



2026-2040 SOLID WASTE MANAGEMENT PLAN

Revised Draft for Public Comment
March 2025

Mercer County
Solid Waste Management District

PREPARED BY:

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COMMISSIONED BY:



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GLOSSARY

Access – For purposes of this document, access is associated with the availability of waste reduction and recycling services to waste generation within a solid waste management district. In most cases, access is used as the presence or absence of waste reduction and/or recycling opportunities, and as a component of measuring compliance with Goal 1 of the 2020 State Solid Waste Management Plan (2020 State Plan).

Annual District Report – This is a report that Ohio Administrative Code Rule 3745-27-90, requires each solid waste management district to submit to Ohio EPA by June 1 each year. Ohio EPA prescribes the form. Information in the report shall be based on the previous calendar year. This report will evaluate the solid waste management district's implementation of the strategies, programs, and activities listed in the implementation schedule of its approved solid waste management plan and the progress made toward the waste reduction and recycling requirements established in paragraphs (E)(1) and (E)(2) of this rule.

Annual District Report Review Form – A document published by Ohio EPA. The document combines the data reported by a solid waste management district in its annual district report, data reported to Ohio EPA by owners/operators of solid waste facilities in their facility annual reports, and data from adjacent states regarding imports of waste from Ohio. The document provides disposal, recycling, and generation data. Ohio EPA publishes a separate form for each of the 52 solid waste management districts.

Board of County Commissioners – Consists of the County Commissioners for a single county solid waste management district. The Board of County Commissioners is responsible for implementing the solid waste management district's solid waste management plan (as prepared by the policy committee and ratified by political jurisdictions).

Board of Directors – Consists of the county commissioners from all of the counties that comprise a joint solid waste management district. The board of directors is responsible for implementing the solid waste management district's solid waste management plan (as prepared by the policy committee and ratified by political jurisdictions).

Board of Trustees – The governing body for a regional solid waste management authority. The board of trustees consists of the same members as a policy committee. The board of trustees performs all of the functions assigned to a policy committee and board of county commissioners/board of directors for a solid waste management district. Thus, the board of trustees is responsible for preparing, ratifying, and implementing the solid waste management plan.

Broker/Recycling Broker – A business that accepts recyclable materials from collection or processing activities, may or may not pay a fee for the materials, and finds an end-user or another processor to purchase the materials. A broker can also be a processor of recyclable materials that also finds end-users for the processed materials.

Captive Landfill Facility refers to a privately-owned industrial or residual solid waste landfill that is used to dispose of solid waste generated exclusively by the owner of the landfill facility.

Clean Materials Recovery Facility (MRF) – A facility where source separated, recyclables are processed.

Commingled – Single stream (also known as “fully commingled” or “single-sort”) recycling refers to a system in which all paper fibers, cardboard, plastics, metals, and other containers are mixed for collection.

Commercial Solid Waste refers to solid waste generated at non-residential buildings, non-industrial businesses, and institutions. This category includes businesses such as shopping centers, retail stores, grocery stores, theaters, gas stations, business offices, hotels, restaurants, and similar service establishments. Institutions include government and non-profit offices, schools, prisons, churches, parks, and similar organizations.

Composting – As defined in Ohio Administrative Code Rule 3734-27-01(C)(3), the process of biological decomposition of solid wastes under controlled conditions resulting in compost. Controlled conditions include but are not limited to grinding, shredding, piling, physical turning, aerating, adding moisture, or other processing of solid wastes.

Composting Facility – As defined in Ohio Administrative Code Rule 3734-27-01(C)(4), a site, location, tract of land, installation, or building used for composting of solid waste in accordance with Chapter 3734 of the Revised Code and rules adopted thereunder.

There are four types of regulated compost facilities:

- Class I Compost Facilities - These facilities can be used to compost the greatest variety of solid wastes including mixed solid waste (glass, food, plastics, pesticides, household cleaners, etc.), food waste, yard waste and other industrial wastes. Class I facilities must have a permit, license and financial assurance.
- Class II Compost Facilities - These facilities can be used to compost only source-separated yard waste, food scraps, animal wastes, specified agricultural wastes, authorized bulking agents and additives, and other alternative materials. Alternative materials (feed stocks, bulking agents and additives) may be used in the compost process only if prior approval is obtained from the Director. Except in limited circumstances, Class II facilities must have a license, financial assurance and registration.
- Class III Compost Facilities - These facilities can be used to compost only source-separated yard waste, animal wastes, specified agricultural wastes, authorized bulking agents and additives. Class III facilities must be registered with Ohio EPA.
- Class IV Compost Facilities - These facilities can be used to compost only source-separated yard waste, authorized bulking agents, and the following additives: urea and bacteria or fungal inoculum. Class IV facilities must be registered with Ohio EPA.

Construction and Demolition Debris (C&DD) is defined in Ohio Administrative Code Rule 3745-400-01(F) as those materials resulting from the alteration, construction, destruction, rehabilitation, or repair of any manmade physical structure, including, without limitation, houses, buildings, industrial or commercial facilities, or roadways.

"Construction and demolition debris" does not include materials identified or listed as solid wastes, infectious wastes, or hazardous wastes pursuant to Chapter 3734. of the Revised Code and rules adopted under it; or materials from mining operations, nontoxic fly ash, spent nontoxic foundry sand, and slag; or reinforced or non-reinforced concrete, asphalt, building or paving brick, or building or paving stone that is stored for a period of less than two years for recycling into a usable construction material.

Current approved plan – Used when referring to a solid waste management district’s effective solid waste plan. The current approved plan is the solid waste management plan being updated using this format.

Curbside Recycling Program – A type of recycling opportunity through which source-separated, residential recyclables are collected at the place of residence. Curbside collection typically involves collecting recyclables in designated containers or in “blue bags” that are collected with regular trash and separated from the trash later. Curbside recycling programs are divided into two categories - “Subscription” and “Non-Subscription” services.

Daily Processing Capacity – This should be the amount of materials or waste, which can be processed during a normal operating day for a facility or activity. If the facility normally operates eight hours per day, the daily processing capacity would be based upon eight hours. If the facility normally operates ten hours per day, the daily processing capacity should be based upon ten hours.

Designated Solid Waste Facility – Those solid waste facilities designated in the initial or amended plan or as are designated pursuant to Ohio Revised Code Sections 343.013, 343.014, or 343.015.

Direct Haul – Waste that is transported from the point of collection to a landfill facility (i.e. the waste is not delivered to a transfer facility).

Dirty Materials Recovery Facility (Dirty MRF) (also known as a mixed solid waste materials recovery facility) – A type of facility where the owner/operator of the facility recovers recyclables from mixed solid waste. Residents are not required to separate recyclable materials from trash because the separation is done at the MRF.

District – The term used in examples in this document to indicate that the text is for a specific solid waste management district (instead of SWMD which is used to refer to solid waste management districts in general).

Diversion – The term used in this document when referring to waste that is reused, recycled, or reduced instead of being disposed in a landfill. Ohio’s waste reduction and recycling rates measure diversion from landfills, not just recycling and reuse. So, volume reduction due to composting or incinerating waste is included in the reduction and recycling rate.

Drop-Off Recycling – Refers to a type of recycling opportunity that serves as a collection location for recyclable materials. Drop-off recycling locations are typically used by the residential population but may also be used by businesses and institutions. People who use drop-offs voluntarily transport recyclable materials to the host site.

A drop-off site typically consists of trailers, roll-off containers, or other types of collection containers where people place their recyclable materials. Drop-offs can be manned or unmanned, can collect recyclables as single or multiple streams, can be available on public or private property, can be available to the general public or serve a specific population, and can be provided by public entities, private companies, non-profit organizations or other providers. The drop-off does not have to be provided by the SWMD to be considered part of the recycling infrastructure.

A drop-off is categorized by the number of hours the drop-off is available for use and the population of the jurisdiction in which the drop-off is located. Accordingly, drop-offs are defined as being located in either urban or rural areas and as being available either full-time or part-time.

- An urban area is a political jurisdiction with a residential population of 5,000 or more.
- A rural area is a political jurisdiction with a residential population of less than 5,000.
- Full-time refers to a drop-off that available for at least 40 hours per week
- Part-time refers to drop-off that is available for use less than 40 hours per week but is available at a regularly-scheduled time at least once a month.

There are four potential types of drop-offs:

- An urban, full-time drop-off is located in a political jurisdiction with a residential population of 5,000 or more and is available at least 40 hours per week.
- A rural, full-time drop-off is located in a political jurisdiction with a residential population of less than 5,000 and is available at least 40 hours per week.
- An urban, part-time drop-off is located in a political jurisdiction with a residential population of 5,000 or more and is available for use less than 40 hours per week but is available at a regularly-scheduled time at least once a month.
- A part-time, rural drop-off is located in a political jurisdiction with a residential population of less than 5,000 and is available for use less than 40 hours per week but is available at a regularly scheduled time at least once a month.

To be creditable recycling opportunity for achieving Goal 1, a drop-off must meet the criteria for one of the four types of drop-offs above and the general criteria below:

1. The drop-off must collect at least five of the materials designated as highly amendable to recycling in the 2020 State Plan. Those materials are listed in the following table:

Materials Designated to Demonstrate Compliance with Goal #1

Residential Sector	Commercial Sector
Corrugated cardboard	Corrugated cardboard
Newspaper	Office paper
Mixed paper	Mixed paper
Glass containers	Glass containers
Steel containers	Steel containers
Aluminum containers	Plastic containers
Plastic containers	Wood pallets and packaging
	Food waste

2. The drop-off is available to the public and the public can easily find and access the site.
3. The drop-off meets the following minimum standards (unless the SWMD can demonstrate that smaller capacity is adequate):
 - Rural drop-offs must provide a minimum of six cubic yards of capacity, and
 - Urban drop-offs must provide a minimum of 10 cubic yards of capacity.
4. There are signs that are adequate to, at a minimum:

- Direct the public to the site or provide the location of the site,
 - List the materials that are accepted, and
 - Provide days and hours of operation (particularly important if the site is available less than 24 hours per day, seven days per week).
5. The drop-off meets the demand of the population for use of the drop-off site (e.g., provides collection containers with adequate capacity to handle the use of the site, is serviced frequently enough given the use of the site, etc.).

Dual stream collection – A recycling system in which fiber (paper and cardboard) is collected in one receptacle and all containers (glass, plastic, metal) are collected in another receptacle.

Electronic Waste or e-waste – Refers to discarded end-of-life and obsolete electrical devices or their parts. Televisions, computers, and cell phones are all common examples of electronic waste.

Excluded Waste (Exempt Waste) – Refers to those wastes that the definition of solid waste [see Ohio Administrative Code Rule 3734-27-01(S)(23)] specifically calls out (i.e. excludes) as not being solid waste. These wastes include slag, uncontaminated earth, non-toxic fly ash, spent, non-toxic foundry sand, material from mining, and construction and demolition debris. Please note that non-toxic fly ash and non-toxic foundry sand and spent foundry sand determined to be non-toxic in accordance with Ohio EPA Division of Surface Water Policy 0400.007.

Facility Data Report – A report published by Ohio EPA annually. The report summarizes data reported to Ohio EPA by owners/operators of solid waste landfills and transfer facilities in facility annual reports.

Fee Exempt Waste – refers to those wastes that Ohio Revised Code Section 3734.57 specifically excludes from being subject to solid waste fees. The fee exempt wastes are listed in ORC Section 3734.57 paragraphs (D)(1) through (D)(7).

Ferrous Metals – Metals that contain iron. Examples include steel, stainless steel, cast Iron, and wrought iron.

Flue Gas Desulfurization (FGD) Waste – Waste generated as a result removing sulfur dioxide (SO₂) from combustion gases generated at coal-fired power plants. As used in this document, the term usually refers to waste generated by wet scrubbers that remove sulfur dioxide (SO₂) emissions using lime.

Generation - This term refers to the amount (weight, volume, or percentage of the overall waste stream) of materials and products as they enter the waste stream and before materials recovery, composting, or combustion takes place.

Generation Fee – A fee established pursuant to Ohio Revised Code Section 3734.573 (A) and assessed on each ton of solid waste generated within the District.

Household Hazardous Waste (HHW) – refers to hazardous waste that is generated in households. Ohio's regulations define household as including all of the following:

1. Single and multiple unit residences
2. Hotels and motels
3. Bunkhouses
4. Ranger stations

5. Crew Quarters
6. Dormitories
7. Campgrounds
8. Picnic grounds
9. Day-use recreation areas

In Ohio, hazardous waste generated at a household is not regulated under the hazardous waste regulations. Thus, homeowners can dispose of HHW in their garbage.

Materials used in the home/apartment such as cleaners, paints, solvents, pesticides, used oil, batteries, and other automotive products that potentially can cause injuries to refuse workers, damage to equipment, and/or harm to the environment if disposed in the solid waste stream. HHW typically exhibits one or more characteristics of hazardous wastes but is exempted from regulation as a hazardous waste because of generation by households.

Incineration – The controlled process by which solid wastes are burned and changed into gases and ash.

Industrial Solid Waste – is defined in OAC Rule 3745-29-01 as a type of solid waste generated by manufacturing or industrial operations and includes, but is not limited to, solid waste resulting from the following manufacturing processes: electric power generation; fertilizer/agricultural chemicals; food and food-related products/by-products; inorganic chemicals; iron and steel manufacturing; leather and leather products; nonferrous metals manufacturing; plastics and resins manufacturing; pulp and paper industry; rubber and miscellaneous plastic products; stone, glass, clay and concrete products; textile manufacturing; and transportation equipment.

Materials Recovery Facility (MRF) – A type of facility used for separating, sorting, or processing waste in order to segregate materials with value (e.g. aluminum, glass, plastics) from trash. The type of processing conducted at a MRF can range widely from buildings in which recyclables are sorted primarily by hand to mechanical facilities that recover recyclables from mixed solid waste. There are two types of MRFs – clean MRFs and dirty MRFs. See the definitions of those terms.

Municipal Solid Waste (also referred to as Residential/Commercial Waste) – is defined in Ohio Administrative Code Rule 3745-27-01(M)(5) as a type of solid waste generated from community, commercial, and agricultural operations, including, but not limited to, the following:

- (1) Solid waste generated by community operations, i.e. wastes derived from households (including single and multiple household residences, hotels, motels, bunkhouses, ranger stations, crew quarters, campgrounds, picnic grounds, and day-use recreation areas).
- (2) Solid waste generated by commercial operations (including stores, offices, restaurants, warehouses, and other non-manufacturing activities).
- (3) Solid waste generated from agricultural operations (including single-family and commercial farms, greenhouses, and nurseries).
- (4) Sludge from municipal, commercial or industrial wastewater treatment plants, water treatment plants, and air pollution control facilities that is co-disposed with wastes specified in 1, 2, 3, and 5 in a sanitary landfill facility.
- (5) Fly and bottom ashes generated from the incineration of municipal solid waste provided the fly ash and bottom ash are not regulated as hazardous wastes.

Non-ferrous – Metals that do not contain iron. Non-ferrous metals include aluminum, brass, copper, nickel, tin, lead, and zinc, as well as precious metals like gold and silver. Non-ferrous metals exhibit properties such as low weight, higher conductivity non-magnetic and resistance to corrosion.

Non-Subscription Curbside Recycling Program – Refers to a type of curbside recycling program that is available to residents automatically within a defined area. To qualify as a non-subscription curbside recycling program for purposes of achieving Goal 1 of the 2020 State Plan, the curbside recycling service must meet all of the following criteria:

All residents living in at least single-family homes within a jurisdiction (i.e. a city, village, or township) receive the service;

Homeowners don't decide whether they receive curbside recycling – they receive the service whether they want it or not;

Homeowners may or may not be billed for the service;

A homeowner can choose not to participate in the curbside service but cannot opt out of paying for the service.

To be a creditable for purposes of achieving Goal 1, the curbside service must also:

be available on a regular basis, at least once every two weeks;

collect at least five of the materials designated at highly amendable to recycling in the 2020 State Plan. Those materials are listed in the following table:

Materials Designated to Demonstrate Compliance with Goal #1

Residential Sector	Commercial Sector
Corrugated cardboard	Corrugated cardboard
Newspaper	Office paper
Mixed paper	Mixed paper
Glass containers	Glass containers
Steel containers	Steel containers
Aluminum containers	Plastic containers
Plastic containers	Wood pallets and packaging
	Food waste

North American Industrial Classification System (NAICS) - - NAICS was developed and adopted in 1997 to replace the Standard Industrial Classification (SIC) system. The NAICS is the standard used to classify business establishments in the United States, Canada, and Mexico to facilitate collecting, analyzing, and publishing data related to the business economy.

Ohio Administrative Code (OAC) – The compilation of rules governing the actions of all state agencies. The OAC is based upon authorities granted in the Ohio Revised Code.

Ohio Revised Code (ORC) – Contains all current statutes of the Ohio General Assembly consolidated into provisions, titles, chapters and sections.

Open dumping – Depositing solid waste into a body of water or onto the ground at a site that is not licensed as a solid waste facility under section 3734.05 of the Ohio Revised Code. For the purpose of a solid waste management plan, open dumps are considered as areas off the road or adjacent to the road or right-of-way on where solid waste is dumped. Road right-of-ways with occasional litter or debris are not considered to be open dumps.

Other Waste – This term, refers to materials disposed in sanitary landfills, which were not classified as solid wastes. In this document, the term “exempt wastes” is used to refer to these materials disposed in sanitary landfills, which are not classified as solid wastes.

Participation Rate – As defined by the National Recycling Coalition, a participation rate is the number of households that separate out materials for recycling, divided by the total number of households serviced by the recycling program at least once over an established time period or number of collection events. In the case of a curbside recycling program, the participation rate is commonly measured by tracking whether a particular household (by address), sets out materials during the time period examined. In contrast, the set-out rate is defined as a count of the “set-outs” on the observed collection day, as a percent of the total number of households or entities serviced.

Pay-As-You-Throw (PAYT) – (see definition for Volume-Based Billing)

Plan – A term used to refer to a solid waste management district’s solid waste management plan.

PPD – The acronym for pounds per person per day.

Policy committee – The group that is responsible for preparing and ratifying a solid waste management plan for a solid waste management district. As prescribed in Ohio Revised Code Section 3734.54(B), a policy committee consists of the following members, one from each of the counties in the solid waste management district:

- The president of the board of county commissioners or his designee
- The chief executive officer (or his designee) of the municipal corporation with the largest population in the county
- A member representing townships
- The health commissioner (or his designee) of the health district with the largest territory within the county
- A member representing industrial, commercial, or institutional generators
- A member representing the general interest of citizens
- One member representing the public.

If there is an even number of counties in the solid waste management district, then the policy committee must have an additional member representing the public.

The policy committee for a single county solid waste management district has seven members. The policy committee for a four-county solid waste management has 29 members (seven per county plus one additional public representative).

Processing Capacity – For purposes of this document, processing capacity refers to the design capacity of the facility (or the maximum amount of materials which could be processed), and not the actual amount of materials processed during a given time period.

Quarterly Fee Report – The report solid waste management districts submit to Ohio EPA to account for revenues and expenditures during the previous three months. A solid waste management districts submits four reports annually using a form prescribed by Ohio EPA (see Ohio Revised Code Section 3734.575).

Recycling - The systematic collection, sorting, decontaminating and returning of waste materials to commerce as commodities for use or exchange. Recycling also means to use, reuse or reclaim a material. It does not include incineration.

Reference Year – The calendar year selected by the policy committee/board of trustees as the year for collecting data that will serve as baseline data for a solid waste management plan.

The reference year is usually the calendar year prior to the calendar year the policy committee is required to begin updating a solid waste management plan. For example, if the policy committee is required to begin preparing its update in 2021, then the policy committee would select 2020 as the reference year.

Regional Solid Waste Management Authority - One of two structures a county/counties can form for purposes of complying with Ohio Revised Code Section 3734.52. The other structure is a solid waste management district.

A regional solid waste management authority is governed by one group – the board of trustees.

Residential Solid Wastes – Solid wastes generated at residential dwellings, such as single-family homes, apartment complexes, condominiums, mobile homes. Domiciles such as nursing homes, campgrounds, and other types of group quarters and institutions are considered to generate commercial waste.

Residential/Commercial Solid Waste – Refers to the combination of waste generated by the residential and commercial sectors. Residential/commercial solid waste is the same as municipal solid waste.

Reuse – Taking an object or material that would otherwise be disposed and using it for its original purpose or a different purpose, without converting the object or material. "Reuse" does not include using an object or material as fill. Reuse differs from recycling which is the breaking down of the material into raw materials which are used to make a new item.

Resource Recovery – This term refers to the conversion of solid waste into energy, or some material, which can be used to create energy at any stage before ultimate disposal. As used in this document, resource recovery does not include the recovery of materials through mechanical and advanced technology methods.

Salvage dealer/motor vehicle salvage dealer – Any person whose primary business is selling recovered motor vehicle parts.

Scrap dealer - The owner or operator of a business that purchases or receives scrap metal for the purpose of sorting, grading, and shipping metals to third parties for direct or indirect melting into new products.

Set-out Rate – The National Recycling Coalition defines a set-out rate as the number of households that set out materials on their assigned collection day, divided by the total number of households served. A set-out rate is a measurement commonly used in assessing curbside collection programs.

Single Stream Recycling – Refers to a recycling system in which all recyclable materials are collected in one container (i.e. commingled) instead of separated into individual commodities (such as newspaper, corrugated cardboard, plastics, glass, etc.).

Solid Waste Management District, SWMD, or District – One of two structures a county/counties can form for purposes of complying with Ohio Revised Code Section 3734.52. The other structure is a regional solid waste management authority.

A solid waste management district is a county which has established a resolution, or joint counties which have entered into an agreement for the purposes of preparing, adopting, submitting, and implementing a solid waste management plan for the county or joint counties and for the purposes 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 county or joint counties and in compliance with Chapters 343. and 3734. of the Revised Code.

A solid waste management district is governed by two groups – a policy committee and a board of county commissioners/board of directors.

Solid Waste – Unwanted residual solid or semi-solid materials resulting from industrial, commercial, agricultural, and community operations, but excluding earth or material from construction, mining, or demolition operations, or other waste materials of the type that would normally be included in demolition debris, non-toxic foundry sand, slag, and other substances that are not harmful to public health. It includes, but is not limited to, garbage, tires, combustible and non-combustible material, street dirt, and debris. Solid waste does not include any material that is an infectious waste or a hazardous waste.

Source Reduction – Any effort to reduce, at the source, the quantity of waste generated, toxic chemical use, or any release to the environment. Source reduction in generation of commercial or industrial wastes could result from process modifications, improvement in feedstock purity, better operating and management practices, and increases in the efficiency of machinery. It includes reducing the amount of materials entering the waste stream by voluntary or mandatory programs to eliminate the initial generation of waste.

Source separated recyclables - Materials that have been separated from trash at either the point of generation or the point of collection for the purpose of recycling the materials.

Standard Industrial Classification (SIC) Codes – Refers to the system established by the U.S. government to classify business establishment. A SIC code consists of a four-digit numerical code that the government assigned to a business establishment to identify the primary business of the establishment. In 1997, the SIC system was replaced with the NAICS system. Standard Industrial Classification used to categorize industries, institutions, and businesses according to the product manufactured or services offered.

State Solid Waste Management Plan (also referred to as State Plan) – Ohio Revised Code Section 3750 requires the Ohio Environmental Protection Agency with the advice of the solid waste management advisory council, to prepare the state solid waste management plan. The law prescribes eight purposes for the state plan. The main purpose of the state plan is to reduce Ohio’s reliance on using solid waste landfill facilities to manage solid waste. To do this, the state plan establishes the waste reduction and recycling goals for both the State and Ohio’s 52 solid waste management districts (SWMDs).

Subscription Curbside Recycling Program – Refers to a type of curbside recycling service through which residents must take a voluntary action to sign up for and agree to pay for the service. To qualify as a subscription curbside recycling program for purposes of achieving Goal 1 of the 2020 State Plan, the curbside recycling service must meet all of the following criteria:

- The service is offered to all residents living in at least single-family homes within the jurisdiction

(i.e. a city, village, or township);

- Homeowner’s decide whether to receive curbside recycling service. The only homeowners that have the ability to use a curbside program are those that contact a service provider to sign-up for the curbside program.
- The only homeowners that can participate in the service are those that pay for the service.
- The curbside recycling service must be available on a regular basis, at least once every two weeks.

The program must collect at least five of the materials designated as highly amendable to recycling in the 2020 State Plan. Those materials are listed in the table below:

Residential Sector	Commercial Sector
Corrugated cardboard	Corrugated cardboard
Newspaper	Office paper
Mixed paper	Mixed paper
Glass containers	Glass containers
Steel containers	Steel containers
Aluminum containers	Plastic containers
Plastic containers	Wood pallets and packaging
	Food waste

SWMD – The acronym for Solid Waste Management District.

TPD – The acronym for Tons Per Day.

TPY – The acronym for Tons Per Year.

Transfer Station/Transfer Facility – A facility, which receives deliveries of solid waste by local collection vehicles and provides for transfer to larger vehicles, which deliver wastes more economically to resource recovery or landfill facilities. As defined in Ohio Administrative Code Rule 3745-27-01(T)(28), any site, location, tract of land, installation, or building that is used or intended to be used primarily for the purpose of transferring solid wastes that are generated off the premises of the facility from vehicles or containers into other vehicles or containers for transportation to a solid waste disposal facility. The term does not include any facility that consists solely of portable containers that have an aggregate volume of fifty cubic yard or less nor any facility where legitimate recycling activities are conducted. The term does not include any facility that accepts scrap tires other than scrap tires which are accepted incidental to a mixed solid waste shipment.

Volume-Based Billing – A trash collection service where the amount a household pays for trash collection depends on the amount of trash the household disposes. The more waste the household throws away, the more the household pays for trash service. Volume-based billing treats trash collection like a utility, such as electricity or natural gas.

Volume Reduction – Activities such as incineration, which reduce the volume of waste to be disposed.

Waste Generation – This term refers to the amount (weight, volume, or percentage of the overall waste stream) of materials and products as they enter the waste stream and before materials recovery, composting, or combustion takes place.

Waste Minimization – Any effort to reduce or recycle the quantity of hazardous waste generated, and where feasible, to reduce or eliminate toxicity. Treatment of hazardous waste is not waste minimization, unless such treatment is part of a recycling process. (Please note that the definition of this term as used in this document does not include solid wastes.)

Waste Reduction – Refers to activities that decrease the quantities of waste disposed in landfills and includes recycling, volume reduction due to composting waste and volume reduction due to incinerating waste.

Waste Stream – The amount of materials that are destined for disposal. The waste stream may refer to specific, homogenous material or numerous materials mixed together.

White Goods – Discarded large appliances (such as refrigerators, ovens, dish washers, washing machines, clothes driers, hot water heaters, etc.).

SECTION i. SOLID WASTE MANAGEMENT

DISTRICT INFORMATION

A. District Information

Table i-1. Solid Waste Management District Information

SWMD Name	Mercer County Solid Waste Management District
Member Counties	Mercer County
Coordinator’s Name (main contact)	Kent Hinton
Job Title	Director
Street Address	220 W Livingston St Rm A230
City, State, Zip Code	Celina, OH 45822
Phone	(419) 584-1982
Fax	N/A
E-mail address	sanitary@sanitary.mercercountyohio.gov
Webpage	https://www.mercercountyohio.org/county-services/solid-waste-management/

Table i-2. Members of the Policy Committee/Board of Trustees

Member Name	Representing
Rick Muhlenkamp	County Commissioners
Wes Harris	Municipal Corporations
Greg Clune	Townships
Michelle Kimmel	Health District
Molly Lammers	Generators
Del Kramer	Citizens
Stan Sutter	Public

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

Chairperson	
Rick Muhlenkamp	Mercer County Commissioner

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

Commissioner Name	County	Chairperson/President
Jerry Laffin	Mercer	President
Rick Muhlenkamp	Mercer	
Dave Buschur	Mercer	

B. Technical Advisory Committee

The District did not establish a technical advisory committee (TAC) for the preparation of this Plan Update.

C. Plan Prepared By



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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 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.

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.

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 SWMD was formed as a single county composed of Mercer County and a very small portion of Darke County. The SWMD includes the County Commissioners and all the local units of governments within the County borders. There have been no changes in the configuration of the District since the District's original solid waste management plan was approved. There are 22 political entities (8 incorporated municipalities and 14 townships) within the SWMD. The City of Celina, the District's largest city and county seat, covers a portion of the county's four hundred square miles in the center of the County. The county's largest township, Marion Township, is in the southeastern corner of the county.

D. Waste Reduction and Recycling Goals

As explained earlier, a SWMD (refers to both SWMDs and Authorities) must achieve goals established in the state solid waste management plan. The current state solid waste management plan is the *2026 Mercer County Solid Waste Management Plan* in compliance with the 2020 State Plan. The 2020 State Plan established ten goals as follows:

2020 State Plan Goals

Goal 1

- The SWMD shall ensure that there is adequate infrastructure (80%) to give residents and commercial businesses opportunities to recycle solid waste.

