion of coal.

General plans and specifications shall be submitted to the attention of the Erie County Solid Waste District Coordinator, 554 River Road, P.O. Box 469, Huron, Ohio 44839. All general plans and specifications shall be clearly marked as complying with the requirements of the Rule Number 3 and Section 343.01(G)(2) of the Revised Code.

RULE 4: ESTABLISHMENT AND OPERATION OF DISTRICT SOLID WASTE COLLECTION SYSTEM.

Except as herein provided, each Generator shall utilize the services of a Service Provider to collect the Solid Waste that it generates. A Generator shall not be required to utilize the services of a Service Provider during any time period that the Generator is able to demonstrate its ability to deliver such Solid Waste to the Landfill for proper disposal and does so in a satisfactory manner.

No Person which is not a Service Provider shall provide Collection Services to Generators.

RULE 5: WAIVER FROM DESIGNATION

Any Person may request, in writing, that the District grant a waiver permitting the delivery of Solid Waste to a solid waste facility other than a solid waste facility designated in the Plan. All written waiver requests shall include such information and explanation as are required to demonstrate (1) that the requested waiver, if granted, is not inconsistent with the projections contained in the Plan and will not adversely affect the implementation and financing of the Plan as provided in the implementation schedule contained in the Plan; or (2) that the Solid Waste, which is the subject of the waiver request is exempt from delivery to a designated solid waste facility pursuant to applicable law or rules of the District. All such waiver requests shall be submitted to the Erie County Solid Waste Management District, attention: Solid Waste Coordinator, 554 River Road, P.O. Box 469, Huron, Ohio 44839. All such waiver requests shall be clearly marked as complying with the requirements of this Rule Number 5 and Section 343.01(I)(2) of the Ohio Revised Code.

B. Proposed Rules

Resolution 197-3 will remain in effect.

ERIE COUNTY SOLID WASTE MANAGEMENT DISTRICT DISTRICT RULES Effective 2023

RULE 1: DEFINITIONS

Board shall mean the Board of County Commissioners of Erie County, Ohio acting in its capacity as the Board of Directors of the District.

Collection Services shall mean Solid Waste and Source Separated Recyclable Material collection services.

District shall mean the Erie County Solid Waste Management District.

Generator shall mean each Person which generates Solid Waste within the District.

Landfill shall mean the Erie County Sanitary Landfill.

Legitimate Recycling Facility shall mean an engineered facility or site where recycling of material other than scrap tires is the primary objective of the facility, in accordance with the definition set forth in Ohio Administrative Code 3745-27-01(L)(2).

Person shall mean each individual, public or private corporation, partnership, and each other form of entity, including a political subdivision or agency thereof.

Plan shall mean the Solid Waste Management Plan or amended Solid Waste Management Plan of the District

Service Provider shall mean any Person which provides Collection Services to Generators in the District.

Solid Waste shall mean such unwanted residual solid or semisolid material as results from industrial, commercial, agricultural, and community operations, excluding earth or material from construction, mining, or demolition operations, or other waste materials of the type that normally would be included in demolition debris, nontoxic fly ash and bottom ash, including at least ash that results from the combustion of coal and ash that results from the combustion of coal in combination with scrap tires where scrap tires comprise not more than fifty per cent of heat input in any month, spent nontoxic foundry sand, nontoxic, nonhazardous, unwanted fired and unfired, glazed and unglazed, structural products made from shale and clay products, and slag and other substances that are not harmful or inimical to public health, and includes, but is not limited to, garbage, scrap tires, combustible and noncombustible material, street dirt, and debris. Solid Waste does not include any material that is an infectious waste or a hazardous waste.

Source Separated Recyclable Materials shall mean a subset of Solid Waste materials that have been separated from other Solid Waste materials at the location where the materials are generated, for the purpose of recycling such materials at a Legitimate Recycling Facility.

RULE 2: REQUIREMENT FOR DISPOSAL AT THE ERIE COUNTY SANITARY LANDFILL OF SOLID WASTE GENERATED IN THE ERIE COUNTY SOLID WASTE MANAGEMENT DISTRICT.