Goal 2

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

Goal 3

- The SWMD shall provide the following required programs: a website, a comprehensive resource guide, an inventory of available infrastructure, and a speaker or presenter.

Goal 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.

Goal 5

- The SWMD shall incorporate a strategic initiative for the industrial sector into its solid waste management plan.

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.

Goal 7

- The SWMD shall explore how to incorporate economic incentives into source reduction and recycling programs.

Goal 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.

Goal 9

- The SWMD has the option of providing programs to develop markets for recyclable materials and the use of recycled-content materials.

Goal 10

- The SWMD shall report annually to Ohio EPA regarding implementation of the SWMD's solid waste management plan.

All ten SWMD goals in this state plan are crucial to furthering solid waste reduction and recycling in Ohio. However, by virtue of the challenges posed by Goals 1 and 2, SWMDs typically have to devote more resources to achieving those two goals than to the remaining goals. Thus, Goals 1 and 2 are considered to be the primary goals of the state plan.

Each SWMD is encouraged to devote resources to achieving both goals. However, each of the 52 SWMDs varies in its ability to achieve both goals. Thus, a SWMD is not required to demonstrate that it will achieve both goals. Instead, SWMDs have the option of choosing either Goal 1 or Goal 2 for their solid waste management plans. This affords SWMDs with two methods of demonstrating compliance with the State'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, and no demonstration of achieving that goal is needed for the solid waste management plan.

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

CHAPTER 2: DISTRICT PROFILE

Purpose of Chapter 2

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 Solid Waste Management District is a single county District composed of Mercer County and the local units of governments within the County borders. There have been no changes in the configuration of the District since the District's original solid waste management plan was approved.

County Overview

There are 22 political entities (8 incorporated municipalities and 14 townships) within the SWMD. The City of Celina, the District's largest city and county seat, covers a portion of the county's four hundred square miles in the center of the County. The county's largest township, Marion Township, is in the southeastern corner of the county.

Businesses and institutions are concentrated within either a Central Business District (CBD) or more local concentrations within business and residential District s. There are clusters of concentrated commercial businesses/institutions, retail, entertainment areas, etc. throughout the County.

Geographical

The Mercer County Solid Waste District is a single county District geographically located in Mercer County. According to “Ohio County Profile of Mercer County” prepared by Office of Research, the land use/land cover is:

- 82% cultivated crops,
- 7% low-intensity development,
- 5% forest,
- 7% other land cover (including high-intensity development, pasture, bodies of water, grasslands, and wetlands)



Mercer County is primarily occupied by cultivated crops but is also home to urban and natural areas. Residents, planners, and commissioners continue to develop highly livable communities throughout the County that respect the rural traditions mixing natural and man-made environments.

B. Population

1. Reference Year Population

Reference year population is taken from Ohio Department of Development’s Office of Strategic Research (ODOD, OSR). OSR provided estimate populations for 2022 based on the 2020 census data by governmental unit. Note: Ohio law requires that the entire population of a municipality located in more than one solid waste management district be added to the solid waste management district containing the largest portion of the jurisdiction’s population. The District has one community that is located in more than one solid waste management District: the Village of Burkettsville. The majority of Burkettsville resides in Mercer County. Adjustments were made to add the portion of Burkettsville located in Darke County to the Mercer County population. The County population was adjusted from 42,348 to 42,412 with the addition of the Village of Burkettsville.

2. Population Distribution

Table 2-1 shows the largest community in the county and the size of the community relative to the total population of the county. Celina as the largest community in Mercer County accounts for 15% of the SWMD’s population.

Table 2-1 Population Distribution in the Reference Year

County		Largest Political Jurisdiction		
Name	Population	Community Name	Population	Percent of Total County Population
Mercer	42,412	Celina	10,881	26%

Table 2-2 shows distribution of the population in cities, villages, and townships and the distribution of the population in incorporated versus unincorporated areas. Population between villages and unincorporated townships is almost equally divided.

Table 2-2 Population Distribution

County	Percent of Population in Cities	Percent of Population in Villages	Percent of Population in Unincorporated Township
Mercer	25.7%	26.4%	47.9%

3. Population Change

The District’s population is expected to decrease 1% from 42,852 in 2026 to 42,278 in 2040 as detailed in Table 2-3.

Table 2-3 District Population Change

Time Period	Area	Mercer
Time Period	Area	Mercer
2010 to 2020	County	4.4%
	Largest City	4.4%
	Unincorporated areas	4.4%
Planning Period 2026 -2040	County	-1%
	Largest City	-1%
	Unincorporated areas	-1%

4. Implications for Solid Waste Management

The profile of the SWMD can provide key insights into solid waste management planning. Factors such as population density, housing characteristics, and poverty rates apply when assessing which programs and program structure are needed to meet residential needs for solid waste management.

Based on the population projections, the District does not foresee any major implications related to managing solid waste and providing recycling programs during the planning period. Population is projected to increase through the planning period, but per capita waste generation is projected to decrease.

Population affects waste generation rates but factors of population growth such as household income, people per household, and economic activity also contribute. Economic activity and population growth affect household income and household income impacts per capita waste generation; and higher income households tend to produce higher amounts of waste. For example, studies suggest that higher income households tend to achieve higher participation rates of recycling. These complex factors are all simultaneously involved and affect each other because they dynamically occur over time.

Mercer County’s generation has averaged 140,345 tons/yr. The highest generation was recorded in 2019 with 156,249 total tons. Trends appear to be predictable and correlate with the Pandemic and with changes in population.

The projected 1% population decrease from 2026 to 2040 is not expected to have a significant impact on generation rates, recycling rates, or generated revenues.

C. Profile of Commercial and Institutional Sector

Western Ohio does not rank as one of Ohio Department of Development’s Priority Investment Areas. The primary commercial business is agriculture and significant changes are not anticipated.

Businesses and institutions are concentrated within either a Central Business District (CBD) or more local concentrations within business and residential districts. There are clusters of concentrated commercial businesses/institutions, entertainment areas, etc. throughout the County.

Service-providing businesses account for more employment and business establishments than goods-producing businesses. The two largest employment sectors fall under education and health care trade.

There are nineteen K-12 public schools in Mercer County. Other private schools and regional campuses exist. Schools in Coldwater and Parkway receive recycling pickup from the Auglaize County SWMD. The District provides technical assistance when approached by the schools and will provide some financial assistance for in-school use of recycling containers. Several of the schools have recycling programs to collect paper.

The District manages a County Office Recycling Program that collects cardboard, mixed paper, aluminum, ferrous metal, and plastics.

Table 2-4 Top Employers by Employment in Commercial and Institutional Sectors

Business Name	Type of Business/Organization
Celina Schools	Educational Services
Mercer County Hospital	Health Care and Social Assistance

Source: Office of Research Ohio Department of Development 2023 Mercer County

D. Profile of Industrial Sector

Mercer County is continually developing economic diversification. Agriculture remains the most important industry and predominantly occupies land area in the County. The top manufacturing employers in the County are listed in Table 2-5.

Table 2-5 Top Employers by Employment in Manufacturing Sectors

Material	City	NAICS	Employees
Celina Aluminum Precision Tech	Celina	33	500
Fort Recovery Industries Inc	Fort Recovery	33	450
JR Manufacturing Inc	Fort Recovery	33	300
Wilmer Inc	Coldwater	32	260
Cooper Farms Feed Mill	Fort Recovery	31	160
J & M Mfg. Co	Fort Recovery	33	150
Pax Machine Works Inc	Celina	33	125
Lincoln Electric Automation	Coldwater	33	114
Basic Grain Product Inc	Coldwater	31	100

Source: U.S. Business Database. Rep. Reference USA. And Source: Office of Research Ohio Department of Development 2023 Mercer County

E. Other Characteristics

The county is complex and multi-faceted with many different kinds of areas: rural, urban, and natural. Mercer County is expected to remain as a primarily rural community. Residents, planners, and commissioners continue to develop highly livable communities throughout the County that respect the rural traditions mixing natural and man-made environments.

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

A. Solid Waste Generated in Reference Year

Waste generation refers to the volume of materials that enter the waste stream before recycling, composting, landfilling or other waste management. To estimate waste generation, Mercer County SWMD collected data from several sources including:

- Ohio EPA Facility Data – some facilities are required to submit annual reports to Ohio EPA.
- Ohio EPA MRF Reports – Ohio EPA collects data from commercial 'big box stores' and material recovery facilities.
- Ohio EPA Compost Facility Data – composter facilities and food haulers/grocer data reported to Ohio EPA.
- Surveys of commercial and industrial businesses, recyclers, buybacks, brokers, and scrap dealers – these surveys are voluntary and rely on the willingness of any company to provide the data.

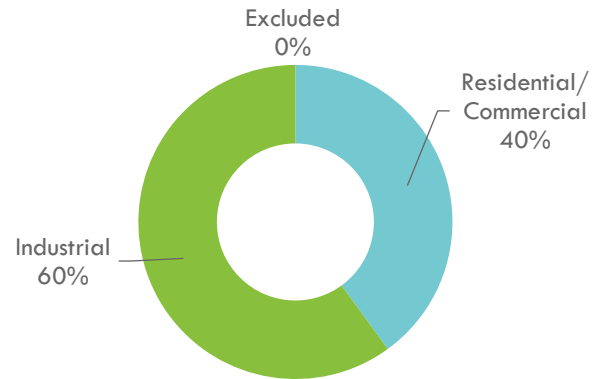
$$\text{Waste Generation} = \text{Wastes Disposed} + \text{Wastes Diverted}$$

In 2022, Mercer County generated 120,675 tons of material, as shown in Table 3-1, with the percentages by sector shown in Figure 3-1.

Table 3-1 Solid Waste Generated in the Reference Year

Type of Waste	Quantity Generated (tons)
Residential/ Commercial	44,882
Industrial	67,339
Excluded	0
Total	112,221

Figure 3-1 Total Waste Generated



1. Residential/Commercial Waste Generated in the Reference Year

Mercer County generated 52,854 tons of waste in the residential/commercial sector. This estimated generation indicates each person generates approximately 6.84 pounds per day. Benchmarking Mercer County’s per capita generation shows the County’s average is less than that of Ohio’s statewide average and higher compared to the U.S.’s national average in 2018.

Comparing the District to other surrounding and single county SWMDs, Mercer County has a per capita generation rate below the average of the four compared counties, and state, shown in Table 3-2. The challenge facing the SWMD is to find ways to reduce waste generation as well as characterizing landfilled waste to identify diversion methods to lower the disposal rate.

Table 3-2 Benchmark Per Capita Residential/Commercial Solid Waste

Type of Waste	Lbs. / Capita / Day
Mercer County	6.8
Auglaize County	5.1
Preble County	4.6
Darke County	6.7
Putnam County	2.8
Ohio Statewide	7.3
U.S Nationwide (2018)	4.9

2. Industrial Waste Generated in the Reference Year

The industrial sector generated 67,339 tons of waste, accounting for approximately 55.8% of total waste generated in the County. However, the majority of the waste generated by industrial sector, 90% is diverted, with 6,421 tons of the industrial waste generated being disposed of. The County should strive to continue to work with the industrial sector, especially manufacturers, to ensure that these companies have the resources necessary to maintain a high level of diversion.

3. Excluded Waste Generated in the Reference Year

Excluded waste is waste material exempt from the definition of solid waste in ORC 3734.01. All exempt waste is also fee exempt. Ohio EPA Format 4.1 adds a threshold for exempt waste which excludes exempt waste from calculations if it is less than 10% of total waste generated. Exempt waste for the District accounts for 0.4% of the waste generated and is not considered in the analysis of this plan.

B. Historical Waste Generated

1. Historical Residential/Commercial Waste Generated

Residential/commercial waste generation has fluctuated between 39,000 and 53,000 tons over the past five years and population has remained fairly constant, as shown in Figure 3-2. Overall, waste generation has increased 35% from 2018 to 2022 while population increased by 3.8%.

Generation was greatest in 2022, at 22% more than the average tons for 2018-2021. Disposal and recycling for residential/commercial sector appeared to dip following the COVID-19 pandemic in 2020 and 2021, with increases in both in 2022 following the economic recovery from COVID-19.

2. Historical Industrial Waste Generated

Industrial generation was high in 2021 but decreased in 2022 due to reported disposal and recycling tonnages as shown in Figure 3-3. The generation rate is driven primarily by the industry’s recycling tons. The industrial recycling tonnage reported accounts for 90% of the District’s industrial waste generated in 2022. The primary material recycled is ferrous metal from the manufacturing sector.

C. Waste Generation Projections

In the residential/commercial sector the historical and reference year data assists in forecasting waste generation. Residential and commercial waste generation is anticipated to increase at a slow rate throughout the planning period. This projection is mainly attributed to the slow decline in the projected population. Diversion is projected to slightly increase during the planning period due to the current recycling program options available to District residents.

Excluded waste has fluctuated between a high of 10,546 tons in 2019 to a low of 482 tons in 2022. The average of the past five years was 5,897 tons and 482 in 2022 which was 0.4% of total disposal. The District did not project excluded waste through the planning period.

Estimation and forecasting explanations are provided in more detail in Appendices D, E, F and G.

Table 3-2 presents projected waste generation for the first 6 years of the planning period.

Figure 3-2 Historical Residential/Commercial Waste Generation



Figure 3-3 Historical Industrial Waste Generation

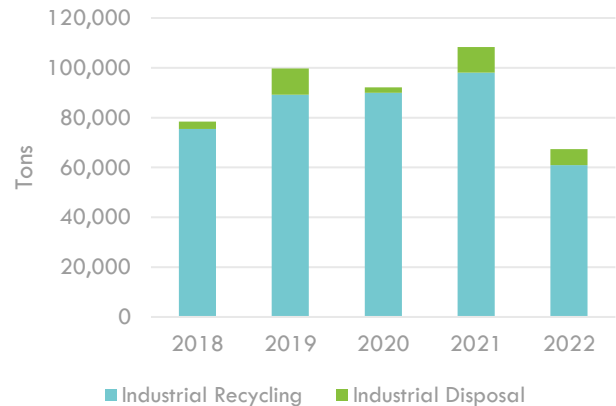


Table 3-2 Waste Generation Projections

Year	Residential/Commercial Waste (tons)	Industrial Waste (tons)	Excluded Waste (tons)	Total (tons)
2026	45,535	67,339	0	112,874
2027	45,580	67,339	0	112,919
2028	45,625	67,339	0	112,964
2029	45,671	67,339	0	113,009
2030	45,717	67,339	0	113,056
2031	45,764	67,339	0	113,103

Source: Appendices G and K

Sample Calculation:

Generation = Disposal + Recycle

Total = Residential/Commercial Generation + Industrial Generation

Per Capita Generation = ((Generation x 2000) / 365) / Population

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 30 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, 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 flow control). A SWMD's authority to designated facilities is explained in more detail later in this chapter.

A. Waste Management Overview

Mercer County manages waste through a combination of landfills, recycling programs and facilities, transfer stations, and composting facilities. Figure 4-1 depicts total waste generation management in the reference year. About 32% of the waste generated is diverted—meaning the majority of generation is being recycled or composted.

Table 4-1 presents projected waste generation for the first 6 years of the planning period. The District is expecting growth in recycling and landfilling and composting to hold flat.

Figure 4-1 Methods of Managing Waste

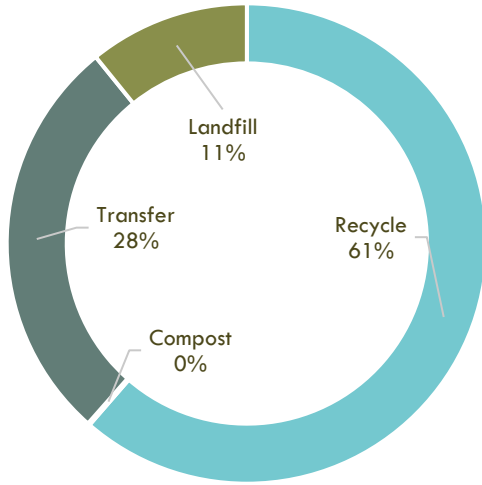


Table 4-1 Methods for Managing Waste Projections

Year	Generate	Recycle	Compost	Transfer	Landfill
2022	112,237	68,882	158	31,036	12,160
2026	112,874	70,910	2,162	28,594	11,209
2027	112,919	70,938	2,162	28,605	11,213
2028	112,964	70,967	2,162	28,617	11,218
2029	113,009	70,996	2,162	28,629	11,223
2030	113,056	71,027	2,162	28,640	11,227

Source:

¹Reference Year Appendix Table G-1 and Projections Table G-2

²Reference Year Appendix Table E-7 and Projections Table E-8 and Reference Year Appendix Table F-6 and Projections Table F-7

³Reference Year Appendix Table D-5 and Projections Table D-6

⁴Reference Year and Projections Appendix Table K-3

B. Profile of Waste Management Infrastructure

This next section identifies waste management infrastructure and identifies gaps and needs to manage the expected growth.

1. Landfill Facilities

A wide variety of wastes are disposed in municipal solid waste landfills and includes waste generated from households, commercial businesses, institutions, and industrial plants. In addition, asbestos (if permitted to do so), construction and demolition debris, dewatered sludge, contaminated soil, and incinerator ash may also be disposed in municipal solid waste landfills.

The Cherokee Run Landfill received 60% of the District's direct hauled municipal solid waste. Landfills used by the SWMD include three out-of-district, but in-state landfills and three out-of-state landfills located in the State of Indiana. The source of information is Ohio EPA and Indiana Department of Environmental Management. Table 4-2, "Landfill Facilities Used by the District in the Reference Year" contains the information concerning waste that was disposed of at these facilities.

2. Transfer Facilities

There were six transfer facilities that accepted waste from the SWMD during the reference year. There was one facility located inside the District, three out-of-district facilities within Ohio, and two facilities located out-of-state. Information for this section was obtained from Ohio EPA and Indiana Department of Environmental Management.

3. Composting Facilities

There was one composting and yard waste management facility that provided services to the SWMD in 2022. During 2022, this facility composted approximately 158 tons of material. The facility, Resource Recycling West, is located outside of the District but within Ohio.

4. Processing Facilities

A MRF is a specialized facility that receives, separates, and prepares recyclable materials for marketing to end-user manufacturers. Materials collected at the curb and through drop-off programs are sent to MRFs. One processing facility provided recycling services to the District in 2022 and was located in-district. Ohio Recycling operates one facility located in Dayton, Ohio as a pre-sort facility which sorts materials, compacts, and transfers materials to their main facility. Rumpke's main processing facility is located in Cincinnati and is classified as a Materials Recovery Facility (MRF).

5. Waste Collection

The list of haulers providing collection services for solid waste and recyclables to District residents in 2022 is shown in Table 4-2.

Figure 4-2 Landfills Used in Reference Year

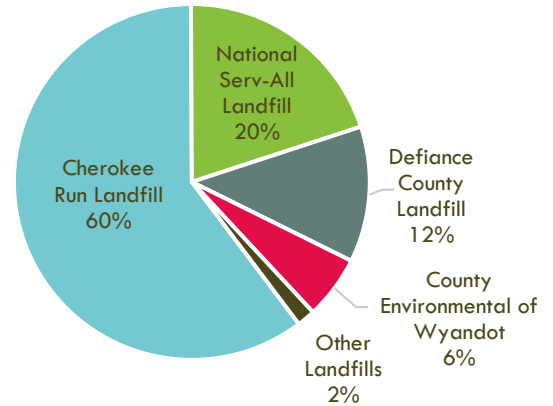


Table 4.2 Inventory of Trash Collection and Curbside Recycling Service Providers in the Reference Year

Name of Provider	Counties Served
Republic Services	Mercer County; Marion Township
D & T Trucking Company	DNR
P&R Disposal	DNR
Hemmelgarn Services	DNR
Ill Son's Towing, Hauling & Salvage	DNR
J & N Haulers	Allen, Auglaize, Champaign, Defiance, Hancock, Hardin, Henry, Logan, Marion, Mercer, Paulding, Putnam, Sandusky, Seneca, Union, Van Wert, Wood, Wyandot
Klenke's Trash Service	Coldwater; Burkettsville; Townships of Butler, Washington, Gibson, Liberty, Hopewell, Jefferson, and Granville
Luedke's Trash Hauling	DNR
Maharg	City of Celina, Villages of Chickasaw, Ft. Recovery, Montezuma, Rockford, and St. Henry
New Source Management	DNR
Ohio Recycling	DNR

Four cities and villages in the SWMD have subscription curbside achieved through a Pay-As-You-Throw (PAYT) system. Residents purchase recycling bags at participating locations which are collected alongside trash bags. Provision of solid waste services is privatized in the SWMD, no public haulers provide hauling services. Public-private contracts determine collection frequency, materials collected, size of containers, and type of collection.

C. Solid Waste Facilities Used in the Reference Year

1. Landfill Facilities

Table 4-3 lists the landfills receiving waste from Mercer County in the reference year, which is direct hauled, i.e., not transferred through a transfer facility.

Table 4-3 Landfill Facilities Used by the District in the Reference Year (2022 Direct Hauled)

Facility Name	Location		Waste Accepted from SWMD (tons)	Percent of all SWMD Waste Disposed	Remaining Capacity (years)
	County	State			
<i>In-District</i>					
None					
<i>Out-of-District</i>					
Defiance County Sanitary Landfill	Defiance	OH	5	0%	26
Cherokee Run Landfill	Logan	OH	2,554	20%	41
County Environmental of Wyandot	Wyandot	OH	8	0%	170
<i>Out-of-State</i>					
Jay County Landfill	Jay	IN	10,046	80%	89
National Serv-All Landfill	Allen	IN	10	0%	31
Randolph Farms Landfill	Randolph	IN	4	0%	60
Jay County Landfill	Jay	IN	10,046	80%	89
Total			12,626	100%	417

Source:
2022 Ohio Facility Data Report Tables. Ohio EPA.
Appendix D, Table D-1 and Appendix M, Table M-1

2. Transfer Facilities

Table 4-4 lists the transfer facilities receiving waste from Mercer County in the reference year before landfilling.

Table 4-4 Transfer Facilities Used by the District in the Reference Year (2022)

Facility Name	Location		Waste Accepted from District (tons)	Percent of all District Waste Transferred	Landfill Where Waste was Taken to be Disposed
	County	State			
<i>In-District</i>					
Maharg Inc Solid Waste Transfer Facility	Mercer	OH	26,475	86%	
<i>Out-of-District</i>					
Rumpke Allen County Transfer Station	Allen	OH	1	0%	
Waste Management of Ohio Inc - Lima	Allen	OH	857	3%	
Rumpke Waste Inc Greenville Transfer Facility	Darke	OH	3,697	12%	
<i>Out-of-State</i>					
Bunn Box Inc.	Allen	IN	4	0%	
Washler Inc Recycling and Transfer Station	DeKalb	IN	3	0%	
Total			30,908	100%	0

Source: "2022 Ohio Facility Data Report Tables". Ohio EPA. Appendix D, Table D-2

3. Composting Facilities

Table 4-5 lists the permitted composting facilities receiving materials from Mercer County in the reference year.

Table 4-5 Compost Facilities Used by the District in the Reference Year (2022)

Facility Name	Location	Material Composted (tons)	Percent of all Material Composted
<i>In District</i>			
None			
<i>Out-of-District</i>			
Resource Recycling West	1596 Neubrecht Rd Lima OH 45801	158.4	100%
Total		158.4	100%

Source: Appendix B, Table B-5

4. Processing Facilities

Table 4-6 lists the processing facilities receiving materials from Mercer County in the reference year.

Table 4-6 Processing Facilities Used by the District in the Reference Year (2022)

Name of Facility	Location		Facility Type	Recyclables Accepted from District (tons)
	County	State		
In-District				
Ohio Recycling	Franklin	OH	MRF	N/A
Out-of-District				
None				
Out-of-State				
None				
Total				N/A

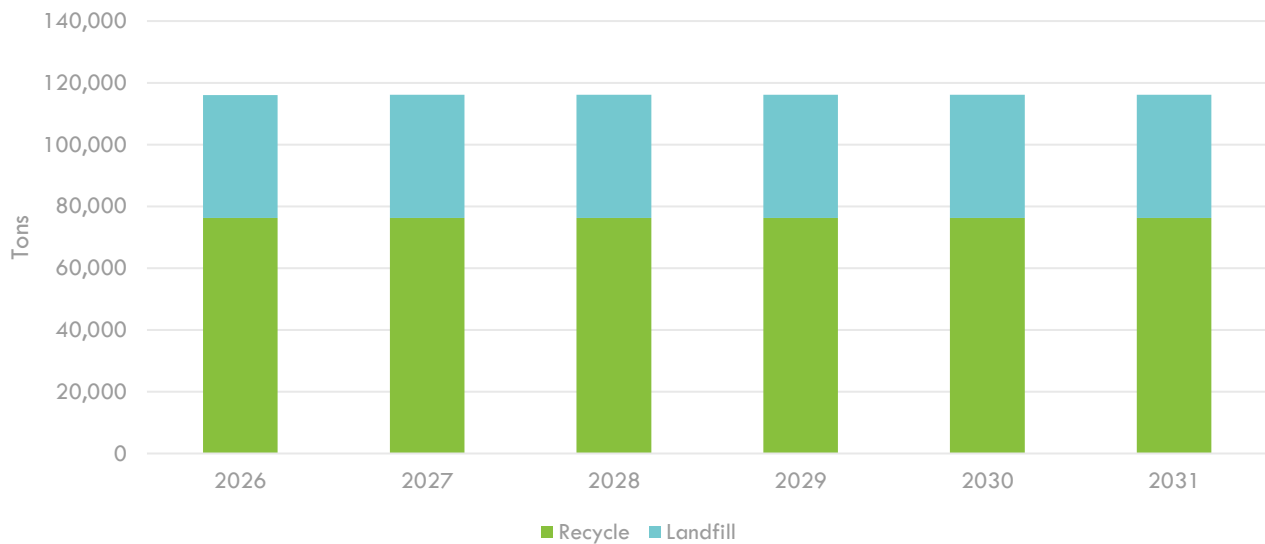
Source:
Appendix B, Table B-7

D. Use of Solid Waste Facilities During the Planning Period

The District continues to support an open market for the collection, transport, and disposal of solid waste. There is sufficient access to municipal solid waste landfill capacity for the planning period and access to transfer facilities to manage waste. Landfill capacity remains abundant and exceeds available volume of waste generated locally.

Mercer County is not expecting changes in the management of waste through the planning period. Following historical trends, the planning period expects waste to be similarly managed as shown in Figure 4-3. Mercer County does not expect any changes to the recyclable processing facilities or flows to processing facilities during the planning period. Additional capacity is not needed.

Figure 4-2 Landfills Used in Reference Year



E. 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 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. The siting strategy is located in Appendix S.

If a solid waste facility should be proposed for Mercer County, the SWMD will defer the authority to the siting strategy contained in the Ohio Administrative Code 3734-27, 3734-30, and 3734-37 including any amendments.

F. Designation

Purpose of Designation

Ohio law gives each SWMD (refers to both SWMDs and Authorities) 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

The Board of Directors of the Mercer County Solid Waste Management District has not yet designated facilities but reserves the right to establish future facility designation in accordance with Section 343.014 of the ORC.

2. List of Designated Facilities

There are no facilities currently designated.

Table 4-7 Facilities Currently Designated

Facility Name	Location		Facility Type
	County	State	
<i>In-District</i>			
None			
<i>Out-of-District</i>			
None			
<i>Out-of-State</i>			
None			

CHAPTER 5: WASTE REDUCTION AND RECYCLING

Purpose of Chapter 5

As was explained in Chapter 1, a SWMD (refers to SWMDs and Authorities) 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 function 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 needs to ensure 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 on the programs and services that are necessary and will be provided, the policy committee (board of trustees for an Authority) performed a strategic, in-depth review of the SWMD's existing programs and services, recycling infrastructure, recovery efforts, finances, and overall expectations. This review consisted of a series of 14 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 Priorities

Priority areas to focus efforts in the 2026 Plan include:

Priority Program	Priority Area
Processing Capacity	Collaborate with Auglaize County SWMD to secure plans for future programming and targeted education.
Financial	In response to the closing of the Celina Landfill, implement a \$2.75/ton contract fee effective as soon as 1/1/28. Annually review actual expenses, revenues, and fund balance to determine need to accelerate contract fee implementation schedule.
Website	Update and enhance website and social media presence.

Strategies/programs being implemented currently address these priority areas. However, based on the evaluation, the programs can adapt specific actions to continue to progress towards the broad goal. Appendix H evaluates the District's performance of strategies/programs in offering and maintaining services as outlined in the current plan. The process of the evaluation shows whether actual performance is what was expected or desired. If strategies/programs didn't perform as intended or challenges were identified, then suggestions were provided to strengthen programs, improve performance, and/or increase effectiveness. The list below is a quick summary of conclusions and findings found from the Appendix H evaluation.