No Person shall deliver, or cause the delivery of, any Solid Waste generated within the District to any solid waste facility other than the Landfill, the only solid waste facility designated by the Plan, or a solid waste facility outside the boundaries of the State of Ohio, unless a waiver from this rule has been granted by the Board, in accordance with Section 343.01(I)(2) of the Ohio Revised Code. For the purpose of this rule, Solid Waste shall exclude: asbestos, yard waste, hazardous waste, Source Separated Recyclable Material, or any other Solid Waste which the Erie County Utility Director has determined is unacceptable at the Landfill.

RULE 3: REQUIREMENT FOR SUBMISSION OF PLANS FOR SOLID WASTE DISPOSAL, TRANSFER, RECYCLING OR RESOURCE RECOVERY FACILITIES TO THE BOARD OF COUNTY COMMISSIONERS.

Any Person proposing to construct, enlarge, or modify any in-District solid waste transfer, disposal, recycling or resource recovery facility shall submit general plans and

specifications for the proposed construction, enlargement or modification to the Board for a determination by that Board of whether those plans and specifications comply with the Plan.

No Person shall construct, enlarge or modify any solid waste transfer, disposal, recycling or resource recovery facility until general plans and specifications for the proposed construction, enlargement or modification have been approved by the Board as complying with the Plan.

This rule shall not apply to any facility described in Division (D) of Section 3734.53 of the Ohio Revised Code, which includes captive facilities and facilities exclusively for the disposal of wastes from the combustion of coal.

General plans and specifications shall be submitted to the attention of the Erie County Solid Waste District Coordinator, 554 River Road, Huron, Ohio 44839. All general plans and specifications shall be clearly marked as complying with the requirements of the Rule Number 3 and Section 343.01(G)(2) of the Revised Code.

RULE 4: ESTABLISHMENT AND OPERATION OF DISTRICT SOLID WASTE COLLECTION SYSTEM.

Except as herein provided, each Generator shall utilize the services of a Service Provider to collect the Solid Waste that it generates, OR Generator shall transport waste generated to the Erie County Sanitary Landfill for proper disposal.

No Person which is not a Service Provider shall provide Collection Services to Generators.

RULE 5: WAIVER FROM DESIGNATION

Any Person may request, in writing, that the District grant a waiver permitting the delivery of Solid Waste to a solid waste facility other than a solid waste facility designated in the Plan. All written waiver requests shall include such information and explanation as are required to demonstrate (1) that the requested waiver, if granted, is not inconsistent with the projections contained in the Plan and will not adversely affect the implementation and financing of the Plan as provided in the implementation schedule contained in the Plan; or (2) that the Solid Waste, which is the subject of the waiver request is exempt from delivery to a designated solid waste facility pursuant to applicable law or rules of the District. All such waiver requests shall be submitted to the Erie County Solid Waste Management District, attention: Solid Waste Coordinator, 554 River Road, Huron, Ohio 44839. All such waiver requests shall be clearly marked as complying with the requirements of this Rule Number 5 and Section 343.01(I)(2) of the Ohio Revised Code.

The Board of Commissioners of the Erie County Solid Waste District is hereby authorized to adopt rules in accordance with Section 343.01 of the Ohio Revised Code after this plan has been approved by the director of the Ohio Environmental Protection Agency.

APPENDIX R BLANK SURVEY FORMS AND RELATED INFORMATION

Annual District Survey will be sent to commercial business each year through mail and email to comply with Goal #2. Below is a copy of survey that businesses within the District receive.

Attn: Commercial Recyclers,

It's time to update our plan and we need your help! Enclosed you'll find the 2020 Annual Industrial/Commercial Recycling Survey.

This information is used to determine how Erie County compares to other counties and if we're meeting our goals and standards set by Ohio EPA.

We can't complete this process without you and your hard earned numbers. Every ton that is recycled is diverted from our landfill and that is something to be proud of. Please complete the survey so we can adequately represent our county.

Don't hesitate to contact me with any questions or comments that you come across. I can be reached at 419.433.7303 ext. 2303 or Tmcneely@eriecounty.oh.gov.