Conclusions/Findings

The core of the District waste reduction programming is the robust and successful commercial/industrial and residential recycling collection services. Mercer County is serviced by multiple haulers that collect curbside recyclables from Celina City and 3 villages. The District also relies upon five full time and one part time drop off location supplemented by several not-for-profits and schools that sponsor small recycling drop off sites. All this has been accomplished with a very modest budget that includes a carefully planned and financially sustainable educational and outreach program. However, the District's goal is to further increase recycling from all three sectors (residential, commercial, and industrial).

To accomplish this, the District expects to employ a variety of educational and outreach enhancements targeted at specific markets as described in Appendix H. The District will also continue with the current level of programming and will explore the costs and impact of these other opportunities:

Category	List of Actions
Residential Sector Reduction and Recycling Programs	Leverage enhanced education and outreach through in-school programming, online District media communications, and distribution of shared content for publication on local communities' websites/social media.
	Continue to encourage participation in the curbside collection program with enhanced promotion of the cost savings from this PAYT program as described in Section H-5.
	Conduct awareness campaigns to targeted communities to communicate value of contracting for waste and recycling
	Consider stakeholder meetings with community leadership including township trustees and public service personnel, residents, and haulers to understand the issues preventing contracting of curbside services and to determine workable solutions
	Collaborate with communities to develop suitable bid specifications for contracting for non-subscription curbside waste and recycling services

Category	List of Actions
	<p>Continue the District's practice of reviewing abuses of the drop-off program including signs noting who is and is not allowed to use the drop-offs, education on the convenience of the curbside bag system, and encouragement to townships to participate in the curbside bag system.</p> <p>Evaluate options of conducting regional cooperative contracts for multiple smaller villages and cities for purchasing curbside waste and recycling services.</p>
Commercial/Institutional Sector Reduction and Recycling Programs	<p>Update the website with a business tab with easy access to waste reduction information specific to this sector including how local businesses can explore and participate in the free on-line platform sponsored by Ohio EPA.</p> <p>Enhance the working relationship with the school systems and consider a survey to gather more information on what materials schools are currently recycling and what needs still exist.</p> <p>Promote and encourage commercial businesses to require their hauler to provide the tonnages of how much they recycle.</p> <p>Consider a recognition award for businesses that are participating in recycling programs. This would help encourage other surrounding businesses to become active in the program.</p> <p>Continue to apply for Ohio EPA grants to help businesses expand or implement recycling programs.</p>
Industrial Sector Reduction and Recycling Programs	<p>Update the website with an industry tab with easy access to waste reduction information specific to this sector including how local businesses can explore and participate in the free on-line platform sponsored by Ohio EPA</p>
	<p>Consider a recognition award for industries that are participating in recycling programs. This would help encourage other surrounding businesses to become active in the program.</p>
	<p>Continue to apply for Ohio EPA grants to help industries expand or implement recycling programs and market development opportunities.</p>
	<p>Promote and encourage industries to require their hauler to provide the tonnages of how much they recycle</p>
Specific Waste Streams: Yard Waste, Food Waste, Fiber	<p>Collaborate with the communities with compost facilities to make sure residents are informed about the program offering/services. Encourage backyard composting in partnership with Ohio Cooperative Extension.</p>
	<p>Offer school administration and custodial staff education on food and yard waste recovery options.</p>
	<p>Boost outreach and education around backyard composting, smart landscaping, grass-cycling, and leaf mulching or mowing in place.</p>
	<p>Collaborate with the communities with compost facilities to make sure residents are informed about the program offering/services.</p>
	<p>Focus on education and resources on the changes in the area's expansion of plastics recycling</p>
	<p>Support end market development through grants, business assistance, or other programs.</p>
Grants/Incentives	<p>Celina's PAYT program is effective at incentivizing diversion and encouraging recycling participation. This successful PAYT program could possibly be adopted by other Mercer County haulers and the District will continue to play a role in the potential promotion of this PAYT model.</p> <p>Grant support or other financial encouragement to communities are not viable strategies based on the limited resources available to the District. However, the District will continue to provide technical support for communities that apply for outside funding assistance.</p>
Restricted & Difficult to Manage Wastes	<p>The District will evaluate enhancing education on using less-harmful ingredients and more environmentally friendly products to minimize the cost of the bi-annual HHW collection events. The District will also continue to promote local outlets available for other difficult to manage waste such as: chargeable batteries, lead-acid batteries, tires, prescriptions, used motor oil, cell phones and electronics.</p>
	<p>The District will consider providing future grant funded District matched scrap tire round up events. Past scrap tire round ups were successful and effective at providing an affordable alternative to retail store tire fees.</p>

Category	List of Actions
Special Programs, Enforcement, Clean Ups	The District finds value and expects to continue special program activity funding for the Health Department and for litter collection/education during the planning period .
Financial	The District has reacted to the closing of the Celina Landfill and has committed to a \$2.75/ton contract fee effective 1/1/28 that will maintain a fund balance equal to over two years of operating expenses.
Education/Outreach	<p>Consider adding education resources for schools and businesses such as: how to waste audit guide, classroom lessons, workplace recycling guide, waste-free classroom, etc.</p> <p>Consider adding more waste reduction tips and guides for homes and businesses seeking a zero waste lifestyle.</p> <p>Educate residents on the importance of recycling right and keeping contamination out of the recycling stream for drop-off and curbside programs.</p> <p>Develop customizable materials that can be posted on community webpages and/or social media platforms that educate residents on allowable and unacceptable materials for curbside and drop-off recycling programs.</p> <p>Offer reduction tips on social media and the webpage.</p> <p>Outreach to multi-family housing landlords and property management companies to help establish or improve multi-family housing recycling programs.</p> <p>Provide resources for self-conducting waste-audits on the webpage.</p> <p>Online flyer samples provided to each political jurisdiction to customize their residential recycling program contact information details to clarify what is and is not recyclable.</p> <p>Continue the distribution of the Annual District Report to the County Commissioners to demonstrate the program implementation and performance for the previous</p>
Grants, Economic Incentives, Enforcement /Clean Ups, Market Development, Facilities	<p>Celina's PAYT program is effective at incentivizing diversion and encouraging recycling participation. This successful PAYT program could possibly be adopted by other Mercer County haulers and the District will continue to play a role in the potential promotion of this PAYT model.</p> <p>Grant support or other financial encouragement to communities are not viable strategies based on the limited resources available to the District. However, the District will continue to provide technical support for communities that apply for outside funding assistance</p> <p>The District finds value and expects to continue special program activity funding for the Health Department and for litter collection/education during the planning period as described in Appendix O-7.</p> <p>Encourage industries to explore and participate in the free on-line platform sponsored by Ohio EPA. This OEPA Materials Marketplace allows businesses, manufacturers, non-profits, and other organizations to connect and find reuse and recycling solutions for their waste, byproducts, and surplus materials.</p> <p>Work with Auglaize County SWMD to secure plans for future programming and targeted education.</p> <p>Work regionally to promote food rescue, food banks and donation programs. The SWMD could help bring together local and regional non-profits, SWMDs and other partners to discuss building a better food redistribution network.</p> <p>Encourage Ohio Recycling, St. Mary's, OH to participate in the survey and share other data on volumes, haulers, and markets.</p> <p>Work with Auglaize County SWMD to secure plans for future programming and targeted education.</p> <p>Continue to expand the relationship with Maharg Transfer Station in order to acquire accurate recovery data.</p> <p>Target top 20 largest businesses and open conversation if they have recycling services and asking what materials they are recycling or would like to recycle.</p>
Other Programs, Regional Cooperative, Surveys	

The list of actions does not commit the District to undertake every specific action. Strategies and actions to streamline operations and continue high diversion were discussed, identified, and prioritized.

B. Program Descriptions

This section briefly describes major programs and services available during the planning period. Appendix I contains complete descriptions.

1. Residential Recycling Programs

Curbside Recycling Services

Table 5-1 Curbside Recycling Services

Curbside Recycling Services

Status	Name	Start Date	End Date	Goal
Non-Subscription Curbside				
Existing	None	Existing	Ongoing	1, 2
Subscription Curbside				
Existing	Celina City	Existing	Ongoing	1, 2
Existing	Coldwater Village	Existing	Ongoing	1, 2
Existing	St. Henry Village	Existing	Ongoing	1, 2
Existing	Fort Recovery Village	Existing	Ongoing	1, 2

Private haulers operate dual-stream, subscription curbside recycling programs in the following communities: Celina, Coldwater, Fort Recovery, and St. Henry.

Subscription curbside recycling is provided to all residents in single-family homes who purchase recycling bags at local businesses for a set amount. Residents separate their fiber recycling and commingled container recycling (dual stream) in two bags for curbside collection.

Drop-off Recycling Services

Table 5-2 Drop-off Recycling Locations

Status	Name	Start Date	End Date	Goal
Full-Time, Urban Drop-offs				
Existing	Jefferson Township/Green Business Solutions	Existing	Ongoing	1, 2
	Dumpster outside building Monday-Friday 9AM- 3PM			
Part-Time, Urban Drop-offs				
None	None			
Full-Time, Rural Drop-offs				
Existing	Burkettsville Village Granville Township Church St., Burkettsville, OH	Existing	Ongoing	1, 2
	Alley Cat Trailer transported by the Village to Ohio Recycling			
Existing	Chickasaw Village – Ohio Village 7837 State Route 274 Chickasaw, OH 45826 Ohio Recycling	Existing	Ongoing	1, 2
	MRF Public Drop Off Monday-Friday 8:30 a.m. to 4:30 p.m. Saturday 8:00 a.m. to 11:30 a.m.			
Existing	St. Henry’s Village – St. Henry High School transported to Ohio Recycling	Existing	Ongoing	1, 2
	Alley Cat Trailer transported by the school			

Status	Name	Start Date	End Date	Goal
Existing	Franklin Township Zuma Park	Existing	Ongoing	1,2
	24/7 access. Dumpsters picked up by the Auglaize County SWMD			
Part-Time, Rural Drop-offs				
Existing	Rockford Village – Parkway High School	Existing	Ongoing	1,2
	400 Buckeye Street Rockford, OH 45882 Dumpsters picked up by the Auglaize County SWMD Open to the public on the 3rd Saturday of the month 9:00 a.m. to 12:00 p.m.			

There are four full time rural drop offs, one part time rural drop off, and one full time urban drop off. Material collected from the majority of drop-offs is processed at private material recovery facilities (MRFs) and at the Auglaize County Material Recovery Facility. Drop-off tonnage from residential sources totaled 75 tons for full time sites and 53 tons for the part time site.

The District monitors participation in the drop-off program to identify whether any sites should be merged. In 2022, no site mergers occurred. One new site was added August 2022 in Franklin Township.

2. Residential Sector Reduction and Recycling Programs

Status	Name	Start Date	End Date	Goal
Existing	Curbside Recycling Initiatives	Existing	Ongoing	1,2
	Maintain curbside recycling programs for existing curbside programs including analysis, status, and assistance.			
New	Curbside Recycling Promotion	2025	Ongoing	3, 4
	Initiate awareness campaigns to targeted communities to communicate value of contracting for waste and recycling Curbside Recycling Expansion Issues. Promotion also includes stakeholder meetings with community leadership including township trustees and public service personnel, residents, and haulers to understand the issues preventing contracting of curbside services and to determine workable solutions including the value of PAYT.			
Existing	Curbside Recycling Cooperatives	Existing	Ongoing	1,2 3, 4
	Curbside Recycling Cooperatives - Evaluate options of conducting regional cooperative contracts for multiple smaller villages and cities for purchasing curbside waste and recycling services			
Existing	Drop Off Efficiency and Operational Assistance	Existing	Ongoing	4
	Conduct review of all drop offs to identify illegal dumping and contamination and provide solutions to abate issues including signage, education, and operational changes.			
New	Enhanced Education and Outreach	2024	Ongoing	3, 4
	Leverage enhanced education and outreach through in-school programming, online District media communications, and distribution of shared content for publication on local communities' websites/social media to increase participation, recovery, and decrease contamination.			

3. Commercial/Institutional Sector Reduction and Recycling Programs

Status	Name	Start Date	End Date	Goal
Existing	Commercial Sector Technical Assistance	Existing	Ongoing	3, 4
Offer of technical assistance to commercial business and institutional sector. Assistance could include assistance with grants, waste audits, recycling assessments, recycling programming, and collection options.				
Existing	Paper Shredding	Existing	Ongoing	2
Provide co-sponsored paper shredding event annually.				
Existing	School Recycling	Existing	Ongoing	2
Leverage enhanced working relationship with the school systems to continue or expand collection at Parkway, St. Henry recycling program & Coldwater schools and potentially other school systems.				
Existing	County Office Recycling	Existing	Ongoing	3, 4
Continued collection of cardboard, mixed paper, aluminum, ferrous metals, non-ferrous metals, and plastic from various county offices.				
New	Recognition Award	2025	Ongoing	3, 4
Design a recognition award for businesses that are participating in recycling programs. This would help encourage other surrounding businesses to become active in the program.				
New	OEPA Materials Marketplace Promotion	2025	Ongoing	2, 4
Include on the business website tab details on how local businesses can explore and participate in the free on-line platform sponsored by Ohio EPA.				

4. Industrial Sector Reduction and Recycling Programs

Status	Name	Start Date	End Date	Goal
Existing	Industrial Sector Technical Assistance	Existing	Ongoing	3,4, 5
Offer of technical assistance to industrial sector. Assistance could include assistance with grants, waste audits, recycling programming, and collection options.				
New	Recognition Award	2025	Ongoing	2, 4, 5
Design a recognition award for businesses that are participating in recycling programs. This would help encourage other surrounding businesses to become active in the program.				
New	OEPA Materials Marketplace Promotion	2025	Ongoing	1, 5
Include on the business website tab details on how local businesses can explore and participate in the free on-line platform sponsored by Ohio EPA.				

5. Restricted & Difficult to Manage Wastes, Special Collection Events

Status	Name	Start Date	End Date	Goal
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Existing	Bi-Annual HHW Collection Event	Existing	Ongoing	2, 4
The SWMD offers an bi-annual electronic collection event. Items are typically sent to Veolia. Materials collected include: pesticides, flammables, corrosive acids, flammable paints and aerosols, solvents and oils, poisons, mercury, fluorescent lamps, batteries, glues, and fire extinguishers. The District may consider annual HHW collection events based on the availability of future funding.				
Existing	Restricted/Difficult to Manage Wasted: Used Oil, Scrap Tires, Appliances, E-Waste	Existing	Ongoing	2, 4
Collection of hard to recycle waste including used oil is available at the bi-annual District HHW collection events. The District also publishes and advertises education materials on the website including retail and private locations where residents can take hard to recycle or restricted waste streams including tires, appliances, e-waste and other difficult to manage wastes. The District periodically holds tire amnesty events and will consider future events based on the availability of grants and District funding.				
Existing	Lead Acid Batteries.	Existing	Ongoing	2, 4
Ohio Recycling runs a year-round buyback program for lead acid batteries. The District advertised on the website retailers that accepted lead-acid batteries. Lead-acid batteries are also accepted at the District's HHW collection events, which are held in even-numbered years				
New	District Yard and Food Waste Management Promotion	2025	Ongoing	2, 4
The District will consider a more active role in and yard and food waste management by offering school administration and custodial staff education on food and yard waste recovery options. The District will also boost outreach and education around backyard food and yard composting, smart landscaping, grass-cycling, and leaf mulching or mowing in place.				
Existing	Yard Waste Collection from Municipalities/Private Haulers	Existing	Ongoing	2, 4
Yard waste management is decentralized. Collection or drop-off opportunities are made available by some cities, villages, and townships. Either the public entity provides the service or contracts with a private business/hauler. Collection frequency varies (each city or village maintains their own level of service list). Five municipalities, Celina, Coldwater, St. Henry, Fort Recovery, and Chickasaw, provide some form of curbside yard waste pick-up. In the reference year, Celina provided their residents the opportunity to place limbs and brush at the curb utilizing a private hauler, Maharg, to haul materials. The Village of Fort Recovery also provides limb and brush curbside pickup collected by the Village. The District will also investigate the Wenning Poultry Farm as a viable yard or food waste composting option.				

6. Education/Outreach

The 2020 State Solid Waste Management Plan established ten goals for Districts to achieve. One of the goals requires that solid waste management Districts (SWMDs) shall provide education, outreach, marketing, and technical assistance regarding reduction, recycling, composting, reuse, and other alternative waste management methods to identify target audiences using best practices. The District has five target audiences, including:

- Residents
- Schools
- Industries
- Commercial businesses and institutions
- Communities and elected officials

The following chart shows the targeted audience for each of the District 's existing programs:

Education/Outreach Program	Target Audience				
	Residents	Schools	Industries	Institutions & Commercial Businesses	Communities & Elected Officials
District Website and Facebook Page	X	X	X	X	X
Public, Elected Officials, and School Communication	X	X	X	X	X
Educational Presentations/Displays	X	X		X	X
HHW and Scrap Tire Education	X				X
Institutional and Commercial Solid Waste and Recycling Assessments and Technical Assistance				X	
Industrial Solid Waste and Recycling Assessments and Technical Assistance			X		
Materials Marketplace Referrals			X	X	

The following descriptions detail each program:

Status	Name	Start Date	End Date	Goal
Existing	Yard Waste Information	Existing	Ongoing	2, 3, 4
The District will continue to host a display at the County Fairgrounds which presents information on backyard composting and managing yard waste. The District also distributes a U.S. EPA produced brochure titled "Greenscaping". These brochures were also available at the District office.				
Existing	HHW and Hard to Manage/Restricted Waste Streams	Existing	Ongoing	3, 4, 6
The District publishes and advertises education materials on the website including HHW events, retail, and private locations where residents can take hard to recycle or restricted waste streams including tires, appliances, e-waste and other difficult to manage wastes. The District will include education on less hazardous options to traditional HHW.				
Existing	Educational Presentations/Displays	Existing	Ongoing	3, 4
The District will continue to participate at the County Fair in August of each year including a booth where educational materials are handed out to residents and businesses. The District is also available to give a presentation at the fair about recycling.				
New	District Website and Facebook page Enhancement	2025	Ongoing	3, 4
The SWMD maintains a website meeting the requirements prescribed by Goal 3 of the 2020 State Plan. The site promotes recycling and includes locations where materials may be taken and information about the Education and Awareness Program.				
The website has the essential information but could improve ease of navigability. The District will endeavor to monitor and update the site at least quarterly to contain accurate and up-to-date information at all times and offer all political jurisdictions the opportunity to add the SWMD's website link to their home webpages and help to add community recycling information to their specific websites.				
The District will consider adding a Business content page which will include recycling resources such as the drop-off containers in the District that accept newspapers, Waste Audit How-To Guide and Steps to Better Business Recycling.				
Existing	Adult and School Education and Outreach	Existing	Ongoing	3, 4, 6
The District works with the education specialist to provide information and materials upon request on closed loop recycling, buy recycled, and landfills at adult events and school presentations throughout the District. The District will consider adding education resources for schools and businesses such as: how to waste audit guide, classroom lessons, workplace recycling guide, waste-free classroom, etc.				

Status	Name	Start Date	End Date	Goal
Existing	Elected Officials Education & Outreach	Existing	Ongoing	3, 4
The township trustees are informed of the upcoming recycling opportunities and litter cleanups happening in the district and their semi-annual meetings. District staff will upon request present at individual city, township, or village public meetings.				
New	Residential Education and Outreach: Yard and Food Waste	2025	Ongoing	3, 4
Boost outreach and education messaging on social media and around backyard composting, smart landscaping, grass-cycling, and leaf mulching or mowing in place.				
Existing	Commercial/Institutional Education and Outreach	Existing	Ongoing	3, 4
The District will continue to provide general technical assistance: answer questions on solid waste management issues, provide resources on recycling and solid waste management. The District provides contacts to entities that can assist them with their recycling needs, including Ohio Recycling and Auglaize Co. SWMD.				
Existing	County Office Recycling Program	Existing	Ongoing	3, 4
The District provides the Annual District Report to the County Commissioners to demonstrate the program implementation and performance for the previous year.				
Existing	Scrap Tire Education	Existing	Ongoing	3, 4
The District provides educational information to encourage residents to contact local tire dealers that accept scrap tires for a fee. A brochure is also distributed by the District with this information. The brochure was also available at the Health Department, the Farm Service Agency, the Commissioner's office, and the District office.				

7. Grants, Economic Incentives, Market Development, Facilities

Status	Name	Start Date	End Date	Goal
Existing	Health Department Funding	Existing	Ongoing	2, 4
The District provides financial assistance to the health department for landfill inspections and well testing. Inspections include the Celina Landfill during the post closure process, the Maharg Transfer Facility, and the Liberty Environmental Storage Facility.				
Existing	Plan Preparation, Implementation and Monitoring	Existing	Ongoing	1, 10
The District will continue to monitor the plan implementation process, and complete annual District reports based on survey work and programming status.				
New	Recognition Award	2025	Ongoing	3, 4
Include on the business website tab details on how local businesses can explore and participate in the free on-line platform sponsored by Ohio EPA.				
Existing	OEPA Materials Marketplace Promotion	Existing	Ongoing	3, 4
The District has developed materials on "closed loop recycling" and incorporates "Buy Recycled" into education programs				
Existing	Other Facilities	Existing	Ongoing	2, 4
The District has a relationship with facilities located in the District that either support or play an active role in management of solid waste including Auglaize County that provides some processing and collection services. The District will continue to expand the relationship with Maharg Transfer Station in order to acquire accurate recovery data.				
New	Other Facilities	2025	Ongoing	2
The District will collaborate with Auglaize County SWMD to secure plans for future programming and targeted education				

8. Enforcement & Clean-up

Status	Name	Start Date	End Date	Goal
Existing	Roadside Litter Collection Program	Existing	Ongoing	None

The District collaborates annually with the Mercer County Engineers and the Mercer County Township Trustees to conduct a Spring Roadside Litter Cleanup.

9. Other Programs

Status	Name	Start Date	End Date	Goal
New	Food Waste Diversion	2025	Ongoing	2, 4

The District will consider a campaign to work regionally to promote food rescue, food banks and donation programs. The District will consider a program to bring together local and regional non-profits, SWMDs and other partners to discuss building a better food redistribution network.

C. Waste Reduction and Recycling Rates

The SWMD expects to meet the 25% residential/commercial waste reduction rate goal in 2024, and the SWMD is projected to continue to meet the 25% goal during the planning period. The District will strive to improve the waste reduction rate with additional education and outreach initiatives.

Table 5-3 Residential/Commercial Waste Reduction and Recycling Rate

Year	Projected Quantity Collected (tons)	Residential/Commercial WRR ¹ (%)
2026	12,154	26.7%
2027	12,182	26.7%
2028	12,211	26.8%
2029	12,240	26.8%
2030	12,271	26.8%
2031	12,301	26.9%

Notes: WRR = Waste Reduction Rate

Source:

Appendix K, Table K-1

Sample Calculation:

Waste Reduction Rate = Recycled / Total Generated

The SWMD accomplished a 90% industrial waste reduction rate goal in the reference year, 2022, and the SWMD is projected to continue to achieve a 90% industrial waste reduction rate during the planning period. The District will strive to improve the waste reduction rate with additional outreach, collaboration, and programming.

Table 5-4 Industrial Waste Reduction and Recycling Rate

Year	Industrial Waste Reduced and Recycled (tons)	Waste Reduction and Recycling Rate (percent)
2026	60,918	90%
2027	60,918	90%
2028	60,918	90%
2029	60,918	90%
2030	60,918	90%

Notes: WRR = Waste Reduction Rate

Source:

Appendix K, Table K-2

Sample Calculation:

Waste Reduction Rate = Recycled / Total Generated

CHAPTER 6: COST AND FINANCING OF PLAN IMPLEMENTATION

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 District's Budget

The plan must demonstrate that planned expenses will be made in accordance with ten allowable uses that are prescribed in ORC Section 3734.57.

In accordance with Ohio Revised Code 343.014, a solid waste management district may adopt designation fees to assure adequate financing to implement the approved solid waste plan. The activities and services described in Chapter 5 will be supported with a Designation/Contract Fee that will become effective January 1, 2028.

The Designation/Contract fee is expected to generate revenues of \$109,546 in 2028. District expenses are expected to be \$81,405 in 2026. The District's 2024 fund balance of \$512,585 will be used as the primary funding source for the years 2022 to 2028. The Projected fund balance on January 1, 2028 is projected to be \$263,813.

The District intends to annually review and reevaluate the implementation schedule for the \$2.75/ton Designation/Contract Fee. The District reserves the right to lower the \$2.75/ton Designation/Contract Fee based on updated industrial tonnage projections, future budget needs, and the Policy Committee commitment to maintaining a fiscally responsible and conservative fund balance.

Figure 6-1 Planning Year Revenues and Expenses



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. This section describes the sources considered by the District Policy Committee for future funding of District programming.

1. Disposal Fee

In accordance with ORC 3734.57(B), a solid waste policy committee can establish a disposal fee that is collected at landfills and remitted to the receiving SWMD in which the landfill is located. The District no longer receives revenues from disposal fees. The District previously levied fees in accordance with ORC Section 3734.57(B) on the Celina Landfill in Celina. The District's fee structure remains \$2.00 collected on each ton of solid waste that is generated within the District and disposed at a solid waste landfill located within the District, \$4.00 collected on each ton of solid waste generated outside the District but within Ohio and disposed at a solid waste landfill located within the District, and \$2.00 collected on each ton of solid waste generated outside of Ohio and disposed at a solid waste landfill located within the District.

The District no longer has active operating landfills in the District after the closure of the Celina Landfill. It does not plan to have operating landfills in the District's borders at this time. Revenues are not collected and will not be collected from disposal fees at this time or during the planning period.

Table 6-2 demonstrates disposal fee revenue leading up to and after the closure of the Celina Landfill in 2021.

Table 6-2 Disposal Fee Schedule and Historical Revenue

Year	Disposal Fee Schedule (\$/ton)			Revenue (\$)			Total Disposal Fee Revenue (\$)
	In-District	Out-of-District	Out-of-State	In-District	Out-of-District	Out-of-State	
2018	\$2.00	\$4.00	\$2.00	\$21,109.36	\$75,616.68	\$0.00	\$96,726.04
2019	\$2.00	\$4.00	\$2.00	\$28,613.56	\$86,028.48	\$14,849.94	\$129,491.98
2020	\$2.00	\$4.00	\$2.00	\$24,508.36	\$61,839.68	\$0.00	\$86,348.04
2021	\$2.00	\$4.00	\$2.00	\$28,426.38	\$50,081.32	\$9.64	\$78,517.34
2022	\$2.00	\$4.00	\$2.00	\$0.00	\$0.00	\$0.00	\$0.00
2023	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
2024	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00

2. Generation Fee

In accordance with ORC 3734.573, a solid waste management policy committee may levy fees on the generation of solid wastes within the district. The District Policy Committee did not choose this option that would not apply to waste sent to out-of-state landfills. The District does not plan to initiate a generation fee during the planning period.

3. Parcel Fee – Rates and Charges

In accordance with ORC 343.08, a SWMD can fix reasonable rates or charges against any improved parcels to which solid waste collection, storage, transfer, disposal, recycling, processing, or resource recovery is provided by the SWMD. The District does not have and does not plan to initiate a Parcel Fee during the planning period.

4. Designation/Contract Fee

In accordance with Ohio Revised Code 343.014, a solid waste management district may adopt designation fees to assure adequate financing to implement the approved solid waste plan.

The Mercer County Solid Waste District Policy Committee met on May 9, 2024 to review all available funding options. The Policy Committee agreed at that meeting that an alternative funding mechanism was necessary to supplement its income after the closure of the Celina Landfill. The Policy Committee agreed to implement a Contract Fee of \$2.75 per ton when its future fund balance falls below \$300,000 which represented over two years of operational expenses. The fund balance is projected to be \$263,813 by the end of 2027 which would trigger the implementation of a \$2.75/ton Contract Fee effective Jan. 1, 2028. The Designation process as described in ORC 343.014 would begin January 2027.

The District Policy Committee on May 9, 2024 evaluated the advantages of a Contract Fee compared to other funding options and determined that Contract Fee:

- Provides a reliable source of predictable income .
- Maintains a responsible and conservative fund balance of greater than a two year operating expense.
- The Contract Fee was considered as a viable option in the previous Solid Waste Plan and was projected to be higher at \$3.50/ton starting 2020.
- Encourages waste reduction and recycling.
- Anticipated to be acceptable to the Ohio EPA as a responsible income source.
- Equitable for seniors and small households since the fee is based on tons generated.

- The \$2.75/ton fee was a modest affordable increase from the previous \$2.00/ton disposal fee. The economic impact of the \$2.75 compared to the previous \$2.00 fee equates to 6 cents/month/household.

Contingency Budget

The District has prepared a Contingency Budget described in section O: C with implementation described of a \$2.75/ton Contract Fee effective Jan. 1, 2026. The Designation Process as described in ORC 343.014 would then begin as early as 2025. The Contingency Budget will become effective if the fund balance drops below \$300,000 prior to the projected 2028 date. This could happen if projected industrial tonnages did not continue the positive generation trend as illustrated in Figure O-1A. Evidence suggests that industrial volumes are increasing over time but are volatile and potentially unpredictable. Industrial disposal has historically represented 15% of total disposal tonnages.

5. Other Sources of Revenue

The District has received Other Revenue from a variety of reimbursements and other sources. Other Revenue for the period 2018 to 2023 has averaged \$1,562 per year. Other Revenue funding is not guaranteed and is therefore not included in planning period projections.

6. Grants Revenue

The District has received Ohio EPA grant funding for a variety of waste reduction programs. Grant funding for the period 2018 to 2023 has averaged \$3,512 per year. Grant funding is not guaranteed and is therefore not included in planning period projections. Table O-5 has been omitted. See Table O-6 for historical details.

Table 6-3 shows the projected revenues for the first six years of the planning period

Table 6-3 Summary of Revenue

Year	Disposal Fees	Generation Fees	Designation Fees	Other Revenue						Total Revenue
				Recycling Revenue	Grants	Rates and Charges	User Fees	Reimbursements	Other	
Reference Year										
2022	\$0	\$0	\$0	\$0	\$4,572	\$0	\$0	\$26	\$2,367	\$0
Planning Period										
2026	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
2027	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
2028	\$0	\$0	\$109,591	\$0	\$0	\$0	\$0	\$0	\$0	\$109,591
2029	\$0	\$0	\$109,635	\$0	\$0	\$0	\$0	\$0	\$0	\$109,635
2030	\$0	\$0	\$109,680	\$0	\$0	\$0	\$0	\$0	\$0	\$109,680
2031	\$0	\$0	\$109,558	\$0	\$0	\$0	\$0	\$0	\$0	\$109,558

Source(s) of Information:

Year 2022 sourced from Quarterly Fee Reports

Planning period years sourced from Appendix O

Sample Calculations:

Total Revenue = Generation Fes + Other Revenue

C. Expenses

Overview of How Solid Waste Management Districts Spend Money

Ohio 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
 - Preparation and monitoring of plan implementation.
- 2
 - Implementation of approved plan.
- 3
 - Financial assistance to boards of health for solid waste enforcement.
- 4
 - Financial assistance to defray the costs of maintaining roads and other public services related to the location or operation of solid waste facilities.
- 5
 - Contracts with boards of health for collecting and analyzing samples from water wells adjacent to solid waste facilities.
- 6
 - Out-of-state waste inspection program.
- 7
 - Financial assistance to local boards of health to enforce ORC 3734.03 or to local law enforcement agencies having jurisdiction within the District for anti-littering.
- 8
 - Financial assistance to local boards of health for employees to participate in Ohio EPA's training and certification program for solid waste operators and facility inspectors.
- 9
 - Financial assistance to local municipalities and townships to defray the added cost of roads and services related to the operation of solid waste facilities.
- 10
 - Payment of any expenses that are agreed to awarded or ordered to be paid under section 3734.35 of the Revised Code and any administrative costs incurred pursuant to that section.

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.

Table 6-2 summarizes the types of expenses the District expects for implementation of this Plan Update. Detailed information regarding expenses is provided in Appendix O.

Table 6-2 Summary of Expenses

Category/Program	2022	2026	2027	2028	2029	2030	2031
1. Plan Monitoring/Prep.	\$6,525	\$7,000	\$7,000	\$7,000	\$14,792	\$40,242	\$12,250
a. Plan Preparation	\$0	\$0	\$0	\$0	\$7,792	\$33,242	\$5,250
b. Plan Monitoring	\$6,525	\$7,000	\$7,000	\$7,000	\$7,000	\$7,000	\$7,000
2. Plan Implementation	\$37,003	\$64,405	\$66,090	\$67,819	\$68,697	\$69,590	\$70,500
a. District Administration	\$24,068	\$28,062	\$28,763	\$29,482	\$29,777	\$30,075	\$30,376
Personnel	\$18,616	\$21,638	\$22,179	\$22,734	\$22,961	\$23,191	\$23,423
Office Overhead	\$5,452	\$6,424	\$6,584	\$6,749	\$6,816	\$6,884	\$6,953
e. Special Collections	\$6,342	\$27,863	\$28,560	\$29,274	\$29,567	\$29,862	\$30,161
HHW Collection	\$6,342	\$27,863	\$28,560	\$29,274	\$29,567	\$29,862	\$30,161
Appliance Collection	\$0	\$0	\$0	\$0	\$0	\$0	\$0
g. Education/Awareness	\$765	\$1,030	\$1,056	\$1,083	\$1,093	\$1,104	\$1,115
Education Staff	\$165	\$530	\$544	\$557	\$563	\$568	\$574
Advertisement/Promotion	\$600	\$500	\$513	\$525	\$531	\$536	\$541
m. Litter Collection/Education	\$5,828	\$7,450	\$7,710	\$7,980	\$8,260	\$8,549	\$8,848
3. Health Dept. Enforcement	\$7,000	\$7,000	\$7,000	\$7,000	\$7,000	\$7,000	\$7,000
5. Well Testing	\$3,000	\$3,000	\$3,000	\$3,000	\$3,000	\$3,000	\$3,000
Total Expenses	\$53,528	\$81,405	\$83,090	\$84,819	\$93,488	\$119,833	\$92,750

Source(s) of Information:

Year 2022 sourced from Quarterly Fee Reports

Planning period years sourced from Appendix O

Sample Calculations:

Total Expenses = sum of expenses category

1. Plan Monitoring/Prep.

1.a Plan Preparation

- The District contracted a consultant for developing the 2026 Plan Update using Format 4.1. The expense line item shown are for consulting fees for plan preparation. This cost includes staff and contracts with outside consultants to prepare the SWMD's solid waste management plan updates. The SWMD assumed the cost of the contract for all subsequent plan updates would be the same.

1.b Plan Monitoring

- The District contracts with a consultant for the preparation of the Annual District Report and continued monitoring of plan progress. Costs include assistance with the District with plan implementation management, annual district reporting, annual surveying of business, future plan development, special studies and other tasks as assigned by the District Director and/or Board. This line item also includes legal assistance.

2. Plan Implementation

2.a District Administration

- 2.a.1 Personnel

The Personnel budget is split between the district and the Sanitary Engineering Department. Planning period expenses were projected based on the 2018 to 2023 actual expenses for salaries including District staff, PERS retirement, Medicare, insurance, supplies, postage, reproductions, advertising, printing, utilities, webpage maintenance, office equipment, and travel. Administrative costs also include staffing time for some program costs which are difficult to separate into their own line item.

2.a.2 Office Overhead – Planning period expenses were projected based on the actual 2018 to 2023 expenses.

2.e. Special Collections

- 2.e.2. HHW Collection – The costs of District Sponsored HHW collection for 2018 to 2023 are actual expenses for a bi-annual event. The projected budget for 2024 and continuing through the planning period allow for the option of an annual HHW collection.

2.g. Education/Awareness

- 2.g.1 Education Staff - This is the cost for salary and expenses associated with education/awareness and outreach including supplies. Planning period expenses were projected based on the actual costs of the program from 2018 through 2023.
- 2.g.2. Advertisement/Promotion - This is the cost for outreach and education program supplies. Planning period expenses were projected based on the actual costs of the program from 2018 through 2023.

2.m. Litter Collection

- This is the operational costs to fund annual litter collection activities provided by the County Engineer. Planning period expenses were projected based on the actual costs of the program from 2018 through 2023.

3. Health Dept. Enforcement

- The annual cost of conducting solid waste enforcement and facility post-closure maintenance inspection including the closed Celina Landfill. The flat fee of \$7,000 is not expected to change during the planning period.

4 Well Testing

- The annual cost of conducting well testing is associated with the closed Celina Landfill. The flat fee of \$3,000 is not expected to change during the planning period.

D. Budget Summary

Table 6-3 presents a summary of the budget for the 2022 reference year and the first six years of the planning period (2026 to 2031). The summary includes revenue, expenditures, net balance, and year-end fund balance. Funding should be available to operate the programs outlined throughout this Plan.

Table 6-3 Budget Summary

Year	Revenue	Expenses	Net Difference	Ending Balance
Reference Year				
2022	\$6,964.92	\$53,528.00	-\$46,563.08	\$699,928.73
Planning Period				
2026	\$0.00	\$84,276.30	-\$81,405.18	\$346,903.30
2027	\$0.00	\$81,405.18	-\$83,089.81	\$263,813.49
2028	\$109,545.94	\$83,089.81	\$24,726.78	\$288,540.27
2029	\$109,590.52	\$84,819.16	\$16,102.14	\$304,642.41
2030	\$109,635.10	\$93,488.38	-\$10,197.68	\$294,444.73
2031	\$109,679.68	\$119,832.79	\$16,929.75	\$311,374.48

Source(s) of Information:

Year 2022 sourced from Quarterly Fee Reports

Planning period years sourced from Appendix O

Sample Calculations:

Net Difference = Revenue – Expenses

Ending Balance = Net Difference + Previous Year Ending Balance

APPENDIX A: MISCELLANEOUS INFORMATION

Appendix A establishes the reference year used for this plan update, planning period, goal statement, material change in circumstances and explanations of differences in data.

A. Reference Year

The reference year for this solid waste management plan is 2022.

B. Planning Period

The planning period for this solid waste management plan is 2026 to 2040.

C. Goal Statement

The District will achieve the following Goal:

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

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

- a. Differences in quantities of materials recovered between the annual district report and the solid waste management plan.

Data does not differ.

- b. Differences in financial information reported in quarterly fee reports and the financial data used in the solid waste management plan.

Data does not differ.

E. Material Change in Circumstances/Contingencies

Ohio law [ORC Section 3734.56(D)] requires the District's Solid Waste Management Plan to be updated when the Mercer County Solid Waste Management District (District) Board of Directors (Board) determines that there has been a material change in circumstances from the circumstances addressed in the approved Plan. If a plan update is required due to a material change in circumstances, the plan update must address those portions of the plan that need to be modified due to the material change in circumstances.

In the event that a new or undesignated solid waste transfer, disposal, recycling or resource recovery facility is subsequently designated by the Board, or a new or undesignated facility is granted a waiver which permits the undesignated facility to accept solid waste generated within the District, and such designation or waiver is documented in a designation or waiver agreement, the Board may not determine that a material change in circumstances has occurred. The Board, as part of the consideration of its assessment of a new or undesignated facility on the Plan, may consider whether to change its contract fee or rates and charges.

In determining whether a material change in circumstances has occurred, the Board will consider the following:

- i. An assessment of changes in waste generation;
- ii. Capacity availability for disposal, transfer, composting, and management of restricted waste streams;
- iii. Strategies for waste reduction and/or recycling;
- iv. Substantial changes in the availability of waste reduction and recycling opportunities available to District residents;
- v. The availability of revenues for plan implementation;
- vi. Procedures to be followed for plan implementation;
- vii. Timetable for implementation of programs and/or activities;
- viii. Facility designations and the flow of waste (the addition or removal of a facility from the designated list is not a material change in circumstances); and
- ix. Any other factor that the Board considers relevant.

The Determination Criteria will be evaluated on the basis of the District Policy Committee's annual review of the approved Plan, and/or information obtained through the District Staff's monitoring program. The staff monitoring program includes the following:

- i. Quarterly analysis of District revenues;
- ii. Analysis of information acquired by District Staff for preparation of the Annual District Report;
- iii. Information acquired by District Staff through follow-up investigations of citizen complaints which indicate the existence of deviations from or noncompliance with the District Plan; and
- iv. Analysis of information voluntarily provided to the District Staff by state or local officials and employees, or owners and operators of solid waste collection, disposal, transfer, recycling activities, or resource recovery facilities, which indicate the existence of major deviations from and/or noncompliance with the District's Plan.

The Policy Committee or the District's Staff will immediately notify the Board of any reliable information that suggests that a change in circumstances has occurred that warrants the Board's consideration of whether a material change in circumstances has occurred.

Within 10 days from receipt of notification from the Policy Committee or the District Staff that there may be a material change in circumstances, the District's Board of Directors will request the District Staff to prepare a report which discusses the events or conditions that have changed as identified in the notice to the Board and apply the criteria listed in paragraph 1, above. The District Staff will prepare the report and submit it to the Board of Directors within 30 days of the Board's request. Within 10 days after the receipt of the District Staff's report, the Board will determine whether additional information is necessary for the Board to determine whether a material change has occurred. If the Board determines that additional information is required, the District Staff will revise its report to include such additional information and submit its revised report within 20 days of the Board's request for additional information.

Within 60 days after the Board's receipt of the District Staff's revised and final report, the Board will make a determination of whether the changed circumstances are material pursuant to the criteria listed in paragraph 1, above. The Board may obtain additional information from sources other than the District Staff as the Board deems it necessary and appropriate to assist the Board in its determination of whether a material change in circumstances has occurred.

It is important to note that a material change in circumstances has not occurred under some, but not necessarily all, of the following actions:

- An assessment of changes in waste generation where an excess or reduced waste generation situation that does not affect the District's ability to either finance or implement the solid waste plan is not considered a material change in circumstance.

- Capacity availability for disposal, transfer, composting, and management of restricted waste streams where a decreased capacity in any of the facilities relied upon by the District is not considered a material change in circumstance when the District can make arrangements for capacity and/or the reduction in capacity does not affect the District's ability to either finance or implement the solid waste plan.
- Substantial changes in the availability of waste reduction and recycling opportunities available to District residents or timetable for implementation. A material change in circumstances has not occurred, however, where the Board is able to modify existing programs by making changes to existing initiatives or implementing new initiatives which will supplement the objectives of existing programs to achieve the State Plan goals.
- Reduced or increased availability of revenues for plan implementation. No material change in circumstances has occurred, however, if the Board is able to maintain critical programs at current funding levels through re-allocation of District revenues, or through the funding contingency plan contained in Section VIII of this Plan Update.
- Facility designations and the flow of waste. New or changed facility designations such as an addition or removal of a facility from the designated list is not a material change in circumstances.

Upon the Board's determination that a material change in circumstances has occurred, the Board shall notify the District Policy Committee and the Director of the Ohio Environmental Protection Agency, in writing, within 10 days of the Board's determination. The Board's notice to the Policy Committee shall request the District Policy Committee to prepare a draft amended solid waste plan, pursuant to ORC 3734.56 (D), that addresses those portions of the District's Plan that the Board has determined may be affected, directly or indirectly, by the material change in circumstances.

APPENDIX B: RECYCLING INFRASTRUCTURE INVENTORY

Appendix B provides an inventory of the recycling infrastructure that existed in the reference year. This inventory covers residential curbside collection services, drop-off recycling sites, mixed waste materials recovery facilities, waste companies providing recycling collection and trash collection services and composting facilities and yard waste management programs.

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

1. Curbside Recycling Services

Table B-1a: Inventory of Non-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	Weight of Materials Collected from SWMD (tons)
							✓	
Non Subscription Curbside Recycling								
None								
Total								0

¹Paper includes: Newspaper, Cardboard, Other Paper, Paper, & Junk Mail; Plastic includes: any plastic container shaped like a bottle or jug; Metals includes: Aluminum containers, Steel Cans, & Tin Cans; Glass includes: Brown Glass, Clear Glass, & Green Glass
Source: 2022 District data

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	Weight of Materials Collected from SWMD (tons)
							✓	
Subscription Curbside Recycling								
SC1	Celina City	Mercer	Residents purchase recycling bags which are collected along with trash bags	Weekly	Aluminum, Glass, Paper, Plastics, Steel	Dual Stream Bags	Y	378
SC2	Coldwater Village	Mercer	Residents purchase recycling bags which are collected along with trash bags	Weekly	Paper, Cardboard, Aluminum, Steel, Plastic #1-2, Plastic Bags, Glass	Dual Stream Bags	Y	175
SC3	St. Henry Village	Mercer	Residents purchase recycling bags which are collected along with trash bags	Weekly	Aluminum, Glass, Paper, Plastics, Steel	Dual Stream Bags	Y	68.25
SC4	Fort Recovery Village	Mercer	Residents purchase recycling bags which are collected along with trash bags	Weekly	Aluminum, Glass, Paper, Plastics, Steel	Dual Stream Bags	Y	101.5
Total								722.75

¹Paper includes: Newspaper, Cardboard, Other Paper, Paper, & Junk Mail; Plastic includes: any plastic container shaped like a bottle or jug; Metals includes: Aluminum containers, Steel Cans, & Tin Cans; Glass includes: Brown Glass, Clear Glass, & Green Glass
Source: 2023 Community and District websites

Private haulers operate dual-stream, subscription curbside recycling programs in the following communities: Celina, Coldwater, Fort Recovery, and St. Henry.

Subscription curbside recycling means that residents have to opt-in or pay additional fees to participate. Subscription curbside recycling is provided to all residents in single-family homes who purchase recycling bags at local businesses for a set amount. Residents separate their fiber recycling and commingled container recycling (dual stream) in two bags for curbside collection.

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	County	How Service is Provided	Days and Hours Available to the Public	Materials Collected ⁽¹⁾	Drop-off Meets All Minimum Standards? (yes or no)	Weight of Materials Collected from SWMD (tons)
Full-time, urban drop-offs							
F TU1	Jefferson Township	Mercer	Dumpster outside of building	Monday-Friday 9AM- 3PM	Cardboard, Paper	Y	0
Total							0

¹Paper includes: Newspaper, Cardboard, Other Paper, Paper, & Junk Mail; Plastic includes: any plastic container shaped like a bottle or jug; Metals includes: Aluminum containers, Steel Cans, & Tin Cans; Glass includes: Brown Glass, Clear Glass, & Green Glass
Source: 2022 District data

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

ID #	Name of Drop-off Site	County	How Service is Provided	Days and Hours Available to the Public	Materials Collected ⁽¹⁾	Drop-off Meets All Minimum Standards? (yes or no)	Weight of Materials Collected from SWMD (tons)
Part-time, urban drop-offs							
None							
Total							0

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

ID #	Name of Drop-off Site	County	How Service is Provided	Days and Hours Available to the Public	Materials Collected ⁽¹⁾	Drop-off Meets All Minimum Standards? (yes or no)	Weight of Materials Collected from SWMD (tons)
Full-time, rural drop-offs							
F TR1	Burkettsville Village (Granville township)	Mercer	Alley Cat Trailer transported by village	24/7	Cardboard, Aluminum, Tin, Mixed Paper, HDPE, PET, Glass	Y	36.4
F TR2	Chickasaw Village - Ohio Recycling (Marion township)	Mercer	MRF	24/7	Cardboard, Aluminum, Tin, Mixed Paper, HDPE, PET, Glass	Y	0
F TR3	St. Henry Village - St. Henry High School (Granville township)	Mercer	Alley Cat Trailer transported by school	NA	School Use Only	Y	19
F TR4	Franklin Township, Zuma Park (Franklin township)	Mercer	Dumpsters picked up by Auglaize County	24/7	Cardboard, Aluminum, Tin, Mixed Paper, HDPE, PET, Glass, Plastic Bags	Y	19.6
Total							75

In 2022, there were four full-time recycling drop-offs located throughout the District. Three drop-offs are available 24/7 and one is not open to the public. Aside from the St. Henry Village site, drop-offs were open and accessible to the public and did not require township residency for participation.

Material collected from the majority of drop-offs is processed at private material recovery facilities (MRFs). Material collected at the Franklin Township drop-off is processed at the Auglaize County Material Recovery Facility. Drop-off tonnage from residential sources totaled 75 tons.

The District monitors participation in the drop-off program to identify whether any sites should be merged. In 2022, no site mergers occurred. One new site was added in Franklin Township.

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

ID #	Name of Drop-off Site	County	How Service is Provided	Days and Hours Available to the Public	Materials Collected ⁽¹⁾	Drop-off Meets All Minimum Standards? (yes or no)	Weight of Materials Collected from SWMD (tons)
Part-time, rural drop-offs							
PTR1	Rockford Village - Parkway High School	Mercer	Auglaize County SWMD picks up material	9AM-12PM, 3rd Sat. Monthly	Cardboard, Aluminum, Tin, Mixed Paper, HDPE, PET, Glass	Y	52.7
Total							52.7

In 2022, there was one part-time recycling drop-off located in Rockford Village at Parkway High School. The drop-off was available on the same day of the month unless a holiday necessitated an adjustment in the schedule. The drop-off was available from 9 a.m. to 12 p.m. Access to drop-offs was open to the public and did not require township residency for participation.

Materials collected from the drop-off are processed at the Auglaize County Material Recovery Facility. Tonnage from residential sources totaled 52.7 tons.

The District monitors participation in the drop-off program to identify whether any sites should be merged. In 2022, no site mergers occurred.

Table B-2e: Inventory of Other Drop-off Sites Available in the Reference Year

ID #	Name of Drop-off Site	County	How Service is Provided	Days and Hours Available to the Public	Materials Collected ⁽¹⁾	Drop-off Meets All Minimum Standards? (yes or no)	Weight of Materials Collected from SWMD (tons)
Other drop-offs							
None							
Total							0

3. Mixed Municipal Solid Waste Material Recovery Facility

Table B-3: Mixed Municipal Solid Waste Material Recovery Facility

Name of Material Recovery Facility	Location (County, City)	Communities Served	Types of Materials Recovered	Weight of Materials Recovered (tons)	Waste Processed (tons)	Bypass Waste (tons)	Total Waste (tons)	Recovery Rate in Reference Year (percent)
None								0

A mixed solid waste materials recovery facility provides residents with access to recycling opportunities by removing recyclables from the trash for the residents. The District does not use a mixed waste material recovery facility (aka dirty MRF) to separate recyclables from trash.

B. Curbside Recycling and Trash Collection Service Providers

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

Name of Provider	County(ies) Served	Trash Collection Service			Curbside Recycling Service			
		PAYT	Residential	Commercial	Industrial	Residential	Commercial	Industrial
Republic Services	Mercer County; Marion Township		✓			✓	✓	
D & T Trucking Company	DNR							
P&R Disposal	DNR							
Hemmelgarn Services	DNR			✓	✓			
Ill Son's Towing, Hauling & Salvage	DNR			✓	✓			
J & N Haulers	Allen, Auglaize, Champaign, Defiance, Hancock, Hardin, Henry, Logan, Marion, Mercer, Paulding, Putnam, Sandusky, Seneca, Union, Van Wert, Wood, Wyandot		✓	✓				
Klenke's Trash Service	Coldwater; Burkettsville; Townships of Butler, Washington, Gibson, Liberty, Hopewell, Jefferson, and Granville		✓			✓		
Luedke's Trash Hauling	DNR		✓					
Maharg	City of Celina, Villages of Chickasaw, Ft. Recovery, Montezuma, Rockford, and St. Henry	✓	✓	✓		✓		
New Source Management	DNR							
Ohio Recycling	DNR		✓	✓				✓

Source: 2023 web and desktop research

Six private haulers operate in the county providing trash collection services. Private haulers are not required to offer recycling to their customers. Curbside recycling is available for residential and commercial properties through private haulers for the majority of the District. Residents living in both incorporated and unincorporated areas directly contract trash services with a private hauler.

C. Composting Facilities

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

ID#	Facility or Activity Name	Compost Class	Publicly Accessible	Location	Waste Received from the SWMD	
					Food Waste (tons)	Yard Waste (tons)
Compost Facilities						
YW1	Resource Recycling West	III	N/A	1596 Neubrecht Rd Lima OH 45801	0	158
Total					0	158
Community Yard Waste Collection Programs						
	None					
Total					0	0
Mulching Operations						
	None					
Total					0	0
Land Application						
	None					
Total					0	0
Anaerobic Digestion						
	None					
Total					0	0

Source: 2022 Ohio EPA Compost Facility Planning Analytical Report

No private sector haulers provide yard waste collection service to customers. Compost facilities (all classes) track material volumes delivered and report to Ohio EPA, which is how the District tracks composting activities.

Five municipalities provide optional yard waste pick-up. In the Villages of Coldwater, St. Henry, Ft. Recovery, Chickasaw, and the City of Celina, yard waste bags are available for purchase. Purchased yard waste bags are collected by each community's trash hauler. Additionally, the communities above also provide once monthly brush and leaf pick-up beginning in April and ending in October.

D. Other Food Waste and Yard Waste Management Programs

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

Facility or Activity Name	Activity Type	Location	Food Waste (tons)	Yard Waste (tons)
City of Celina	Curbside Yard Waste Collection			
Village of Coldwater	Curbside Yard Waste Collection			
Village of St. Henry	Curbside Yard Waste Collection			
Village of Ft. Recovery	Curbside Yard Waste Collection			
Village of Chickasaw	Curbside Yard Waste Collection			
Hauler/Grocer Food Waste Data	N/A	N/A	91	0
Total			91	0

Source: 2022 Ohio EPA Compost Facility Planning Analytical Report

Hauler/Grocer food waste diverted was obtained from Ohio EPA.

E. Material Handling Facilities Used by the SWMD in the Reference Year

Table B-7: Inventory of Material Handling Facilities Used in the Reference Year

Facility Name	County	State	Type of Facility	Weight of Material Accepted from SWMD (tons)
None				
Total				0

Source: "Material Recovery Facility and Commercial Recycling Data", Ohio EPA, 2021.
 Note: MRF = material recovery facility

No in-District facilities reported receiving SWMD recyclable materials.

APPENDIX C: POPULATION DATA

A. Reference Year Population

Table C-1a: Reference Year Population Adjustments

Community	Mercer
Before Adjustment	42,348
<i>Additions</i>	
Village of Burkettsville	64
<i>Subtractions</i>	
None	0
After Adjustment	42,412

Source: "2022 Ohio County Population Estimates" prepared by Ohio Development Services Agency, Office of Research

Table C-1b: Total Reference Year Population

Total Reference Year Population	
Before Adjustment Population	After Adjustment Population
42,348	42,412

Reference year population is taken from Ohio Department of Development's Office of Strategic Research (ODOD, OSR). OSR provided estimate populations for 2022 based on the 2020 census data by governmental unit. Note: Ohio law requires that the entire population of a municipality located in more than one solid waste management district be added to the solid waste management district containing the largest portion of the jurisdiction's population. The District has one community that is located in more than one solid waste management District: the Village of Burkettsville. The majority of Burkettsville resides in Mercer County. Adjustments were made to add the portion of Burkettsville located in Darke County to the Mercer County population.

B. Population Projections

Table C-2: Population Projections

Year	Mercer
2018	40,959
2019	41,060
2020	42,593
2021	42,434
2022	42,412
2023	42,390
2024	42,368
2025	42,831
2026	42,852
2027	42,873
2028	42,893
2029	42,914
2030	42,935
2031	42,878
2032	42,821
2033	42,764
2034	42,707
2035	42,650
2036	42,576
2037	42,501
2038	42,427
2039	42,352
2040	42,278

Source: Ohio Department of Development Projections, Projections by County, Excel format, updated November 29, 2022

Sample Calculations:

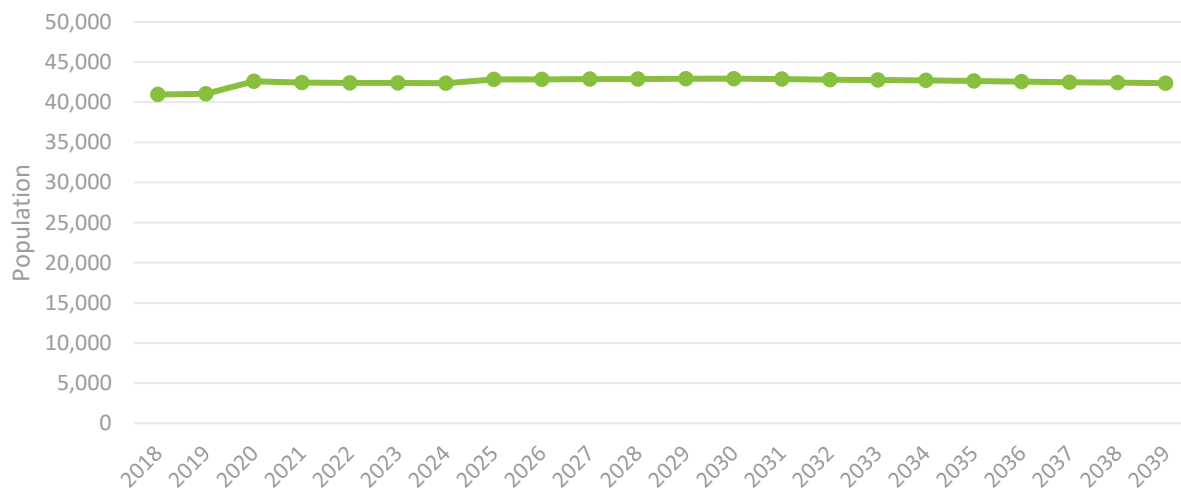
Projected population in 2022 = 42,412

Population change 2022 to 2025 = 419

Projected population in 2023 = 2026 population + 65 Village of Burkettsville – 2022 population / 3 years + 2023 Population = 42,390

Figure C-1 depicts the historical and projected population for Mercer County demonstrating a relatively steady population.