Please return this survey to the Erie County Solid Waste Management District no later than April 30, 2021. Please send to:

Erie County solid Waste Management District
554 River Rd.
Huron, OH 44839

Or Fax to: 419.433.6214

Online Survey: <https://www.surveio.com/survey/d/A1D2Q3C4I9D8X4N1W>



Thank you for assisting in this process,

Tiffini McNeely
District Coordinator

2020 ANNUAL SOLID WASTE DISTRICT SURVEY INDUSTRIAL RECYCLING

PLEASE HELP US UPDATE OUR FILES BY COMPLETING THE FOLLOWING INFORMATION:

COMPANY/ORGANIZATION NAME: _____

CONTACT PERSON: _____

TITLE: _____

MAILING ADDRESS: _____

CITY: _____ STATE: _____ ZIP: _____

PHONE: _____ FAX: _____

OF EMPLOYEES: _____ EMAIL: _____

SIC CODE OR NAIC: _____

CURRENT WASTE HAULER: _____

TOTAL TONS OR CUBIC YARDS (PLEASE SPECIFY) OF WASTE FOR 2020: _____

IS YOUR BUSINESS BEST DESCRIBED AS COMMERCIAL OR INDUSTRIAL? PLEASE CIRCLE
ONE: COMMERCIAL INDUSTRIAL

Please provide the following information for the 2020 calendar year. If you cannot report the amount in tons, indicate what unit (e.g. cubic yards or lbs) you are using. Estimate if necessary. Please report waste recycled from YOUR business, not what you may have taken from another business or your home.

RECYCLED MATERIALS

Recycled Material	Tons Recycled in 2020	Describe How or Where Material was Recycled
Appliances		
Household Hazardous Waste		
Used Motor Oil		
Electronics		
Scrap Tires		
Dry Cell Batteries		
Lead-Acid Batteries		
Food		
Glass		
Ferrous Metals		
Non-Ferrous Metals		
Corrugated Cardboard		
All other paper		
Plastics		
Textiles		
Wood		
Rubber		
Commingled Recyclables		
Yard Waste		
Ash		
Non-Excluded Foundry Sand		
Flue Gas Desulfurization Waste		
List Any Others Missed		
1		
2		
3		

APPENDIX S SITING STRATEGY

The District does not have a siting strategy in place.

APPENDIX T MISCELLANEOUS PLAN DOCUMENTS

District resolutions, certification statements, public notices, other notices (e.g., the notice sent to the 50 largest generators)

Will be sent after plan is approved by OEPA

APPENDIX U RATIFICATION RESULTS

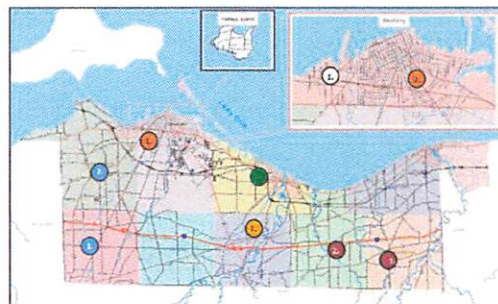
Table U-1 Ratification Summary

Erie County			
Board of County Commissioners	Approved	Rejected	Date Resolution Adopted
Community	Population		Date Resolution Adopted
	Approved	Rejected	
Cities			
City of Sandusky			
City of Huron			
Townships			
Groton Township			
Oxford Township			
Margaretta Township			
Perkins Township			
Huron Township			
Milan Township			
Berlin Township			
Florence Township			
Vermilion Township			
Villages			
Bay View			
Castalia			
Berlin Heights			
Milan			
Kelleys Island			
Total	0	0	
County Population			
Ratification percentage			#DIV/0!

Appendix V Inventory of Open Dumps and Other Disposal Facilities

- A. Existing Open Dumps and Waste Tire Dumps- N/A
- B. Ash, Foundry Sand, and Slag Disposal Sites- N/A

Appendix W District Map



MAP KEY	
	1. Erie County Board of Commissioners
	2. Sandusky City Council
	1. Groton Township
	2. Sandusky North
	1. Erie County Secretary and Clerk
	2. Sandusky City Council
	1. Sandusky City Council
	2. Sandusky City Council
	1. Sandusky City Council
	2. Sandusky City Council
	1. Sandusky City Council
	2. Sandusky City Council