Figure C-1 Historical and Projected Population



Projections of population through the planning period are based on the latest population projections from the Ohio Department of Development (ODOD), Office of Statistical Research. The ODOD Office provided year 2020 census data and projected estimates for 2025, 2030, 2035, and 2040. To determine population estimates between these years, straight-line interpolation was used.

Over the fifteen-year planning period, population figures are expected to slightly decrease by 1.3 percent, averaging a 0.09 percent annual decrease.

Population projections can gauge future demand for services, but in projection calculations there are room for errors because of the difficulty associated with forecasting. As projected by ODOD, population is expected to decrease. When compared to historical population decline, the projected decline is minimal. According to the United States Census Bureau between the years 2020 and 2022 population for Mercer County decreased by 0.4 percent, averaging a 0.2 percent annual decrease.

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 Received from SWMD (TPY)			
	County	State	Residential/ Commercial	Industrial	Excluded	Total
In-district facilities						
None						0
Out-of-district facilities						
Defiance County Sanitary Landfill	Defiance	OH	5	0	0	5
Cherokee Run Landfill	Logan	OH	117	2,437	0	2,554
County Environmental of Wyandot	Wyandot	OH	1	1	6	8
Out-of-state facilities						
Jay County Landfill	Jay	IN	5,719	3,867	460	10,046
National Serv-All Landfill	Allen	IN	10	0	0	10
Randolph Farms Landfill	Randolph	IN	0	4	0	4
Total Direct Haul Waste Disposed in Landfills			5,851	6,309	466	12,626

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).

Excluded wastes are classified as slag, uncontaminated earth, non-toxic fly ash, spent non-toxic foundry sand and material from mining, construction, or demolition operations.

Source: Ohio EPA. "2022 Ohio Facility Data Report Tables". October 20, 2022., Ohio EPA. "Disposal Recycling and Generation Analytic Summary for 2022"

Indiana Department of Environmental Management. "Waste Received" Excel File, Kentucky Energy and Environment Cabinet. "Waste Quantity Report 2022" Excel File.

Waste flows to the landfills either by direct haul or through a transfer facility. Approximately 28 percent of the waste was direct hauled, meaning a refuse truck picked up waste from clients and directly hauled that waste to a landfill for disposal. Direct hauled waste is disposed in in-state and out-of-state landfill facilities. The majority of direct hauled waste was disposed in one privately owned landfill located in Indiana in nearby Jay County. Additionally, approximately 80% of waste was disposed in out-of-state landfill facilities.

A wide variety of wastes are disposed in municipal solid waste landfills. Waste generated from households, commercial businesses, institutions, and industrial plants. In addition, asbestos (if permitted to do so), construction and demolition debris, dewatered sludge, contaminated soil, and incinerator ash. More District waste from residential and commercial sources was disposed than from industrial sources.

Figure D-1 Total Landfill Disposal (2022)

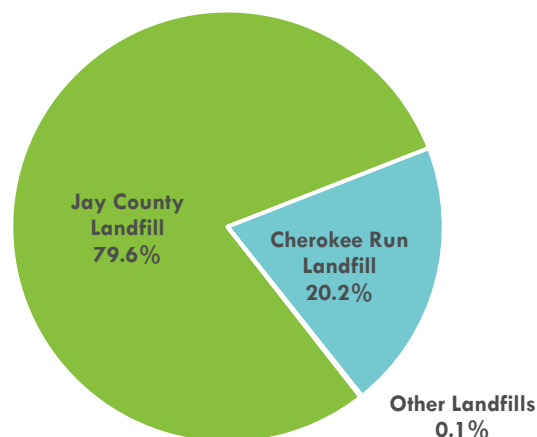


Table D-1b: Waste Disposed in Reference Year – Captive Landfills¹

Facility Name	Location		Waste Accepted from the District		
	County	State	Industrial (tons)	Excluded (tons)	Total (tons)
None					0
Total			0	0	0

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: Source: Ohio EPA. “2022 Ohio Facility Data Report Tables”. October 20, 2022.

Ohio EPA. “Disposal Recycling and Generation Analytic. Summary for 2022”

Captive landfills are landfills used to dispose of waste generated exclusively by the manufacturing company that owns the landfill. District waste was not disposed in a captive landfill in the reference year.

Table D-2 Reference Year Waste Transferred¹

Facility Name	Location		Waste Accepted from the SWMD			
	County	State	Residential/ Commercial (tons)	Industrial (tons)	Excluded (tons)	Total (tons)
In-District						
Maharg Inc Solid Waste Transfer Facility	Mercer	OH	26,475		0	26,475
Out-of-District						
Rumpke Allen County Transfer Station	Allen	OH	1		0	1
Waste Management of Ohio Inc - Lima	Allen	OH	857			857
Rumpke Waste Inc Greenville Transfer Facility	Darke	OH	3,575	112	10	3,697
Out-of-State						
Bunn Box Inc.	Allen	IN	0	0	4	4
Washler Inc Recycling and Transfer Station	DeKalb	IN	0	0	3	3
Total			30,908	112	17	31,036

¹ The facilities listed in Table D-2 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: Source: Ohio EPA. “2022 Ohio Facility Data Report Tables”. October 20, 2022, Ohio EPA. “Disposal Recycling and Generation Analytic. Summary for 2022”, Indiana Department of Environmental Management. “Waste Received” Excel File

In cases where waste is hauled from a transfer facility to a landfill, the county of origin is not recorded at the landfill. This means a load of trash disposed in a landfill from a transfer facility could have waste mixed from several counties. When a transfer facility hauls to more than one landfill, it becomes difficult to track which landfill received a county’s waste. For planning purposes the waste hauled through transfer facilities is listed separately identifying possible destination landfills. Approximately 72 percent of the waste was transferred, meaning a refuse truck picked up waste from clients and hauled that waste to a transfer facility. Waste was tipped, reloaded into transfer trucks, and hauled to landfills for disposal.

There is one in-district transfer station, Maharg Inc. Solid Waste Transfer Facility, located in the District that managed the majority of waste transferred in 2022. There are also seven out-of-district facilities and two out-of-state facilities that accepted waste from the District in 2022.

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

Facility Name	Facility Type	Location		Waste Accepted from the SWMD			
		County	State	Residential/Commercial (tons)	Industrial (tons)	Excluded (tons)	Total (tons)
Clean Earth Environmental Solutions, Inc.	RRS		IN	0	0.02	0	0
Covanta Environmental Solutions, LLC	SF		IN	0	0	0	0
Indianapolis Resource Recovery Facility	I	Marion	IN	0	143	0	143
Medassure Of Indiana Treatment Facility	MWP	Marion	IN	0.33	0	0	0
Tradebe Treatment & Recycling, LLC	SF	Lake	IN	0	1	0	1
Total				0.33	145	0	145

There were 5 waste-to-energy facilities that were used as a management method. If the quantity of waste managed at incinerators in the reference year is less than 10 percent of total waste disposed in that year, then the solid waste management plan does not need to account for incinerated waste. Total incinerated waste was 145 tons or 0.3 percent.

Table D-4: Total Waste Disposed in Reference Year

	Residential/Commercial (tons)	Industrial (tons)	Excluded (tons)	Total (tons)
Direct Hauled	5,851	6,309	0	12,160
Transferred	30,908	112	0	31,020
Incinerated	0	0	0	0
Total	36,759	6,421	0	43,180

¹ The facilities listed in Table D-3 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: Source: Ohio EPA. "2022 Ohio Facility Data Report Tables". October 20, 2022. Ohio EPA. "Disposal Recycling and Generation Analytic. Summary for 2022"

NOTE: Table D-4 does not include 482 tons of Excluded Waste from Table D-2 and does not include 144.6 tons of Incinerated waste from Table D-3 since each is less than 10% of the total and should not be included in planning year projections.

Total disposal refers to the sum of waste direct hauled and transferred. According to Ohio EPA Format 4.1, if excluded waste is 10 percent or less of total disposal in the reference year, then SWMD's are not required to account for excluded waste in the solid waste management plan. Total excluded waste was 482 tons or 1.1 percent.

B. Historical Waste Analysis

Table D-5 Historical Disposal Data

Year	Population	Residential/Commercial Solid Waste		Industrial Solid Waste	Excluded Waste	Total Waste
		Rate (ppd)	Weight (tons)	Weight (tons)	Weight (tons)	Weight (tons)
2018	40,873	3.98	29,681	2,938	8,178	40,797
2019	40,959	4.19	31,354	10,474	10,546	52,374
2020	41,060	4.07	30,486	2,279	6,434	39,199
2021	42,593	4.36	33,925	10,367	3,845	48,137
2022	42,434	4.75	36,759	6,421	482	43,662

Source:

Ohio EPA ADR Review Forms for 2018-2022 for population and waste disposal data. Population data for 2022 was taken from Table C-1.

Sample Calculation: Residential/Commercial + Industrial + Excluded = Total Waste

36,759 + 6,421 + 0 = 43,180 tons disposed in 2022

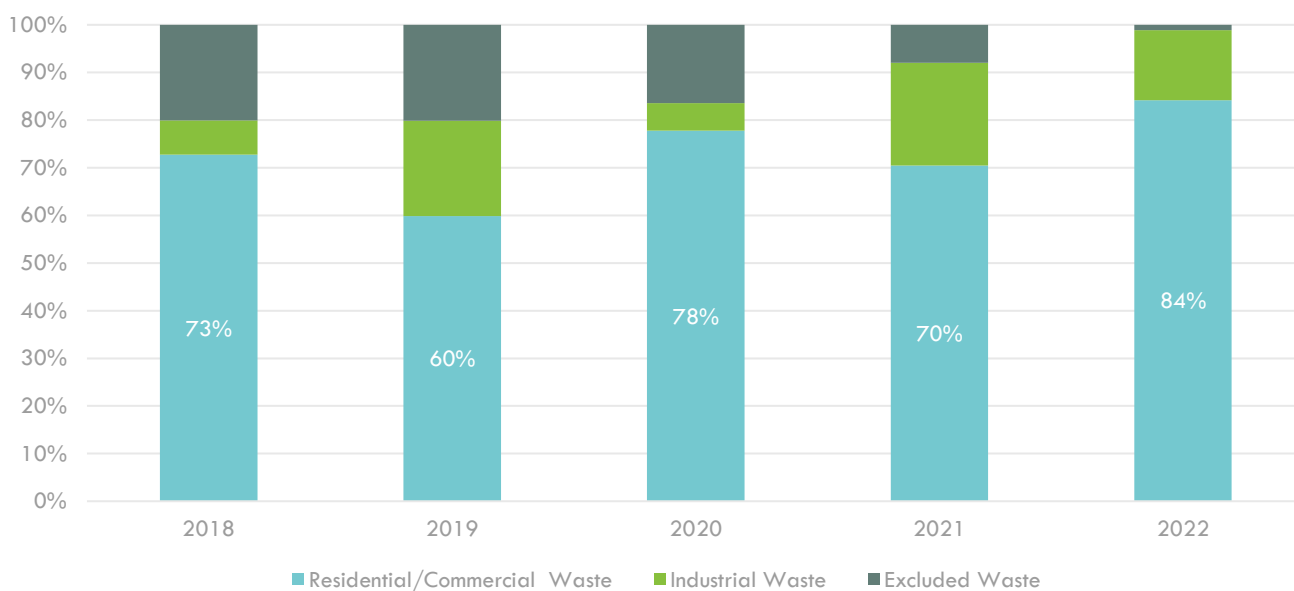
(Residential/Commercial tons * 2,000 pounds per ton) / 365 days / Population = Residential/Commercial disposal rate

(12,434 tons * 2,000 pounds per ton) / 365 days / 25,712 persons = 2.65 pound per person per day)

NOTE: Table D-5 does not exactly match Table D-4. Table D-5 does include 482 tons of Excluded Waste from Table D-2 and does include 144.6 tons of Incinerated waste from Table D-3. These tonnages were included in Table D-5 to ensure an accurate historical comparison.

From 2018 to 2022 total disposal demonstrates a 7.0% increasing trend with average annual disposal of roughly 44,834 tons. The analysis below separates the waste disposal sectors to determine if there are any correlations for waste disposal in the SWMD. Residential/commercial increased 23.8 percent from 2018 to 2022.

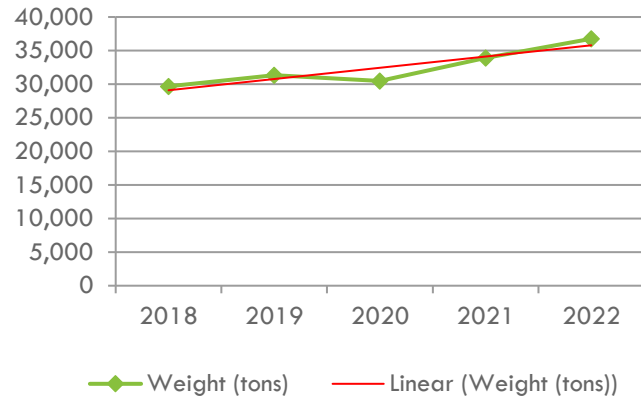
Figure D-2 Percentage of Waste Disposal as Total



1. Residential/Commercial

The SWMDs residential/commercial stream comprises the majority of waste disposed in the landfills as shown in Figure D-3. Also, to note is the residential/commercial waste disposal does not directly follow population trends. Actual disposal increased from 2018 to 2022 at a higher rate (23.8 percent) than population growth which increased 3.8 percent.

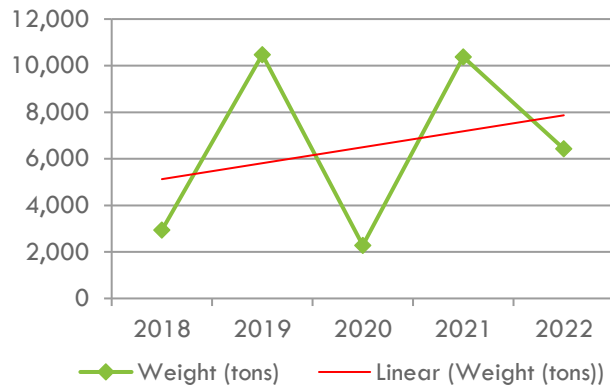
Figure D-3 Residential/Commercial Disposal Analysis



2. Industrial Waste

Industrial waste is not a major component of the SWMD’s disposal stream, accounting for an average of 15 percent of total disposal annually over the past 5 years. As shown in Figure D-4 industrial disposal have increased since 2018 by 118 percent and fluctuates annually.

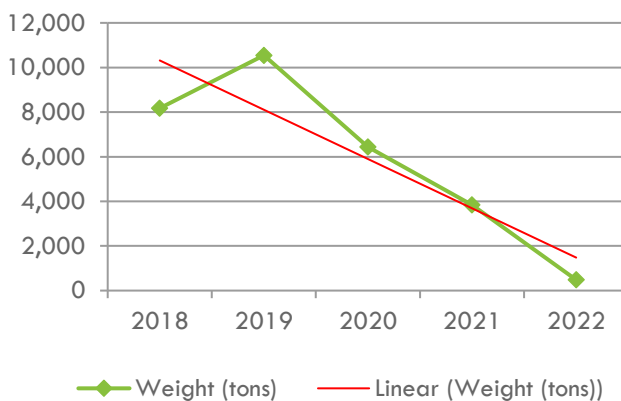
Figure D-4 Industrial Disposal Analysis



3. Excluded Waste

Excluded waste has contributed between 0% to 20% of total disposal annually in the SWMD over the past 5 years. Since 2018, disposal of excluded waste has decreased from 8,178 tons per year to 482 tons per year. Excluded wastes include slag, uncontaminated earth, non-toxic fly ash, spend non-toxic foundry sand and material from mining, construction, or demolition operations. According to Ohio EPA ADR review reports, the waste disposal is classified as construction and demolition. It should also be noted that excluded waste is fee exempt.

Figure D-5 Excluded Waste Disposal Analysis



C. Disposal Projections

There are several methods that can be used for projecting waste disposal through the planning period, such as historical per capita, historical averages and historical trends. After conducting the historical analysis and considering factors that could change historical disposal trends, waste disposal for the planning period is projected in Table D-5.

Table D-6 Waste Disposal Projections

Year	Residential/ Commercial Solid Waste	Industrial Solid Waste	Excluded Waste	Total Waste	Waste Transferred (as part of Total Disposal) Weight (tons)	Waste Transferred (as part of Total Disposal) (Percent)
	Weight (tons)	Weight (tons)	Weight (tons)	Weight (tons)	Weight (tons)	%
2018	29,681	2,938	8,178	40,797	7,409	18%
2019	31,354	10,474	10,546	52,374	6,886	13%
2020	30,486	2,279	6,434	39,199	8,979	23%
2021	33,925	10,367	3,845	48,137	10,191	21%
2022	36,759	6,421	482	43,662	31,366	72%
2023	33,055	6,421	0	39,476	28,359	72%
2024	33,038	6,421	0	39,459	28,347	72%
2025	33,021	6,421	0	39,442	28,334	72%
2026	33,382	6,421	0	39,802	28,594	72%
2027	33,398	6,421	0	39,819	28,605	72%
2028	33,414	6,421	0	39,835	28,617	72%
2029	33,430	6,421	0	39,851	28,629	72%
2030	33,446	6,421	0	39,867	28,640	72%
2031	33,463	6,421	0	39,884	28,652	72%
2032	33,418	6,421	0	39,839	28,620	72%
2033	33,374	6,421	0	39,795	28,588	72%
2034	33,329	6,421	0	39,750	28,556	72%
2035	33,285	6,421	0	39,706	28,524	72%
2036	33,241	6,421	0	39,661	28,492	72%
2037	33,183	6,421	0	39,603	28,451	72%
2038	33,125	6,421	0	39,545	28,409	72%
2039	33,067	6,421	0	39,487	28,367	72%
2040	33,009	6,421	0	39,429	28,326	72%

Residential/Commercial: Use average annual per capita disposal rate of 4.27lb/person/day	Residential/Commercial projections based on 2018 to 2022 average annual per capita disposal calculated at 4.27 pounds per person per day. The per capita rate of 4.27 pounds per person per day is representative of the typical per person disposal historically exhibited. Applying the 4.27 pounds per person per day to the increasing population over the planning period averages a waste disposal of 33,305 tons which falls between the 29,681 and 36,759-ton fluctuation exhibited for the SWMD.
Industrial: Average Annual Percent Change of 0%	Disposal is projected to remain constant throughout the planning period of 6,421 tons. Note that 6,421 is the actual generation from Table D-4. This tonnage was used for Table D-6 projections since it closely approximates the average 2018 – 2021 generation.
Excluded: Flat 0 tons	Total disposal refers to the sum of waste directly hauled and transferred. According to Ohio EPA Format 4.1, if excluded waste is 10 percent or less of total disposal in the reference year, then SWMD's are not required to account for excluded waste in the solid waste management plan. Excluded waste is projected at 0 tons.

APPENDIX E: RESIDENTIAL/COMMERCIAL RECOVERY DATA

A. Reference Year Recovery Data

Tables E-1 through E-4 account for all material being credited to the waste reduction and recycling rate for the residential/commercial sector. These tables were adjusted for double counting. Double counting occurs when the same material is reported by more than one survey respondent, typically both the generator of the material and the processor that receives the material from the generator. Material is “double counted” if the quantities from both respondents are credited to total recovery. In those instances, the total quantity recovered was adjusted to subtract the quantity reported by one source or the other to avoid crediting the material twice.

Table E-1 is reserved for commercial data obtained from Mercer County survey efforts. Data was aggregated from businesses that responded to the survey.

Table E-1: Commercial Survey Results

Material	2022 Actual	2023 Actual
Appliances/ "White Goods"	6	361
HHW	0	0
Used Motor Oil	17	26
Electronics	2	2
Scrap Tires	0	858
Dry Cell Batteries	1	1
Lead-Acid Batteries	18	18
Food	0	86
Glass	30	35
Ferrous Metals	1,186	1,186
Non-Ferrous Metals	78	3
OCC	2,100	2,571
All Other Paper	463	489
Plastics	56	80
Textiles	267	613
Wood	292	232
Rubber	0	0
Commingled Recyclables (Mixed)	895	1,130
Yard Waste	1,095	2,162
Ash (recycled ash only)	0	0
Non-Excluded Foundry Sand	0	0
Flue Gas Desulfurization Waste	0	0
Other	35	151
Total	6,540	10,003

Table E-2 reports recycling data from scrap yards, brokers, buybacks, processors and MRFs. Processors and MRF quantities reported in Table E-2 are obtained from Ohio EPA MRF Data Reports. No adjustments were made to this data.

Table E-2 Data from Other Recycling Facilities

Program and/or Source of Materials/Data	Glass	Ferrous Metals	Non-Ferrous Metals	Cardboard	Mixed Paper	Plastic	Total
Buybacks							
None							0
Scrap Yards							
None							0
Brokers							
None							0
Processors/MRF's							
None							0
Unadj. Total							
Adj.	0	0	0	0	0	0	0
Adj. Total	0	0	0	0	0	0	0

Quantities reported in Table E-3 were obtained from Ohio EPA reports. No adjustments were needed.

Table E-3 Data Reported to Ohio EPA by Commercial Businesses

Ohio EPA Data Source	Glass	Ferrous Metals	Non-Ferrous Metals	Cardboard	Mixed Paper	Plastic	Wood	Commingled	Other	Total
Walmart Recycling in Ohio	0	0	3	586	1	12	0	0	108	711
Dollar General Corporation	0	0	0	197	1	1	0	0	0	199
Kroger	0	0	0	65	0	5	0	0	0	70
CVS	0	0	0	3	0	0	0	0	0	3
Unadjusted Total	0	0	3	852	2	18	0	0	108	983
Adjustments	0	0	0	0	0	0	0	0	0	0
Adjusted Total	0	0	3	852	2	18	0	0	108	983

Table E-4 Other Recycling Programs/Other Sources of Data

Other Programs or Sources of Data	Appliances/ "White Goods"	HHW	Used Motor Oil	Scrap Tires	Food	Ferrous Metals	Non-Ferrous Metals	Corrugated Cardboard	All Other Paper	Plastics	Commingled Recyclables (Mixed)	Yard Waste	Unadj. Total	Adj.	Adjusted Total
Curbside Recycling Services	0	0	0	0	0	0	0	0	0	0	723	0	723	723	0
Drop-off Recycling Locations	0	0	0	0	0	0	0	0	0	0	128	0	128	128	0
Special Collection Events	9	22	2	0	0	0	0	0	0	0	0	0	33	0	33
Commercial/Institutional Programs	0	0	0	0	0	56	1	4	19	2	78	0	159	0	159
Composting Facilities	0	0	0	0	0	0	0	0	0	0	0	158	158	0	158
Ohio EPA Food Waste Data	0	0	0	0	91	0	0	0	0	0	0	0	91	0	91
Ohio EPA Scrap Tire Data	0	0	0	894	0	0	0	0	0	0	0	0	894	0	894
Unadj. Total	9	22	2	894	91	56	1	4	19	2	929	158	2,185	850	1,335
Adj.	0	0	0	0	0	0	0	0	0	0	850	0	850		
Adj. Total	9	22	2	894	91	56	1	4	19	2	78	158	1,335		

Quantities reported in Table E-4 is a compilation of quantities diverted through programs and services. Adjustments were made to exclude 850 tons of "Commingled" because it is included from other sources.

Table E-5 Reference Year Residential/Commercial Material Reduced/Recycled

Material	Quantity (tons)
Appliances/ "White Goods"	14
Household Hazardous Waste	22
Used Motor Oil	19
Electronics	2
Scrap Tires	894
Dry Cell Batteries	1
Lead-Acid Batteries	18
Food	91
Glass	30
Ferrous Metals	1,242
Non-Ferrous Metals	82
Corrugated Cardboard	2,955
All Other Paper	484
Plastics	76
Textiles	267
Wood	292
Rubber	0
Commingled Recyclables (Mixed)	974
Yard Waste	1,253
Ash (recycled ash only)	0
Non-Excluded Foundry Sand	0
Flue Gas Desulfurization Waste	0
Other (Aggregated)	143
Total	8,858

During the reference year, the District diverted 8,858 tons of material from the residential/commercial sector. Table E-5 reports the quantities of materials diverted. Ferrous materials and cardboard are the two largest material categories recycled for the reference year.

Table E-6 reports quantities diverted for each program/source.

Table E-6 Quantities Recovered by Program/Source

Program/Source of R/C Recycling Data	Quantities (Tons)
Commercial Survey	6,540
Data from Other Recycling Facilities	0
Ohio EPA Commercial Retail Data	983
Curbside Recycling Services	723
Drop-off Recycling Locations	128
Special Collection Events	33
Commercial/Institutional Programs	159
Composting Facilities	158
Ohio EPA Food Waste Data	91
Ohio EPA Scrap Tire Data	894
Unadj. Total	9,708
Adj.	850
Adj. Total	8,858

B. Historical Recovery

Mercer County diverted an average of 10,683 tons of material per year, or on average 1.41 pounds per person per day.

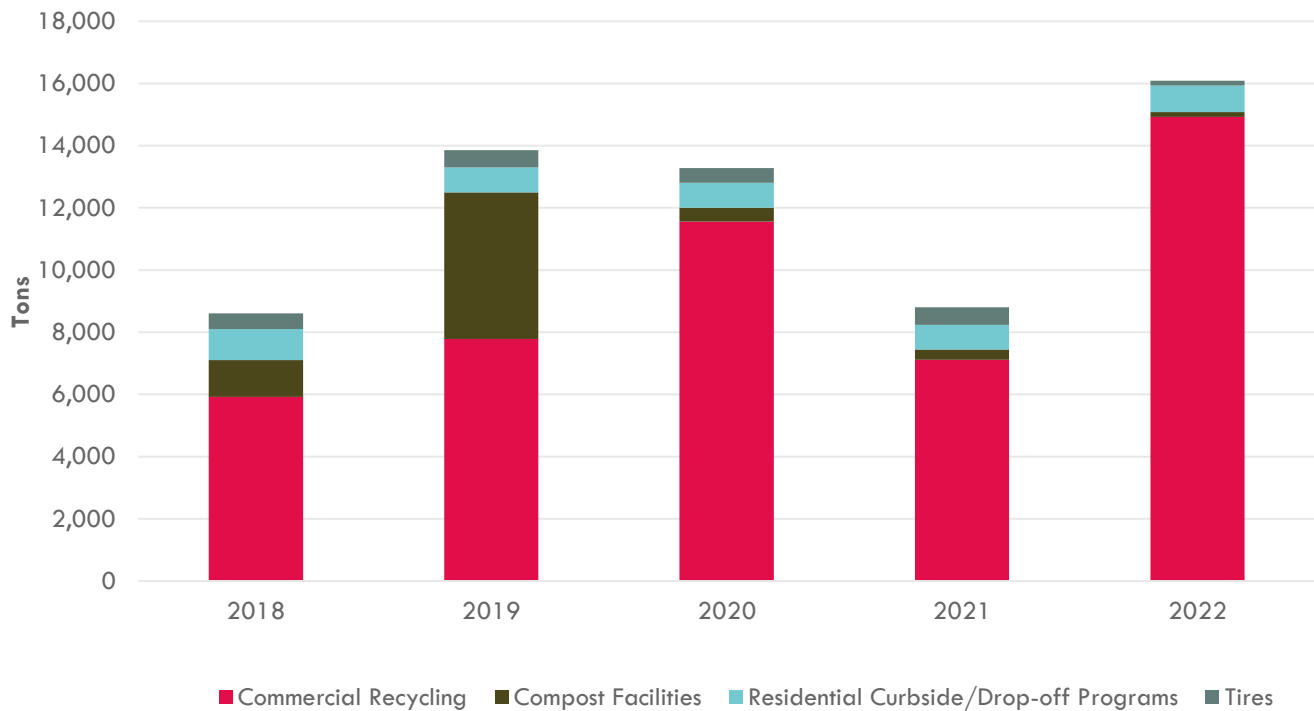
Table E-7 Historical Residential/Commercial Recovery by Program/Source

Year	Commercial Survey	Data from Other Recycling Facilities	Ohio EPA Commercial Retail Data	Curbside Recycling Services	Drop-off Recycling Locations	Special Collection Events	Composting Facilities	Commercial/Institutional Programs	Ohio EPA Food Waste Data	Ohio EPA Scrap Tire Data	Unadj. Total	Adj.	Totals
2018	5,038	0	867	702	293	903	1,188	N/A	106	508	9,605	995	8,610
2019	2,975	89	1,049	683	116	4,373	4,719	N/A	96	562	14,660	798	13,862
2020	6,347	44	1,450	726	78	4,389	437	N/A	139	473	14,084	805	13,279
2021	6,727	0	1,105	695	100	0	330	N/A	75	569	9,602	795	8,807
2022	6,540	0	983	723	128	33	158	159	91	894	16,945	850	8,858

Table E-7a: Residential/Commercial Historical Recycling Analysis: 2018-2022

Year	Population	Residential/Commercial Recycling (Tons)	Tires (Tons)	Composting (Tons)	Total (Tons)	Average Pounds/Person/Day	Annual Percent Change (%)	Annual Tonnage Change (Tons)
2018	40,873	6,914	508	1,188	8,610	1.15		
2019	40,959	8,581	562	4,719	13,862	1.85	61.00%	5,252
2020	41,060	12,369	473	437	13,279	1.77	-4.21%	-583
2021	42,593	7,908	569	330	8,807	1.13	-33.68%	-4,472
2022	42,434	8,541	158	159	8,858	1.14	0.58%	51
Average over 5 Year Period					10683.20	1.41	5.92%	248

Figure E-1 Historical Recycling by General Material Category: 2018-2022



Source(s): Tables E-7

The data analysis in Table E-8 shows residential and commercial programmatic historical and projected recycling data from 2018 to 2040.

Table E-8 Historical and Projected Residential/Commercial Recovery by Program/Source

Year	Commercial Survey	Data from Other Recycling Facilities	Ohio EPA Commercial Retail Data	Curbside Recycling Services	Drop-off Recycling Locations	Special Collection Events	Commercial/Institutional Programs	Composting Facilities	Ohio EPA Food Waste Data	Ohio EPA Scrap Tire Data	Adj.	Adj. Total	Totals
2018	5,038	0	867	702	293	903	0	1,188	106	508	9,605	995	8,610
2019	7,347	89	1,049	683	116	0	0	4,719	96	562	14,660	798	13,862
2020	10,719	44	1,450	726	78	16	0	437	139	473	14,084	805	13,279
2021	6,727	0	1,105	695	100	0	0	330	75	569	9,602	795	8,807
2022	6,540	0	983	723	128	33	159	159	158	91	8,973	850	8,123
2023	6,540	0	983	1,130	132	33	159	2,162	86	858	12,082	1,262	10,821
2024	6,540	0	983	1,187	138	33	159	2,162	858	0	12,059	0	12,059
2025	6,540	0	983	1,234	144	33	159	2,162	858	0	12,112	0	12,112
2026	6,540	0	983	1,271	148	33	159	2,162	858	0	12,154	0	12,154
2027	6,540	0	983	1,296	151	33	159	2,162	858	0	12,182	0	12,182
2028	6,540	0	983	1,322	154	33	159	2,162	858	0	12,211	0	12,211
2029	6,540	0	983	1,349	157	33	159	2,162	858	0	12,240	0	12,240
2030	6,540	0	983	1,376	160	33	159	2,162	858	0	12,271	0	12,271
2031	6,540	0	983	1,403	163	33	159	2,162	858	0	12,301	0	12,301
2032	6,540	0	983	1,431	167	33	159	2,162	858	0	12,333	0	12,333
2033	6,540	0	983	1,460	170	33	159	2,162	858	0	12,365	0	12,365
2034	6,540	0	983	1,489	173	33	159	2,162	858	0	12,397	0	12,397
2035	6,540	0	983	1,519	177	33	159	2,162	858	0	12,430	0	12,430
2036	6,540	0	983	1,549	180	33	159	2,162	858	0	12,464	0	12,464
2037	6,540	0	983	1,580	184	33	159	2,162	858	0	12,499	0	12,499
2038	6,540	0	983	1,612	188	33	159	2,162	858	0	12,534	0	12,534
2039	6,540	0	983	1,644	191	33	159	2,162	858	0	12,570	0	12,570
2040	6,540	0	983	1,677	195	33	159	2,162	858	0	12,607	0	12,607

In Table E-8, actual tonnage was used for 2018 through 2023. Projections for each program/source were calculated using the following assumptions and methodology:

- Commercial survey data is projected to remain constant throughout the planning period.
- Data from other facilities is projected to remain unreported throughout the planning period.
- Ohio EPA Commercial Retail data is projected to remain constant throughout the planning period. Very dependent on retailer outreach conducted by Ohio EPA.
- Curbside data is projected to remain constant throughout the planning period.
- Drop-off data is projected to increase slightly throughout the planning period in response to resident education and outreach.
- Special Collection Event data is projected to remain constant throughout the planning period.
- Commercial/Institutional data is projected to remain constant throughout the planning period.
- Composting data is projected to remain constant throughout the planning period.
- Ohio Food Waste data is projected to remain constant throughout the planning period.
- Ohio EPA Scrap Tire data is projected to remain constant throughout the planning period.

APPENDIX F: INDUSTRIAL RECOVERY DATA

A. Reference Year Recovery Data

Tables F-1 through F-4 account for all material being credited to the waste reduction and recycling rate for the industrial sector.

Table F-1 Industrial Survey Results

NAICS	FW	GI	FM	NFM	CC	MxP	PI	W	R	CoM	Other	Total
22												0
31												0
32												0
33												0
Other:	7,568	0	40,227	2,896	1,084	3,567	646	1,513	1	1,419	1,996	60,918
Unadj. Total	7,568	0	40,227	2,896	1,084	3,567	646	1,513	1	1,419	1,996	60,918
Adj.	0	0	0	0	0	0	0	0	0	0	0	0
Adj. Total	7,568	0	40,227	2,896	1,084	3,567	646	1,513	1	1,419	1,996	60,918

Source(s): District industrial survey results.

Table F-1 accounts for material credited for waste reduction and recycling as reported by the industrial businesses. In some instances, an industrial business did not respond to the reference year survey but did respond to a previous survey. Supplemental data was used in this table when the business was verified as operating in the reference year, the nature of the business did not significantly change, and the business still produced the same type of recyclables. Some materials reported as recycled are considered non-creditable. These materials include: train boxcars, construction and demolition debris, metals from vehicles, liquid industrial waste, and hazardous waste. Adjustments were made on Table F-1 to exclude these materials.

Table F-1 accounts for material credited for waste reduction and recycling as reported by industrial businesses. Some materials reported as recycled are considered non-creditable. These materials include train boxcars, construction and demolition debris, metals from vehicles, liquid industrial waste, and hazardous waste.

Table F-2 Data from Other Recycling Facilities

Source of Data	GI	FM	NFM	CC	MxP	PI	Total
Buybacks							
None							0
Scrap Yards							
None							0
Brokers							
None							0
Processors/MRF's							
None							0
Unadj. Total	0	0	0	0	0	0	0
Adj.	0	0	0	0	0	0	0
Adj. Total	0	0	0	0	0	0	0

Source(s): District industrial survey results and Ohio EPA. "2022 Material Recovery Facility and Commercial Recycling Data." 2023.

Table F-2 data is obtained from the district's industrial surveys and Ohio EPA's reports on processors. There were no processors/MRFs that reported industrial diversion from in-district sources for the reference year.

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

Other Recycling Programs or Other Sources of Data	GI	FM	NFM	CC	MxP	PI	Unadjusted Total	Adjustments	Adjusted Total
None							0	0	0
Unadjusted Total	0	0	0	0	0	0	0	0	0
Adjustments	0	0	0	0	0	0	0		
Adjusted Total	0	0	0	0	0	0	0		

Source(s): Ohio EPA. District recorded program data.

Other recycling programs or sources of recycling data are reported in Table F-3 for industrial material. No other sources of industrial data were found for the District.

The District diverted 60,918 tons from the industrial sector. Table F-4 reports quantities of each material diverted.

Table F-4 Industrial Waste Reduced/Recycled in Reference Year

Material	Quantity (tons)
Food	7,568
Glass	0
Ferrous Metals	40,227
Non-Ferrous Metals	2,896
Corrugated Cardboard	1,084
All Other Paper	3,567
Plastics	646
Textiles	0
Wood	1,513
Rubber	1
Commingled Recyclables (Mixed)	1,419
Yard Waste	0
Ash (recycled ash only)	0
Non-Excluded Foundry Sand	0
Flue Gas Desulfurization Waste	0
Other (Aggregated)	1,996
Total	60,918

Source(s): Tables F-1, F-2, and F-3

Table F-5 reports the total tons diverted for each program/source.

Table F-5 Quantities Recovered by Program/Source

Program/Source of Industrial Recycling Data	Quantity (Tons)
Industrial survey	60,918
Data from other recycling facilities	0
Total	60,918

Source(s): Tables F-1, F-2, F-3, and F-4

B. Historical Recovery

The tonnage recovered in the industrial sector followed a consistent trend from 2019 to 2021. In 2019, there was a significant, 18% increase in the number of tons recovered. There was an additional nearly 40% decrease in the number of tons recovered in 2021. These shifts appear to be mainly due to the amount reported in the surveys and changes in data reported from other recycling facilities.

Table F-6 Historical Industrial Recovery by Program/Source

Year	Industrial survey	Data from other recycling facilities	Totals
2018	75,264	179	75,443
2019	89,050	165	89,215
2020	89,764	159	89,923
2021	97,876	136	98,012
2022	60,918	0	60,918

Industrial Historical Recycling Analysis: 2018-2022

Year	Population	Industrial Recycling (Tons)	Average Pounds/ Person/Day	Annual Percent Change (%)	Annual Tonnage Change (Tons)
2018	40,873	75,443	10.11		
2019	40,959	89,215	11.94	18.25%	13,772
2020	41,060	89,923	12.00	0.79%	708
2021	42,593	98,012	12.61	9.00%	8,089
2022	42,434	60,918	7.87	-37.85%	(37,094)
Average over 5 Year Period		82,303	82,702	10.90	-2.45%

Source(s): District Industrial Surveys for 2018 – 2022, “Material Recovery Facility and Commercial Recycling Data” for 2018-2022.

ADR and MRF/ Commercial Recycling Data was used for the historical projections rather than the industrial survey

C. Industrial Recovery Projections

Table F-7 Industrial Recovery Projections by Program/Source

Year	Industrial Recycling Tons
2018	75,443
2019	89,215
2020	89,923
2022	98,012
2023	60,918
2024	60,918
2025	60,918
2026	60,918
2027	60,918
2028	60,918
2029	60,918
2030	60,918
2031	60,918
2032	60,918
2033	60,918
2034	60,918
2035	60,918
2036	60,918
2037	60,918
2038	60,918
2039	60,918
2040	60,918

Projections

According to the Ohio EPA’s Plan Format v4.1, there is no industrial recycling goal during the reference year. During the reference year, the District achieved a 94% industrial diversion rate. The District projects a flat 60,918 tons throughout the planning period to remain conservative. The District’s industrial recovery projections are presented in Table F-7.

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)	Annual % Change		
		Disposal (tons)	Recycled (tons)	Generated (tons)	Per Capita Generation (ppd)	Disposal (tons)	Recycled (tons)	Generated (tons)			R/C	Ind	Ex.
2018	40,873	29,681	9,605	39,286	5.27	2,938	75,443	78,381	8,178	125,845	-	-	-
2019	40,959	31,354	14,660	46,014	6.16	10,474	89,215	99,689	10,546	156,249	17%	27%	-7%
2020	41,060	30,486	14,084	44,570	5.95	2,279	89,923	92,202	6,434	143,206	-3%	-8%	5%
2021	42,593	33,925	9,602	43,527	5.60	10,367	98,012	108,379	3,845	155,751	-2%	18%	-8%
2022	42,434	36,759	8,858	45,617	5.89	6,421	60,918	67,339	482	113,438	5%	-38%	6%

Source(s) of Information:

Disposal from Appendix D

Recycled from Appendices E and F

Populations: Annual district reports

Sample Calculations:

Waste Generation = disposed + recycled = generated

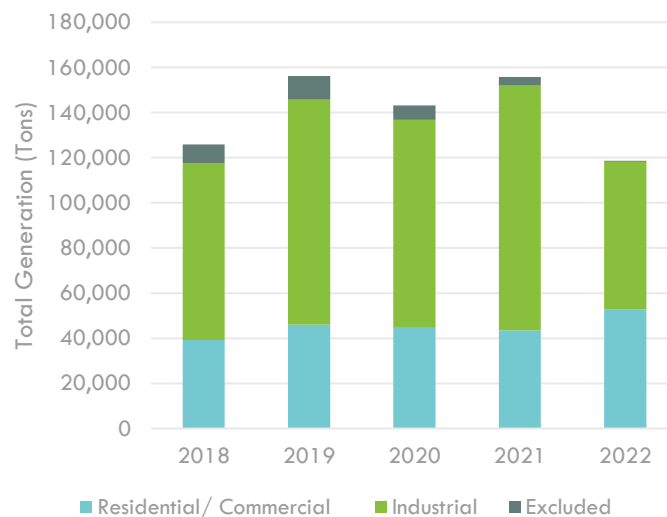
Per Capita Generation = ((generated * 2,000) / 365) / population

Total waste generation by the District was calculated by adding the quantities of waste disposed from Appendix D and quantities of recycled from Appendices E and F. Quantities resulting from the disposal and recycling as presented in Table G-1 accurately represent waste generation for the District. Residential, commercial, and industrial waste generation decreased slightly from 2018 to 2022, shown in Figure G-1.

The following table compares the daily per capita generation rates of the District and other select Ohio solid waste management districts (SWMDs). The other solid waste

management districts were selected because they share similar population sizes, similar geographical locations, or similar ratios of urban vs. rural land use patterns. The statewide statistics were also included for reference.

Figure G-1 Historic Waste Generated

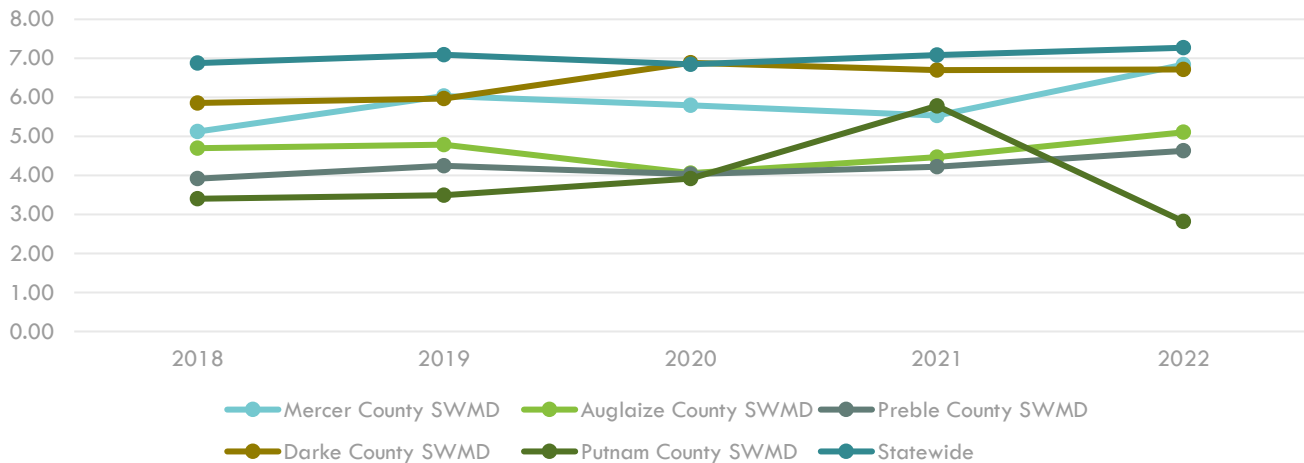


Reference Year 2022	Mercer County SWMD	Auglaize County SWMD	Preble County SWMD	Darke County SWMD	Putnam County SWMD
Population	42,348	45,948	41,708	49,793	34,451
Residential/Commercial Diversion Rate	30%	42%	15%	16%	53%
Industrial Diversion Rate	90%	30%	57%	87%	99%
Total Waste Generation (Disposal + Recycling) P/P/P/D	15.55	21.71	8.69	8.17	36.65
Total Diversion Rate	64%	33%	35%	29%	95%

1. Residential Generation Analysis

Total residential/commercial waste generation in the District has increased approximately 13,568 tons or 35% since 2018 as illustrated in Figure G-2. Of the total generation, disposal increased approximately 7,078 tons or 24% over a 5-year period, while recycling increased 6,490 tons or 68%. Compared to other selected SWMDs, Mercer County has a higher average pounds/person/day generation and lower than the average statewide generation for the residential/commercial sector.

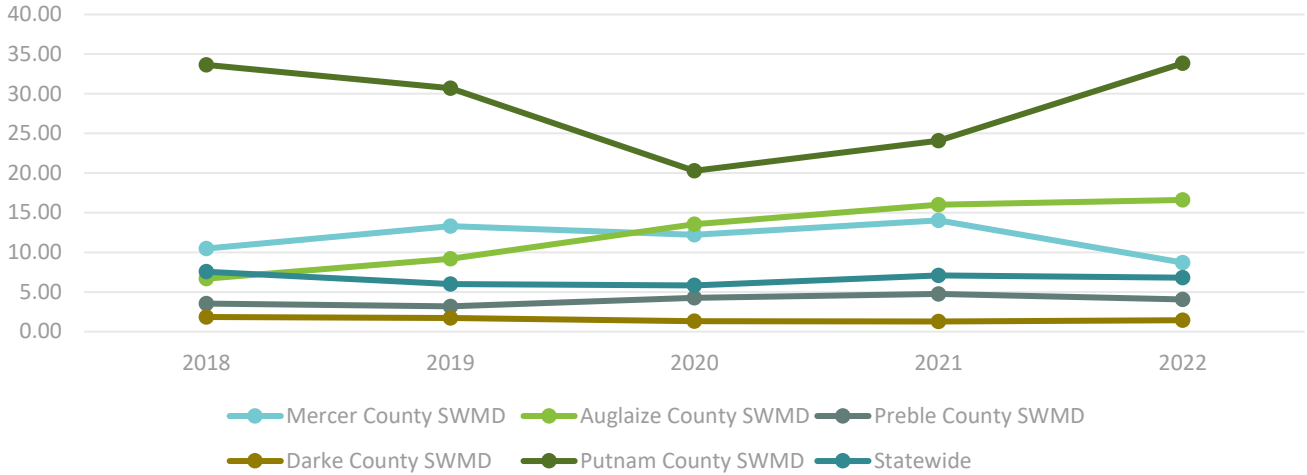
Figure G-2 Historic Residential/Commercial Total Waste Generation Rates for Selected Ohio SWMDs:



2. Industrial Generation Analysis

Total industrial waste generation in the District has decreased approximately 13,039 tons or 17% since 2018 as illustrated in Figure G-2. Of the total generation, disposal increased approximately 3,483 tons or 119% over a 5-year period, while recycling decreased over 16,521 tons or 22%. Compared to other selected SWMDs, Mercer County has a midrange pounds/person/day generation and higher generation than the average statewide generation for the industrial sector.

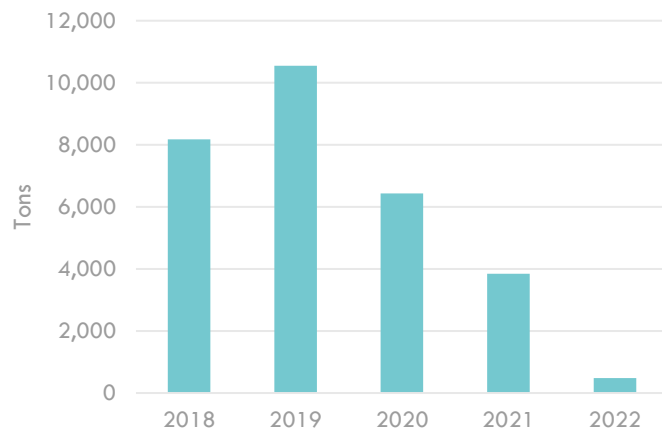
Figure G-3 Historic Industrial Total Waste Generation Rates for Selected Ohio SWMDs:



3. Exempt Waste

The total tons of excluded waste generated in the District is shown in Figure G-5. The excluded tons generated falls below 10% of the total waste stream. Excluded waste accounted for an average of 4% of the total material generated in the County.

Figure G-1 Historic Excluded Waste Generated



B. Generation Projections

Projections for the District have been developed in Appendices D, E, and F for disposal and recycling for the residential/commercial and the industrial sector. Table G-2 summarizes these projections which are presented in detail in Appendices D, E and F.

- Residential/Commercial Sector
 - Disposal is projected to remain stable around 4.27 pounds per person per day based on the population increases in Appendix C.
 - Recycling is expected to remain stable and decrease slowly based on projections in Appendix E throughout the planning period.
- Industrial Sector:
 - Disposal is projected to remain constant throughout the planning period.
 - Recycling is expected to remain constant throughout the planning period.
- Excluded Waste: According to Ohio EPA Format 4.1, if excluded waste is 10 percent or less of total disposal in the reference year, then SWMD's are not required to account for excluded waste in the solid waste management plan. Since the excluded waste during the reference year was 60% of total disposal, projections were not included in the District's projections.

Table G-2 Generation Projections

Year	Population	Residential/ Commercial				Industrial			Excluded (tons)	Total (tons)
		Disposal (tons)	Recycle (tons)	Generated (tons)	Per Capita Generated (ppd)	Disposal (tons)	Recycle (tons)	Generated (tons)		
2022	42,412	36,759	8,123	44,882	5.80	6,421	60,918	67,339	0	112,221
2023	42,412	33,055	10,821	43,876	5.67	6,421	60,918	67,339	0	111,215
2024	42,390	33,038	12,059	45,097	5.83	6,421	60,918	67,339	0	112,436
2025	42,368	33,021	12,112	45,133	5.84	6,421	60,918	67,339	0	112,472
2026	42,831	33,382	12,154	45,535	5.83	6,421	60,918	67,339	0	112,874
2027	42,852	33,398	12,182	45,580	5.83	6,421	60,918	67,339	0	112,919
2028	42,873	33,414	12,211	45,625	5.83	6,421	60,918	67,339	0	112,964
2029	42,893	33,430	12,240	45,671	5.83	6,421	60,918	67,339	0	113,009
2030	42,914	33,446	12,271	45,717	5.84	6,421	60,918	67,339	0	113,056
2031	42,935	33,463	12,301	45,764	5.84	6,421	60,918	67,339	0	113,103
2032	42,878	33,418	12,333	45,751	5.85	6,421	60,918	67,339	0	113,090
2033	42,821	33,374	12,365	45,738	5.85	6,421	60,918	67,339	0	113,077
2034	42,764	33,329	12,397	45,727	5.86	6,421	60,918	67,339	0	113,065
2035	42,707	33,285	12,430	45,715	5.87	6,421	60,918	67,339	0	113,054
2036	42,650	33,241	12,464	45,705	5.87	6,421	60,918	67,339	0	113,044
2037	42,576	33,183	12,499	45,682	5.88	6,421	60,918	67,339	0	113,020
2038	42,501	33,125	12,534	45,659	5.89	6,421	60,918	67,339	0	112,998
2039	42,427	33,067	12,570	45,637	5.89	6,421	60,918	67,339	0	112,976
2040	42,352	33,009	12,607	45,616	5.90	6,421	60,918	67,339	0	112,954

Source(s) of Information:

Disposal from Appendix D

Recycled from Appendices E and F

Populations: Annual district reports

Sample Calculations: Waste Generation = disposed + recycled = generated

Per Capita Generation = ((generated * 2,000) / 365) / population

Table G-3 projects the residential/commercial waste composition through the planning period.

Table G-3 Composition of Residential/Commercial Waste

Material	Paper and Paperboard	Glass	Ferrous	Aluminum	Other Nonferrous	Plastics	Rubber and Leather	Textiles	Wood	Other	Food	Yard Trimmings	Misc inorganic wastes	R/C waste generated
Percent of Total Generation ¹	23.1%	4.2%	6.6%	1.3%	0.9%	12.2%	3.1%	5.8%	6.2%	1.5%	21.6%	12.1%	1.4%	
2022	8,491	1,544	2,426	478	331	4,485	1,140	2,132	2,279	551	7,940	4,448	515	36,759
2023	7,636	1,388	2,182	430	297	4,033	1,025	1,917	2,049	496	7,140	4,000	463	33,055
2024	7,632	1,388	2,181	429	297	4,031	1,024	1,916	2,048	496	7,136	3,998	463	33,038
2025	7,628	1,387	2,179	429	297	4,029	1,024	1,915	2,047	495	7,132	3,996	462	33,021
2026	7,711	1,402	2,203	434	300	4,073	1,035	1,936	2,070	501	7,210	4,039	467	33,382
2027	7,715	1,403	2,204	434	301	4,075	1,035	1,937	2,071	501	7,214	4,041	468	33,398
2028	7,719	1,403	2,205	434	301	4,077	1,036	1,938	2,072	501	7,217	4,043	468	33,414
2029	7,722	1,404	2,206	435	301	4,078	1,036	1,939	2,073	501	7,221	4,045	468	33,430
2030	7,726	1,405	2,207	435	301	4,080	1,037	1,940	2,074	502	7,224	4,047	468	33,446
2031	7,730	1,405	2,209	435	301	4,082	1,037	1,941	2,075	502	7,228	4,049	468	33,463
2032	7,720	1,404	2,206	434	301	4,077	1,036	1,938	2,072	501	7,218	4,044	468	33,418
2033	7,709	1,402	2,203	434	300	4,072	1,035	1,936	2,069	501	7,209	4,038	467	33,374
2034	7,699	1,400	2,200	433	300	4,066	1,033	1,933	2,066	500	7,199	4,033	467	33,329
2035	7,689	1,398	2,197	433	300	4,061	1,032	1,931	2,064	499	7,190	4,027	466	33,285
2036	7,679	1,396	2,194	432	299	4,055	1,030	1,928	2,061	499	7,180	4,022	465	33,241
2037	7,665	1,394	2,190	431	299	4,048	1,029	1,925	2,057	498	7,167	4,015	465	33,183
2038	7,652	1,391	2,186	431	298	4,041	1,027	1,921	2,054	497	7,155	4,008	464	33,125
2039	7,638	1,389	2,182	430	298	4,034	1,025	1,918	2,050	496	7,142	4,001	463	33,067
2040	7,638	1,389	2,182	430	298	4,034	1,025	1,918	2,050	496	7,142	4,001	463	33,009

¹From Advancing Sustainable Materials Management: 2018 Tables and Figures Assessing Trends in Materials Generation and Management in the United States December 2020

APPENDIX H: STRATEGIC EVALUATION

The state solid waste management plans establish recycling and reduction goals for solid waste management Districts. In this Appendix, the Policy Committee completed a strategic process of evaluating its reduction and recycling efforts. To do this, the status of the reduction and recycling efforts were evaluated in the context of factors presented in the 13 analyses described in Format 4.1. The strategic program evaluation was performed on the following:

In this Appendix the Policy Committee completed a strategic process of evaluating its reduction and recycling efforts. To do this, the status of the reduction and recycling efforts were evaluated in the context of factors presented in the 13 analyses described in Format 4.1. This strategic program evaluation was performed on the following analyses:

SECTION H-1	•RESIDENTIAL RECYCLING INFRASTRUCTURE ANALYSIS
SECTION H-2	•COMMERCIAL SECTOR ANALYSIS
SECTION H-3	•INDUSTRIAL SECTOR ANALYSIS
SECTION H-4	•RESIDENTIAL/COMMERCIAL WASTE COMPOSITION ANALYSIS
SECTION H-5	•ECONOMIC INCENTIVE ANALYSIS
SECTION H-6	•RESTRICTED AND DIFFICULT TO MANAGE WASTE ANALYSIS
SECTION H-7	•DIVERSION ANALYSIS
SECTION H-8	•SPECIAL PROGRAM NEEDS ANALYSIS
SECTION H-9	•FINANCIAL ANALYSIS
SECTION H-10	•REGIONAL ANALYSIS
SECTION H-11	•DATA COLLECTION ANALYSIS
SECTION H-12	•EDUCATION AND OUTREACH ANALYSIS
SECTION H-13	•PROCESSING CAPACITY ANALYSIS

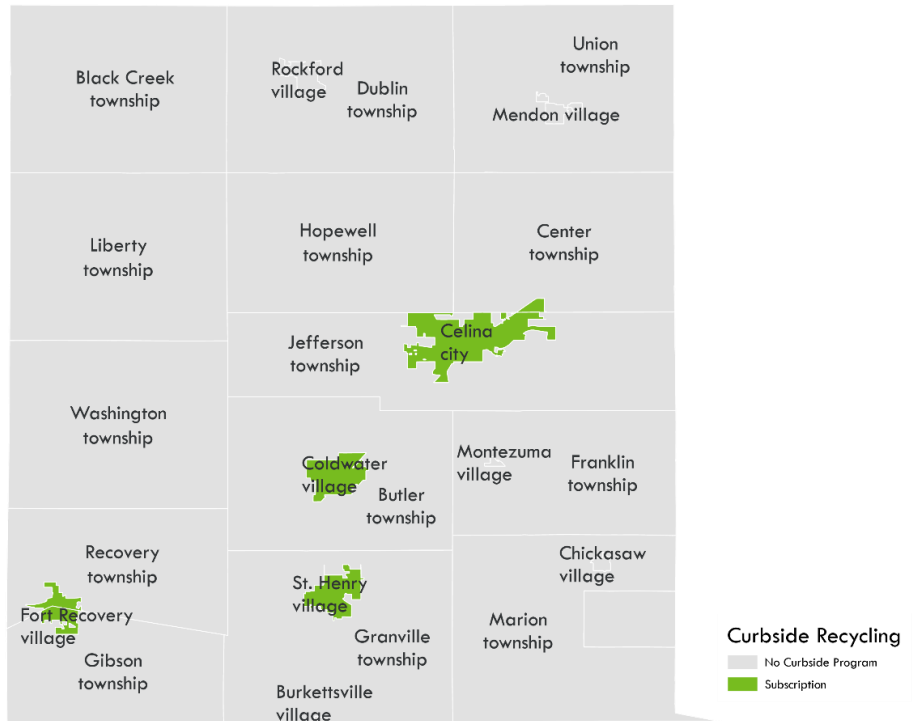
H-1 RESIDENTIAL RECYCLING INFRASTRUCTURE ANALYSIS

This evaluation of the SWMD’s existing residential recycling infrastructure determines whether the needs of the residential sector are being met and if the infrastructure is adequately performing. There are many materials that can be recycled. The SWMD’s waste management system relies on various collection systems and programs to divert materials from the landfill to be recycled. The residential recycling infrastructure consists of curbside programs, drop-off recycling programs, special event drop-offs, take-back retailers, reuse centers, thrift stores, and a network of food banks. The SWMD’s role in instituting this network of available opportunities varies.

Curbside Programs

Geographical

Curbside recycling programs are available to 4 incorporated municipalities using a two bag system. These municipalities have subscription curbside achieved through contracts between the municipality and private customers. Residents with subscription trash participate in recycling through purchasing recycling bags from their local municipalities.



Functionality

Curbside recyclables are divided into bags segregating fiber from mixed containers.

How to Recycle

Mercer County, Ohio’s Curbside Recycling Program requires the following 2-bag system.



BAG #1

- Newspapers
- Catalogs
- Magazines
- Junk Mail
- Office Paper
- Food Boxes (wax inserts removed)
- Paper Egg Cartons
- Cardboard** (Corrugated Cardboard tied in small bundles is acceptable)



BAG #2

- Aluminum Cans, Foil & Pie Pans
- Tin Cans – please rinse (labels can stay on)
- #1 & #2 plastic containers (please rinse and remove all caps) *3 Gal containers or less, such as milk jugs, pop bottles, detergent containers. Plastic bags should be combined together into one.
- Glass bottles & jars only – please rinse (labels can stay on)

two

Comparison of Reference Year to Currently Approved Plan

As shown in Table H-1.1, recycling increased 21% since the last plan update from 598 to 723 tons.

Table H-1.1 Incorporated Municipality Curbside Recycling

Political Entity	2016 Tons	2022 Tons	2016 lb./HH	2022 lb./HH	2022 Service Type
Celina City	285	378	124	165	Subscription
Coldwater Village	165	175	179	191	Subscription
St. Henry Village	82	68	183	152	Subscription
Fort Recovery Village	67	102	233	356	Subscription
Total	598	723	152	183	

Table H-1.2 Township Curbside Recycling

Political Entity	2016 Tons	2022 Tons	2016 lb./HH	2022 lb./HH	2022 Service Type
None					
Total	0	0	0	0	

Tables H-1.1 illustrated calculated data of pounds recovered per household. Household counts are taken from “Population and Household Counts for Governmental Units: 2020, 2010, 2000” dated August 2021 published by Ohio Department of Development Policy Research and Strategic Planning Office for 2020 and report household counts by municipality for 2020. The report determines households based on the number of people in a home. It does not publish if the households are residing in single family or multi-family units. For purposes of this analysis the number of single versus multi-family units being serviced are unknown. Additionally, it is unclear how many eligible households participated in subscription curbside recycling programs. Households can participate in curbside recycling programs in the municipalities listed in H-1.1 by purchasing recycling bags from their local municipalities. For this analysis, it is unknown how many households in each municipality purchased recycling bags.

Participation/Performance

Table H-1-1 illustrates a 21% increase in total curbside recycling tonnages to 723 tons in 2022. The SWOT analysis identified the need to improve curbside recycling participation and tonnage. The average performance of the four curbside programs improved from 152 lbs./household to 183 lbs./household. The District recognizes that the 2020 Recycling Partnership State of Curbside Recycling Report noted a benchmark of 331 pounds per household for subscription curbside. The District intends to within the budget work to increase participation through education and outreach.

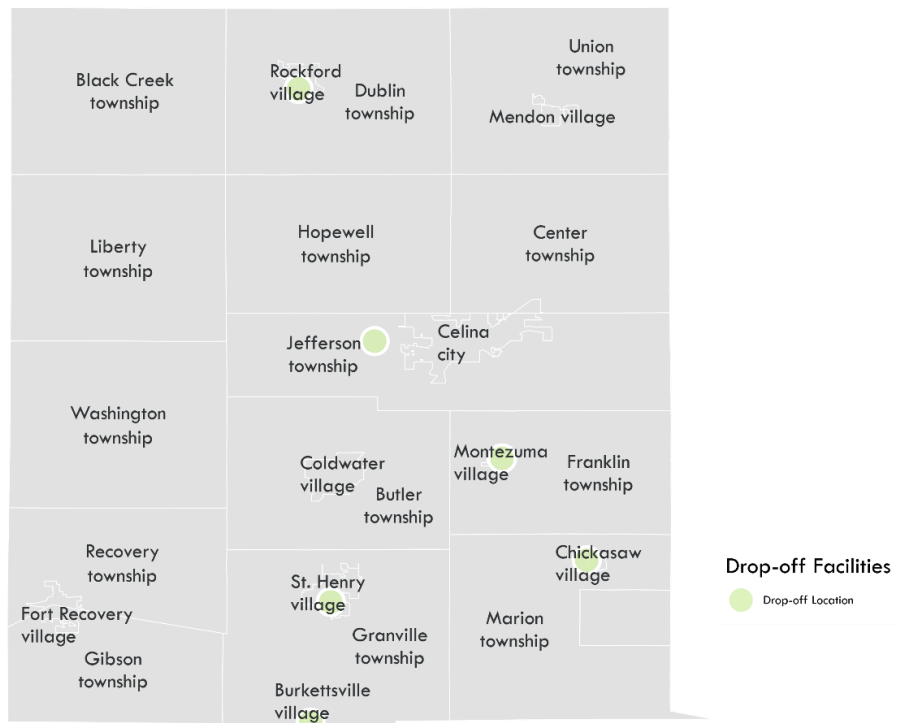
Drop-off Programs

Geographical

Five full time and one part time drop-off recycling locations are available to Mercer County residents as illustrated on the map. Locations are serviced either by Auglaize County Solid Waste District or by local school systems. Details are illustrated in Appendix B, Table B-2c.

Performance Analysis

Performance is difficult to analyze due to limited reported data. Data is available from drop off locations serviced by Auglaize County but is not available for privately managed drop offs. Table H-1.3 illustrated historical recycling tonnages. 2018 demonstrates higher recycling tonnages because the Jefferson Township drop-off stopped reporting tonnages in 2019. The District relies on the service hauler (which is also the processor) to provide data.



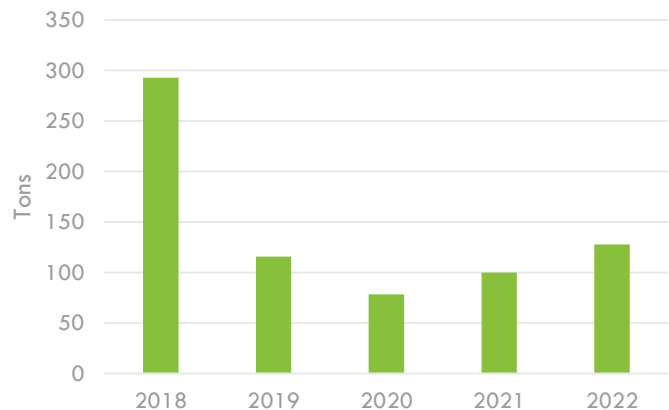
Drop offs were added to replace the Franklin Township and Rockford Village curbside programs that were discontinued in 2021. The District has been challenged by determining the effectiveness of these new drop off locations due to limited reported data from the collection contractor and processor. Other challenges include identifying contamination, contamination rates, and the population served by the drop-offs.

Historical participation in the drop off program has also included private and non-profit sponsors.

As an example, a small newspaper collection program is operated by the Celina Boy Scouts at the Daily Standard Newspaper in Celina. This Drop Off location is not included in the base line inventory due to the relatively small amount generated. In 2023, the Daily Standard Drop Off collected three gaylord boxes of newspaper that was shipped to Gateway Recycling, Toledo, OH

Another example of a non-profit drop-off sponsor is the Coldwater Village location once sponsored by the Coldwater Academic Promoters (CAP) and now managed by the Coldwater Swim Team. This small drop-off which is also not on the inventory list accepts paper and cardboard which is shipped to Venture Linx in Celina, OH.

Figure H-1.3 Historical Trend for Drop-Off Recycling



Special Event Collection

The District has collaborated in offering Special Collection Programs to area residents. An Office Paper Shredding event was conducted at Mercer Savings Bank in June 2023 yielding a total of 3.90 tons collected and processed by All Shred Services.

School Recycling

Parkway, St. Henry, and Coldwater schools continue to recycle and are serviced by Auglaize County SWMD. Coldwater Schools collected 7.2 tons. Parkway schools collected 43 tons, but part of this was from their collection from the public sector. St. Henry schools collection was processed by Ohio Recycling, and they collected approximately 18.75 tons.

County Office Recycling

The Mercer County Office Recycling Program generated 3.85 tons of cardboard, 15.2 tons of mixed paper, 0.8 tons of aluminum, 15 tons of ferrous metals, .75 tons of non-ferrous metals and 1.65 tons of plastic containers in 2023. Aluminum and plastic were collected in recycling containers provided by the District. Containers for recycling plastic and paper were also provided to schools and various county offices.

Conclusions/Findings

The District recognizes the challenges of limited data from which to gauge collection program performance. The lack of data is a result of the reluctance of private service providers to share collection details, tonnages, or participation.

Multiple non-profit drop and school system recycling collection programs have been established which represents a positive trend. The District will need to ensure coordination and reporting from these smaller programs to ensure accurate reporting and trend analysis.

Overall, the larger publicly sponsored Drop Offs have continued to increase in activity since 2019 with 128 tons reported for 2022.

Possible opportunities include:

- Leverage enhanced education and outreach through in-school programming, online District media communications, and distribution of shared content for publication on local communities' websites/social media in order to increase participation, recovery, and decrease contamination.
- Continue to encourage participation in the curbside collection program with enhanced promotion of the cost savings from this PAYT program as described in Section H-5.
- Attempt to reestablish the curbside collection programs in Franklin Township and Rockford Village that were discontinued in 2021. The District is in communication with Rockford and Franklin Township to discuss the challenges of the subscription curbside recycling program.
- Conduct awareness campaigns to targeted communities to communicate value of contracting for waste and recycling
- Evaluate options of conducting regional cooperative contracts for multiple smaller villages and cities for purchasing curbside waste and recycling services.
- Consider stakeholder meetings with community leadership including township trustees and public service personnel, residents, and haulers to understand the issues preventing contracting of curbside services and to determine possible solutions
- Collaborate with communities to develop suitable bid specifications for contracting for non-subscription curbside waste and recycling services
- Continue the District's practice of reviewing illegal dumping abuses of the drop-off program including signs noting who is and is not allowed to use the drop-offs, education on the convenience of the curbside bag system, and encouragement to townships to participate in the curbside bag system.

H-2 COMMERCIAL/INSTITUTIONAL SECTOR ANALYSIS

This evaluation of the District’s existing commercial/institutional determines if existing programs are adequate to serve the sector or if there are needs that are not being met. The analysis conducted here for this plan update evaluates the strengths and weaknesses of existing programs. The goal is to determine if the commercial/institutional sector is already adequately served or if the District can do more to address the commercial sector. Commercial/institutional sector within the District consists of the following (non-exhaustive list): commercial businesses, schools and universities, government agencies, office buildings, hospitals, and non-profit organizations.

Geographical

The Mercer County Solid Waste District is a single county District geographically located in Mercer County. According to “use/land cover is:

- 82% cultivated crops,
- 7% low-intensity development,
- 5% forest,
- 7% other land cover (including high-intensity development, pasture, bodies of water, grasslands, and wetlands)



Mercer County is primarily occupied by cultivated crops but is also home to urban and natural areas. Residents, planners, and commissioners continue to develop highly livable communities throughout the County that respect the rural traditions mixing natural and human-caused environments.

Table H-2.1 Commercial/Institutional Establishment Statistics

NAICS Code	NAICS Description	Total Establishment Establishments	Establishments with over 100 Employees
42	Wholesale Trade	70	1
44-45	Retail Trade	266	4
48-49	Transportation and Warehousing	50	1
51	Information	36	1
52	Finance and Insurance	142	2
53	Real Estate and Rental and Leasing	55	0
54	Professional, Scientific, and Technical Services	135	1
55	Management of Companies and Enterprises	4	0
56	Administrative & Support and Waste Management and Remediation Services	50	0
61	Educational Services	34	6
62	Health Care and Social Assistance	406	6
71	Arts, Entertainment, and Recreation	36	0
72	Accommodation/Food Service	113	0
81	Other Services (Except Public Administration)	310	0
92	Public Administration	105	0

The City of Celina, the District's largest city and county seat, covers a portion of the county's four hundred square miles in the center of the County. The county's largest township, Marion Township, is in the southeastern corner of the county.

Businesses and institutions are concentrated within either a Central Business District (CBD) or more local concentrations within business and residential Districts. There are clusters of concentrated commercial businesses/institutions, retail, entertainment areas, etc. throughout the County.

Commercial businesses or landlords' contract with a private service provider for recycling services.

Functionality

The District conducts an annual survey to gather as much data as possible describing the waste management practices of the Commercial/Institutional/Industrial Sector. One of the challenges of analyzing this sector is the lack of survey responses and available information regarding the services available and received throughout the County.

Commercial Businesses: Private haulers offer commercial collection services, but the District receives limited information through hauler and commercial survey results regarding how many businesses contract for services and the volumes of recovered materials. Some collection and processing haulers are reluctant to share commercial collection data.

Schools, Universities: There are nineteen K-12 public schools in Mercer County. Other private schools and regional campuses exist. Schools in Coldwater and Parkway receive recycling pickup from the Auglaize County SWMD. Recycling activities at other District schools is on the onus of the school to subscribe with a private sector service provider. The District provides technical assistance when approached by the schools and will provide some financial assistance for in-school use of recycling containers. Several of the schools have recycling programs to collect paper.

Government Agencies, Office Buildings: Private haulers offer collection services, but it is unknown how many government agencies for services. The District manages a County Office Recycling Program that collects cardboard, mixed paper, aluminum, ferrous metal, and plastics. Historically, survey results of government agencies provide limited data.

Diversion

The District makes an annual good faith effort to gather as much data as possible describing the waste management practices of the Commercial/Institutional/Governmental/Industrial Sector. The Data is used for reduction analysis, updating diversion projections, and reported in the ADR. Collecting data from this sector has historically been time consuming, expensive, and a challenge to obtain. The District has enhanced the data gathering process in past years and has received participation from large generators that had not previously participated. New surveys employ an on-line link to simplify the process. In addition, the District will continue to improve the data gathering process during the planning period including buybacks (scrap yards) and processors. This valuable end market data could further improve reduction percentages.

As shown in Table H.3 a total of 7,523 tons are estimated as commercial recycling activities.

Table H-2.2 Commercial Recycling for 2022

Program/Source of R/C Recycling Data	Quantities (Tons)
Commercial Survey	6,540
MRFs	0

Ohio EPA Commercial Retail Data	983
Total	7,523

Programs

Technical assistance is provided to commercial businesses, institutions, and industrial businesses upon request. In 2022, numerous businesses and institutions called for assistance regarding disposal of hard to recycle materials and assistance securing recycling pickup with Ohio Recycling or Auglaize County SWMD. Additionally, a public shredding event was held by the District in 2022 for office paper.

Solid Waste and Recycling Assessments are offered to commercial and institutional businesses upon request. In 2022, waste and recycling assessments were not requested.

Commercial Sector Technical Assistance - The District offers technical assistance to commercial business, institutions, and the industrial sector. The District provides technical assistance to businesses and industries on how to recycle various materials at their place of business. In 2023, there were numerous calls on fluorescent lights, computers, hazardous waste, and paint. These businesses were given contacts by companies that could assist them with their recycling needs. Many of them were given Ohio Recycling and Auglaize Co. SWMD's contact information to possibly arrange pickup of their recyclable materials.

Conclusions/Findings

The commercial sector is well serviced by the private and public sector and indirectly serviced by the District. The most significant barrier is the cost of service in the County; however, limited solutions to this issue are available.

Possible opportunities include:

- Update the website with a business tab with easy access to waste reduction information specific to this sector.
- Include on the business website tab details on how local businesses can explore and participate in the free on-line platform sponsored by Ohio EPA. This OEPA Materials Marketplace allows businesses, manufacturers, non-profits, and other organizations to connect and find reuse and recycling solutions for their waste, byproducts, and surplus materials.
- Evaluate a Material Specific commercial/industrial campaign targeting easily recoverable materials like paper and cardboard.
- Continue to apply for Ohio EPA grants to help businesses expand or implement recycling programs.
- Enhance the working relationship with the school systems and consider a survey to gather more information on what materials schools are currently recycling and what needs still exist.
- Promote and encourage commercial businesses to require their hauler to provide the tonnages of how much they recycle.
- Review best practices from other Districts to improve data gathering process and participation from the commercial/industrial sectors including buybacks centers, scrap yards, and processors.

Consider a recognition award for businesses that are participating in recycling programs. This would help encourage other surrounding businesses to become active in the program.

H-3 INDUSTRIAL SECTOR ANALYSIS

This evaluation of the SWMD’s industrial sector determines if existing programs are adequate to serve the sector or if there are needs that are not being met. The analysis conducted here for this plan update evaluates the strengths and weaknesses of existing programs. The goal is to determine if the industrial sector is already adequately served or if the District can do more to address the industrial sector.

Manufacturing Composition

Manufacturing has grown in Mercer County through the years. A few of the largest manufacturing businesses and what they manufacturer include:

Table H-3.1 Largest Manufacturers (over 100 employees)

Material	City	NAICS	Employees
Celina Aluminum Precision Tech	Celina	33	500
Fort Recovery Industries Inc	Fort Recovery	33	450
JR Manufacturing Inc	Fort Recovery	33	300
Wilmer Inc	Coldwater	32	260
Cooper Farms Feed Mill	Fort Recovery	31	160
J & M Mfg. Co	Fort Recovery	33	150
Pax Machine Works Inc	Celina	33	125
Lincoln Electric Automation	Coldwater	33	114
Basic Grain Product Inc	Coldwater	31	100

Table H-3.2 Industrial Establishment Statistics

NAICS Code	NAICS Description	Total Establishments	Establishments with over 100 Employees
22	Utilities	5	0
31	Manufacturing: Food and Apparel	32	4
32	Manufacturing: Wood, Paper, Printing, Chemical, and Plastics	33	3
33	Manufacturing: Metal, electronics, Transportation, Furniture, and Misc.	97	7

As shown in Table H-3.3, non-excluded foundry sand, cardboard, and paper account for the largest material volumes recycled.

Table H-3.3 Industrial Recycling for 2022

Material	Quantities (Tons)
Ferrous Metals	40,227
Food	7,568
All Other Paper	3,567
Non-Ferrous Metals	2,896
Other (Aggregated)	1,996
Wood	1,513
Commingled Recyclables (Mixed)	1,419
Corrugated Cardboard	1,084
Plastics	646
Rubber	1
Ferrous Metals	40,227
Total	60,918

Programs

Solid Waste and Recycling Assessments are offered by the District to industrial businesses upon request. Technical assistance is also provided to industrial businesses upon request. Traditional, interest from businesses and institutions includes calls for assistance regarding disposal of hard to recycle materials and assistance securing recycling pickup with Ohio Recycling or Auglaize County SWMD.

However, recycling activities and opportunities in this sector are largely unknown. Reports seen from other Ohio Counties with higher manufacturing employment demonstrate manufacturing industries leading the way in waste reduction and recycling. Industry is also demonstrated as an enormous consumer of recycled materials. One of the challenges of analyzing this sector is the lack of information regarding the services available and received throughout the County. Reporting is voluntary. There could be an opportunity to assist this sector, however there would be limitations on time available for District staff.

Conclusions/Findings

Manufacturing is an important economic engine for Mercer County and the District provides programming to assist this sector within the limits of the annual budget. The District recognizes that industrial surveys and building relationships are key strategies to understanding this sectors' waste/recycling strengths and opportunities. The District has not focused on industrial programming since diversion rate for this sector has been traditionally high and industries have a direct financial interest in minimizing waste disposal expenses.

Possible opportunities towards this sector include:

- Encourage industries to explore and participate in the free on-line platform sponsored by Ohio EPA. This OEPA Materials Marketplace allows businesses, manufacturers, non-profits, and other organizations to connect and find reuse and recycling solutions for their waste, byproducts, and surplus materials.
- Continue to apply for Ohio EPA grants to help businesses expand or implement recycling programs.
- Develop a working relationship with major industries to gather more information on what challenges and opportunities exist with their specific waste stream management.
- Promote and encourage industries to require their hauler to provide the tonnages of how much they recycle.
- Consider as a component of the proposed business recognition award a specific program for industries that have demonstrated impressive waste reduction programming.

H-4 RESIDENTIAL/COMMERCIAL WASTE COMPOSITION ANALYSIS

This evaluation looks at the waste s that typically make up the largest portions of the residential/commercial waste stream and determines whether the District currently has or should have programs to address those wastes.

Composition

Generation Composition

Municipal solid waste (MSW) also referred to as residential/commercial waste includes common items thrown away after being used such as packaging, food, grass clippings, sofas, computers, tires, and refrigerators. According to US EPA’s “Advancing Sustainable Materials Management: Facts and Figures 2018” wastes that typically make up the largest portions of the residential/commercial waste stream are paper and cardboard (23.1%), food (21.6%), plastics (17.7%), paper and paperboard (15.1%), and rubber, leather & textiles (11.6%).

The District generated 52,854 tons of municipal solid waste in 2022. Applying the US EPA waste generation estimates to the SWMD’s waste generation gives an approximation of materials generated. As shown in Table H.4.1 paper, food, and plastics are the three largest categories of materials generated. This evaluation looks at the availability of and need for programs to recover these three largest categories.

Table H.4.1 US EPA Estimated Waste Generated by Material

Material	US EPA % Generated (2018)	Estimated Mercer County Tons Generated (2022)
Paper and Cardboard	23.1%	12,209
Food	21.6%	11,416
Yard Trimmings	12.1%	6,395
Plastics	12.2%	6,448
Rubber, Leather, Textiles	8.9%	4,704
Metals	8.8%	4,651
Wood	6.2%	3,277
Glass	4.2%	2,220
Other	2.9%	1,533
Total	100.0%	52,854

Disposal Composition

The District disposed 36,759 tons of municipal solid waste in 2020. About 16,095 tons were recycled and composted, which leaves a large amount of material still being landfilled. Applying the US EPA waste disposal estimates to the SWMD’s waste landfilled gives an approximation of materials landfilled. As shown in Table H.4.2, food waste, plastics, paper, and paperboard are the three largest categories of materials being landfilled.

Table H.4.2 US EPA Estimated Waste Disposal by Material

Material	US EPA % Generated (2018)	Estimated Mercer County Tons Disposed (2022)
Paper and Cardboard	23.1%	10,403
Food	21.6%	5,404
Yard Trimmings	12.1%	1,360
Plastics	12.2%	6,102
Rubber, Leather, Textiles	8.9%	1,470
Metals	8.8%	1,213
Wood	6.2%	3,088
Glass	4.2%	1,103
Other	2.9%	6,617
Total	100.0%	36,759

Specific Waste Streams

Yard Waste

Composting and technologies (anaerobic digesters, in-vessel technologies, etc.) are available options to manage yard trimmings. These management methods can be small, medium, or large scale. Some waste haulers also provide yard waste collection service to customers, however collection trucks do not have scales so individual hauler quantities and participation are not available. Compost facilities (all classes) track material volumes delivered and report to Ohio EPA, which is how the District tracks composting activities.

Five municipalities, Celina, Coldwater, St. Henry, Fort Recovery, and Chickasaw, provide some form of curbside yard waste pick-up. In the reference year, Celina provided their residents the opportunity to place limbs and brush at the curb utilizing a private hauler, Maharg, to haul materials. The Village of Fort Recovery also provides limb and brush curbside pickup collected by the Village.

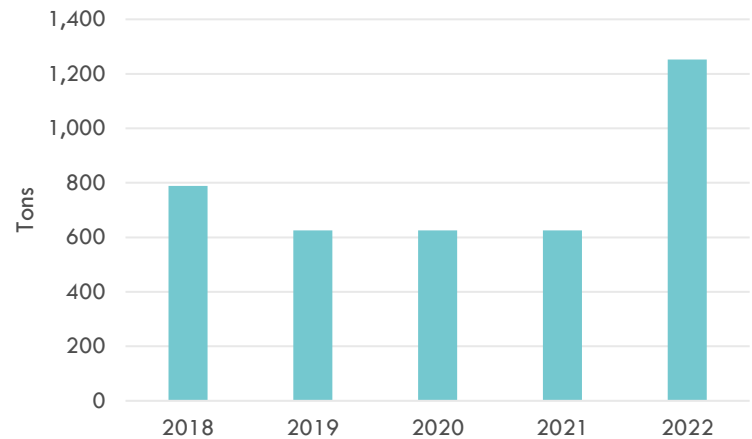
The District provides limited outreach on small, medium, and large-scale composting management methods.

Yard Waste Analysis

Historically yard waste averages 9 percent of the recycled stream. Historical tonnages recycled are shown in Table H-4.1. The increase in 2022 was a result of increased survey participation by composting locations.

Composting can be small, medium, or large scale. A diversely developed system reinforces sustainability and environmental stewardship. The Policy Committee discussed these systems and the benefits of these opportunities, especially decentralized approaches.

Figure H-4.1 Historical Yard Waste Recycling



Food Waste

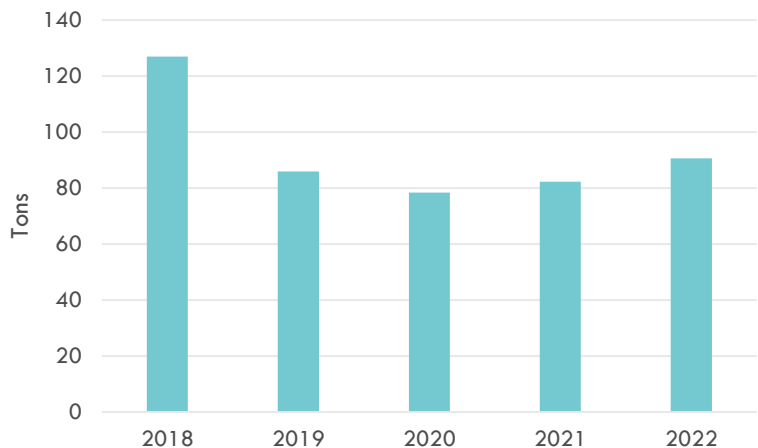
There are several available options to manage food waste including waste minimization, donation, composting, and technologies (anaerobic digesters, in-vessel technologies, etc.). Waste minimization is a management method that has had little promotion by the SWMD. Teaching about making better use of food through storage, portion size, recipe suggestions for leftovers can help prevent food waste. One permitted Class II facility is located in the SWMD. The District provides limited outreach to the residential/commercial sector regarding the available options to manage food waste.

Food Waste Analysis

Historically food waste recycling has been inconsistent as shown in Table H-4.2.

Food waste is a difficult stream to manage in large part because of the collection methods and monitoring of composting and technology approaches. However, waste minimization and donation are methods of managing that have not received concerted focus by the District .

Figure H-4.2 Historical Food Waste Recycling



Fiber

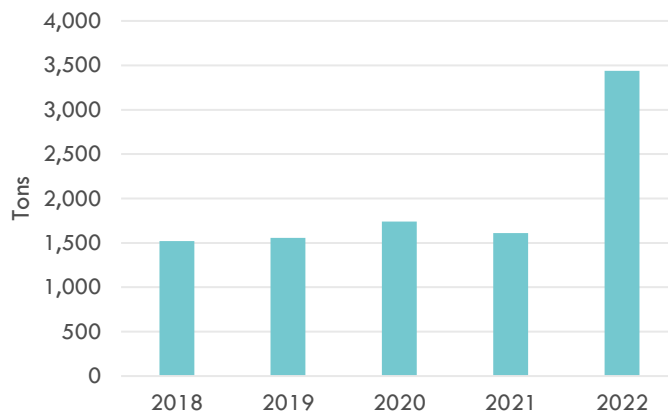
Waste minimization and recycling are two available options to manage paper waste. Waste minimization stops waste before it starts, and recycling is separating the materials from the waste stream and using them as virgin feedstock to manufacture new products. Waste minimization is a management method that has had little promotion by the SWMD. Recycling of paper comes down to available collection methods. Paper is one of the common suite of materials accepted by all service providers through curbside and drop-off collections. Single-family households have curbside recycling arranged by political entities through contracts with haulers; however, participation is optional, and households must purchase recycling bags. Multi-family and commercial businesses have opportunities, but the extent of the service outreach is unknown. The District provides details upon request of local hauling contractors that provide commercial and multi-family recycling services. The District also provides details on local Drop-off recycling containers available in five political jurisdictions and in Auglaize County. The District recognizes that gaps exist in collection services to these entities.

Fiber Analysis

Paper (includes cardboard) is one of the largest streams of materials reported as recycled historically as shown in Table H.4.3. On average, paper accounts for approximately 17 percent of the recycled stream. In 2022, an increase resulted in paper accounting for 34 percent of the recycled stream.

There are available programs, however the SWOT analysis exercise identified opportunities in the commercial sector with economics identified as a barrier.

Figure H-4.3 Historical Fiber Waste Recycling



Conclusions/Findings

Based on waste characterizations from the state of Ohio, Mercer County's largest residential/commercial disposal streams are fiber, food waste, yard waste, and plastics. The District has ample current programming directed towards the recovery of these primary waste stream sectors. The District recognizes the need to continuously improve recovery rates and will consider the limitations of the budget.

Possible opportunities towards this sector include:

- Offer school administration and custodial staff education on food and yard waste recovery options.
- Boost outreach and education around backyard composting, smart landscaping, grass-cycling, and leaf mulching or mowing in place.
- Collaborate with the communities with compost facilities to make sure residents are informed about the program offering/services.
- Focus on education and resources on the changes in the area's expansion of plastics recycling
- Support end market development through grants, business assistance, or other programs.

H-5 ECONOMIC INCENTIVE ANALYSIS

Economic incentives encourage increased participation in recycling programs. In accordance with Goal 7 of the 2020 State Solid Waste Management Plan, the District is required to explore how to incorporate economic incentives into source reduction and recycling programs.

The District recognizes that the lack of District grants or direct economic support to communities is a limiting factor. However, the District will provide technical assistance to communities that seek OEPA funding for source reduction and recycling programming.

Pay-As-You-Throw (PAYT)

Pay as you throw (PAYT) is an economic incentive for curbside residents to pay for only the amount of MSW disposed per household. Also referred to as unit pricing, variable rate pricing or user-pay, this per-usage-pricing model has been effective in reducing waste by 50% and increasing recycling while seeing significant savings in tipping fees depending on the community. The City of Celina contracts waste disposal with Maharg Disposal that offers volume based PAYT billing. Current pricing includes:

- Garbage – \$1.20 per bag or \$6.00 for a package of (5) five
- Recycling – \$0.80 per bag or \$4.00 for a package of (5) five
- Yard Waste – \$1.20 per bag



The discount for recycling does provide some incentive compared to disposal. The District is examining the opportunity for other haulers in the area to adopt a similar model if simply to offer different pricing for 35 gal., 65 gal., 96 gal., or unlimited waste collection services.

Conclusions/Findings

The District recognizes the value of PAYT as an equitable waste management tool that encourages recycling and waste minimization. Opportunities related to PATY include:

- Celina’s PAYT program is effective at incentivizing waste reduction and encouraging recycling participation. This successful PAYT program could possibly be adopted by other Mercer County haulers and the District will continue to play a role in the potential promotion of this PAYT model.
- Grant support or other financial encouragement to communities are not viable strategies based on the limited resources available to the District . However, the District will continue to provide technical support for communities that apply for outside funding assistance.

H-6 RESTRICTED AND DIFFICULT TO MANAGE WASTE STREAMS ANALYSIS

Goal 6 of the 2020 State Solid Waste Management Plan requires SWMDs to provide strategies for managing scrap tires, yard waste, lead-acid batteries, household hazardous waste (HHW), and obsolete/end-of-life electronic devices. This analysis evaluates the existing programs offered for managing restricted wastes and difficult to manage wastes. For waste streams where programs are not available the District must evaluate the need for and feasibility of providing programs.

District HHW Collection Events

The District provides bi-annual HHW collection events at the Mercer County Fairgrounds. There is a \$1 fee per can of paint. The District incorporates alternative management options into their outreach and educational programming to encourage waste disposal minimization.

Restricted and Difficult to Manage Recycling/Reuse Opportunities Listing

The District also publishes and continuously updates a web-based list of available outlets for other hard to recycling materials including:

Table H-6.1 Restricted and Difficult To Manage Materials Programs

Material	Local Programs
Scrap Tires	Directed to retailer take-back outlets
Appliances	District collection and web-based list of private businesses drop off locations
Pharmaceuticals	Directed to retailer take-back outlets
Motor Oil	Directed to web-based list of retailer take-back outlets
E-Waste	Directed to web-based list of retailer take-back outlets
Household and Rechargeable Batteries	Directed to retailer take-back outlets
Yard Waste	Private hauler collection and web-based list of private business drop off location
Electronics	Directed to web-based list of retailer take-back outlets

Specific Private collection/recycling opportunities include:

Appliances

- Ohio Recycling
- Three Sons Towing
- Celina Recycling

Lead Acid Batteries

- Advanced Auto Parts
- Auto Zone
- NAPA Auto Parts (Celina)
- NAPA Auto Parts (Coldwater)
- NAPA Auto Parts (Ft. Recovery)
- Ohio Recycling
- Tractor Supply Company

Computers & Computer Equipment

- Ohio Recycling
- Goodwill – Celina

Motor Oil

- Advanced Auto Parts
- Platinum Auto Group
- Poly Works
- Tractor Supply Company

Yard Waste Drop Off Location

- Dues Nursery

Other special waste stream recycling opportunities are provided by the District in addition to the private opportunities published.

Lead Acid Battery Management

Ohio Recycling offers year-round buyback program for lead acid batteries. The District advertises on the website all retailers that accept lead-acid batteries. Lead-acid batteries are also accepted at the District's bi-annual HHW collection events.

E-Waste

The District advertised various opportunities for recycling electronics on its website including Ohio Recycling and Reconnect.

Appliances

The District promotes businesses that accept appliances for recycling on their website. Additionally, appliances are collected at the bi-annual District HHW.

Scrap Tires

The District is active in responding to residents' calls regarding scrap tire disposal options. The District directs residents and businesses to tire dealers that accept tires for a nominal fee (\$3.00/tire at many establishments).

A brochure was developed to educate the public on scrap tire disposal laws and the nuisance they can create if improperly disposed. The brochure was also available at the Health Department, the Farm Service Agency, the Commissioner's office, and the District office.

Conclusions/Findings

The District recognizes the need and public interest in providing opportunities for hard to recycle and restricted waste streams. HHW collection is a significant portion of the District's annual budget. Opportunities related to expanding or enhancing special waste stream management include:

- The District will evaluate enhancing education on using less-harmful ingredients and more environmentally friendly products to minimize the cost of the bi-annual HHW collection events. The District will also continue to promote local outlets available for other difficult to manage waste such as: chargeable batteries, lead-acid batteries, tires, prescriptions, used motor oil, cell phones and electronics.
- The District will consider providing future grant funded District matched scrap tire round up events. Past scrap tire round ups were successful and effective at providing an affordable alternative to retail store tire fees.
- If possible, the District may consider annual HHW collection events based on availability of future funds.

H-7 DIVERSION ANALYSIS

Waste diversion is defined as the amount of waste recycled and the amount of waste diverted from entering the waste stream through source reduction activities. Waste diversion activities include waste minimization (also called source reduction), reuse, recycling, and composting. The diversion analysis looks at the diversion programs, infrastructure, rate and trends, and materials.

Residential/commercial diversion in the District trends a relatively linear line as shown in Figure H.7.1. The slight decline in 2021 is attributed to the impact of COVID-19 during which some programming was limited and household practices were adjusted.

The material categories reported as most recycled in 2022 include ferrous metals, cardboard, and yard waste. Based on reported data, ferrous metals and cardboard are largely being captured by MRFs (commercial survey) and yard waste is being captured by compost facilities. Figure H-7.2 shows the residential/commercial material categories diverted in 2022.

Figure H-7.1 Residential/Commercial Diversion

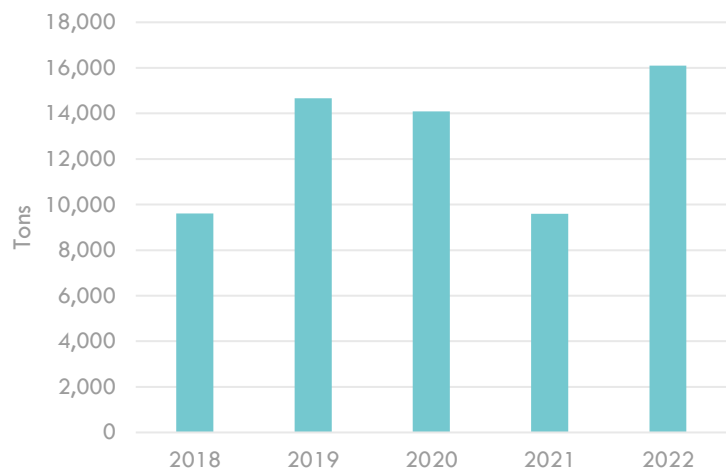
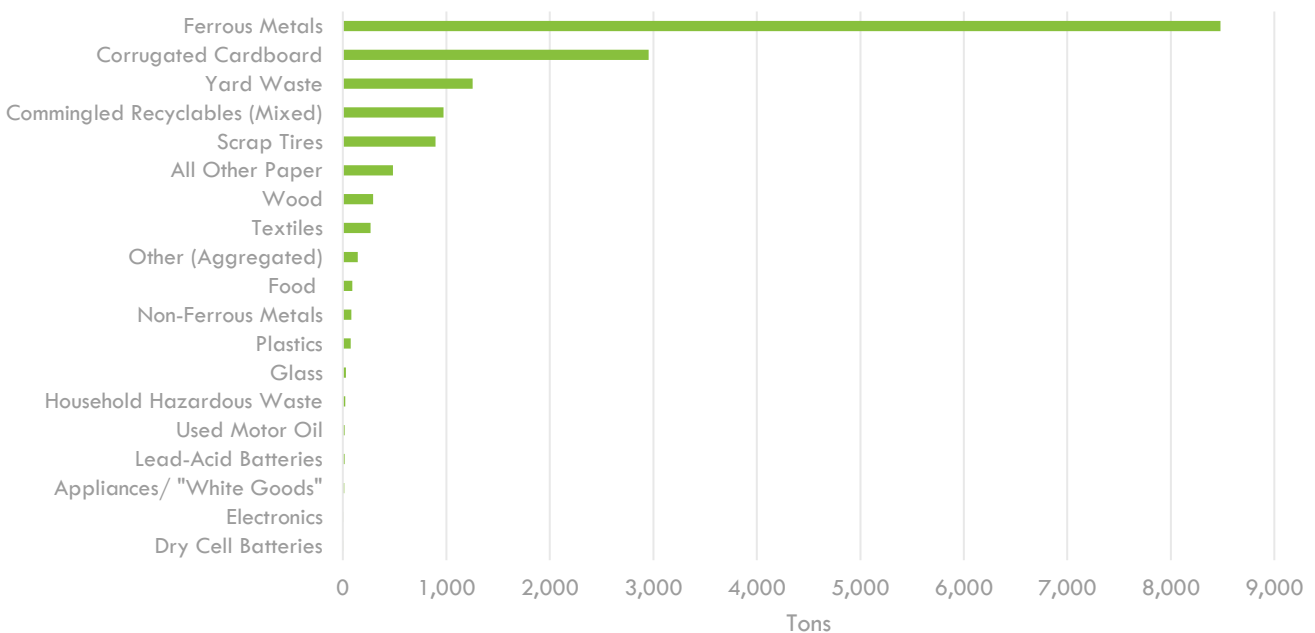
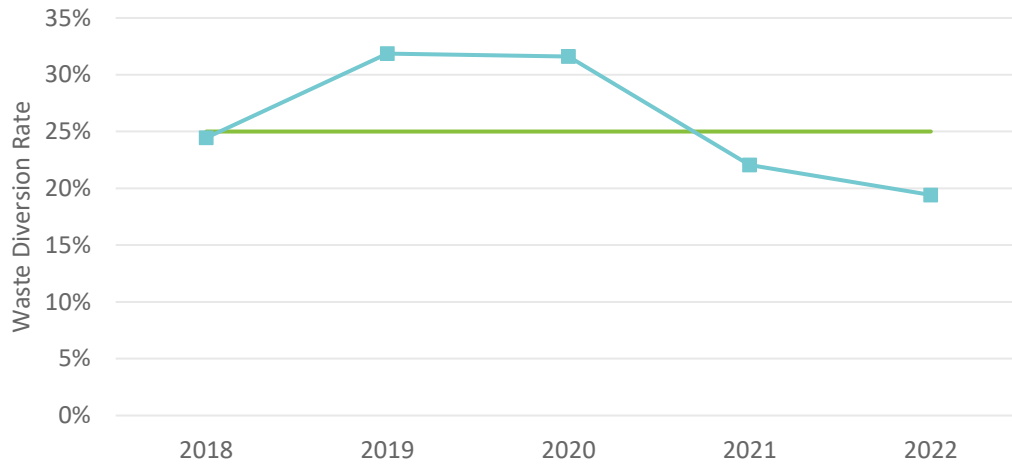


Figure H-7.2 Residential/Commercial Materials Diverted



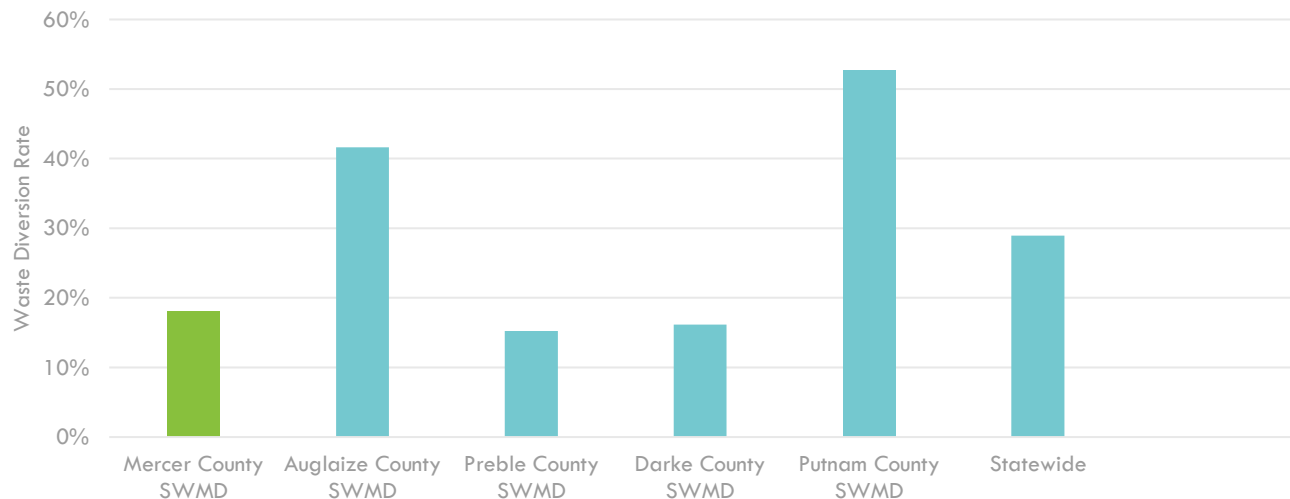
The diversion trend is expected to exceed 25% based on actual 2023 statistics and is expected to exceed 25% starting in 2024 and continuing throughout the planning period. Figure H-7.3 shows the diversion achieved over the past five years in comparison to the State residential/commercial waste diversion goal, represented by the blue line. Like Residential/Commercial trends, the dip in 2021 and 2022 is attributed to the impact of COVID-19.

Figure H-7.3 Residential/Commercial Waste Reduction Rate



The SWMD’s waste reduction rate compared to other regional District s and the state average is outlined in Figure H-7.4.

Figure H-7.4 2022 Waste Reduction Rate Comparison



Conclusions/Findings

The District is achieving consistent diversion which exceeds the statewide benchmark. However, the District acknowledges that there are more materials being landfilled that could potentially be reduced or recycled to further increase the diversion.

The District's total res/com diversion rate was impacted during 2021 and 2022 due to the unusual impact of COVID 19. The diversion rate improved to nearly 25% based on actual 2023 data and is expected to exceed 25% over the planning period. The pandemic has had a continuing impact on lifestyles and more work will need to be focused on the reestablishment of waste minimization practices in the future.

Opportunities moving forward for the District include:

- Continue exploring more ways to expand education and outreach. The District will consider working towards this through increasing large group presentations.
- Increasing survey responses from Commercial and Industrial businesses will also be another major step for the District.
- Incorporating Wenning Poultry Farm in Fort Recovery as a viable food or yard waste option needs to be further evaluated. The status of this site is unknown. It is not a registered compost facility and Wenning Poultry Farm did not respond to the District's survey requests.
- Consider looking at the contamination in the drop-off and curbside programs and targeting those most commonly incorrectly recycled materials and making campaigns out of them.

H-8 SPECIAL PROGRAM NEEDS ANALYSIS

Ohio Revised Code 3734.57(G) gives SWMDs the authority to fund a number of activities that are not related to achieving the goals of the state solid waste management plan. In addition, there are other programs that SWMDs fund that are not addressed in either the state plan or law.

Health Department

Funding for health department activities is not related to achieving the goals of the state solid waste management plan but does play a role in the SWMD's management. The District does provide funding to the Health Dept. for well testing and facilities inspections such as the Liberty Environmental Storage Facility, Maharg Transfer Station, and the closed Celina Landfill

Litter Collection

The District has conducted annual Spring Roadside Litter Cleanups with participation with the Mercer County Township Trustees and the Mercer County Engineers' Office. Typically over 500 miles of roadway are included yielding over 3,000 lbs. of litter and 200 lbs. of recyclables.

Conclusions/Findings

The District finds value and expects to continue special program activity funding for the Health Department. The District also finds value in the roadside litter collection provided by the Township Trustees and for the Engineer's Office. Both programs are expected to continue during the planning period as described in Appendix O-7.

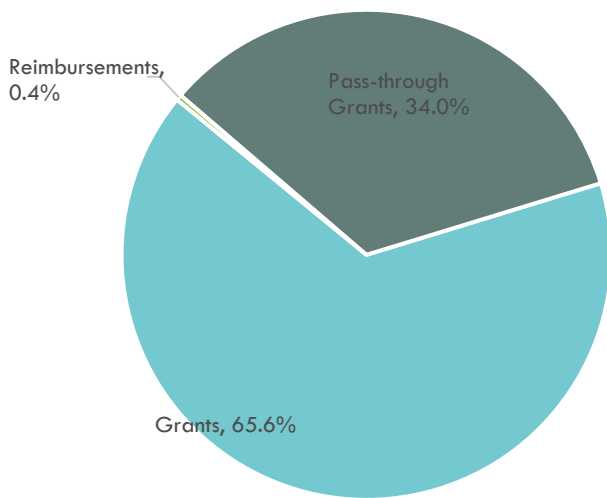
H-9 FINANCIAL ANALYSIS

The purpose of this analysis is to examine the SWMD's current financial position and assess the financial requirements and revenue sources throughout the next planning period. The District is currently funded through revenues from grants, reimbursements, and other miscellaneous sources.

This analysis evaluates the SWMD's financial position currently and during the planning period.

Reference Year and Historical Analysis

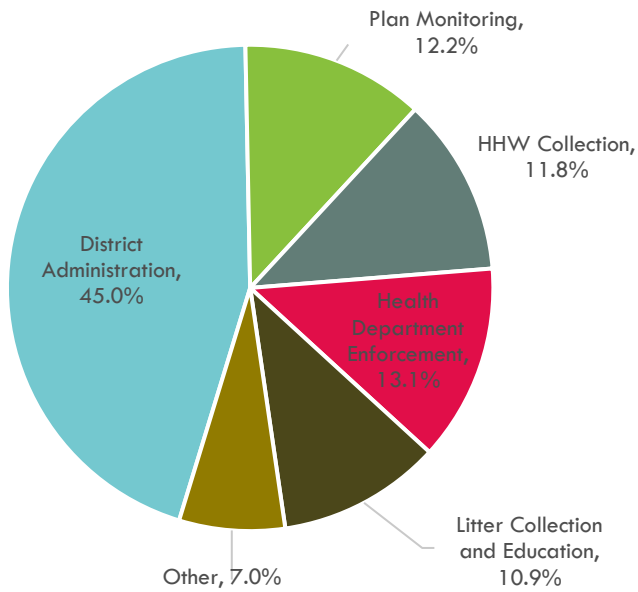
Figure H-9.1 Revenue Distribution in 2022



Currently, pass-through grant funds and other grant funds solid waste recycling, reuse, and reduction programs as outlined in the solid waste management plan. Management of these programs includes fulfilling obligations to organize and/or provide programs, funding, enforcement, and education. In 2022, the District's expenses fell into the following distribution categories as shown in Figure H-9.2.

The District's revenue streams are limited after the closure of the Celina Landfill in 2021. With its closure, the District no longer receives disposal fees to help fund its programs. Because of this, it has largely been operating off its fund balance. The District's plan for rebuilding its revenue stream is described in this section with additional details in Appendix O.

Figure H-9.2 Expense Distribution in 2022



Over the past few years, the District has been extracting from the carryover balance to cover its deficit. Figure H-9.3 shows revenues in comparison to expenses.

Figure H-9.3 Historical Revenues versus Expenses

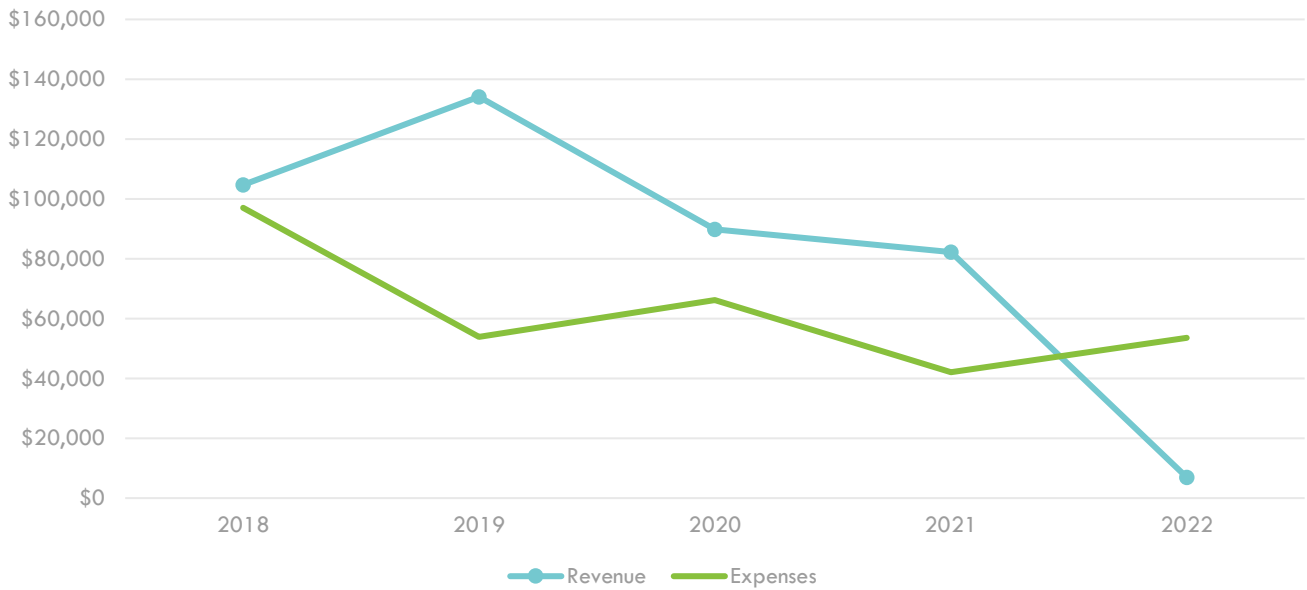


Table H-9.1 Historical Disposal Fee Analysis

Year	Waste Disposed (tons)	Total Revenue from Disposal Fee (\$)
2018	40,797	\$96,726
2019	52,374	\$129,492
2020	39,199	\$86,348
2021	48,137	\$78,517
2022	43,662	\$0
Average Tonnage/Revenue	44,834	\$78,217

Average Annual Change +/-	716	(\$24,182)
Average Annual Percent +/-	4.18%	-27.13%

Source(s) of information: Disposed tons were sourced from Annual District Review Forms. Disposal fee tons were sourced from quarterly fee reports.

As shown in Table H-9.1 the average disposal fee revenue collected was \$78,217. The analysis demonstrates a rapid decline to zero from 2018 to 2022 coinciding with the closure of the Celina Landfill. Actual received disposal fee revenues declined to zero compared to the projections in the 2019 Approved Plan due to the closure of the Celina Landfill.

Table H-9.2 Historical Generation Revenue Compared to Approved Plan Projections

Year	Plan Disposal Fee Revenue Projections	Actual Disposal Fee Revenue Received	Difference
2018	\$79,920	\$96,726	\$16,806
2019	\$80,693	\$129,492	\$48,799
2020	\$81,472	\$86,348	\$4,876
2021	\$82,260	\$78,517	(\$3,743)
2022	\$83,054	\$0	(\$83,054)
Average	\$81,480	\$78,217	(\$3,263)

Analysis of Optional Funding Mechanisms

Ohio Revised Code (ORC) 343.08 allows the District to fix reasonable rates or charges to be paid by every person, municipal corporation, township, or other political subdivision that owns premises to which solid waste collection, storage, transfer, disposal, recycling, processing, or resource recovery service is provided by the District and may change the rates or charges whenever it considers it advisable.

In response to the closing of the Celina Landfill and the impact as illustrated in Table H-9.2, the District Policy Committee met on May 9, 2024, and discussed funding options available by ORC 343.08 and determined that a Contract Fee of \$2.75 per ton would be the most applicable of all options to ensure ample funding for future programming and OEPA compliance.

The District expects to start the implementation process for the \$2.75 per ton fee 1/1/27 with the expectation of a 1/1/28 effective date. The District has projected that the 1/1/28 remaining fund balance will be \$317,000 which equates to over three years of surplus operating funds.

The \$88,000/yr. projected income is based exclusively on the projected 33,000 res/com tons only. The District Policy Committee determined that the industrial tonnage was too volatile to include in projections and a more responsible conservative budget would be the more predictable res/com tonnages.

The District expects that the 1/1/28 implementation will maintain a \$250,000+ fund balance level and provide ample buffer for unexpected District expenses or expanded programming.

The District did anticipate the option of a \$3.50/ton Contract Fee in the current Solid Waste Management Plan that would have become effective 2020. The District evaluated the current expenses, income, and fund balance

and determined that the original Contract Fee amount could be reevaluated. The District did a thorough analysis of all funding options and determined that the actual fee and implementation schedule would be updated.

Because a Contract Fee is based on tonnages produced, the District believes that a Contract Fee is the most equitable funding option for Seniors and small families that generate less waste. The Contract Fee is also the best strategy to financially encourage waste reduction and recycling.

The District also believes that the Contract Fee funding option minimizes the financial impact on an average family. Assuming an average family produced one ton of waste per year, the net cost of a \$2.75/ton Contract Fee would increase only six cents per month from the prior \$2/ton landfill tip fee.

The District expected to formalize the ORC 343 designation process starting 1/1/27 including public notices and public hearings. The County Commissioners would during 2027:

- Adopt a resolution
- Publish two legal notices in the newspaper
- Mail two notices of the adoption of the preliminary and final resolution to:
 - Fifty industrial, commercial, and institutional generators of solid wastes within the District
 - Legislative authority of each municipal corporation, county, and township
 - OEPA Director
- The County Commissioners may revise the designation list and adopt a resolution of final designations effective sixty days later

The District expects to use the income generated from this Contract Fee to provide the following resource recovery services and education and outreach services to all residents and businesses in the District:

- Household hazardous waste collections
- Lead acid battery recycling through Ohio Recycling
- Use oil recycling through local vendors
- Scrap tire collections
- Electronics recycling through local vendors
- Appliance collection
- County offices recycling program
- Litter collection
- Market development support
- Comprehensive education and outreach services

Table H-9-2 Projections for Rates and Charges during Planning Period

Year	Disposal Fees	Generation Fees	Designation Fees	Other Revenue	Total Revenue
2018	\$96,726	\$0	\$0	\$8,019	\$104,745
2019	\$129,492	\$0	\$0	\$4,649	\$134,141
2020	\$86,348	\$0	\$0	\$3,501	\$89,849
2021	\$78,517	\$0	\$0	\$3,690	\$82,207
2022	\$0	\$0	\$0	\$6,965	\$6,965
2023	\$0	\$0	\$0	\$3,623	\$3,623
2024	\$0	\$0	\$0	\$0	\$0
2025	\$0	\$0	\$0	\$0	\$0
2026	\$0	\$0	\$0	\$0	\$0
2027	\$0	\$0	\$0	\$0	\$0
2028	\$0	\$0	\$109,546	\$0	\$109,546

2029	\$0	\$0	\$109,591	\$0	\$109,591
2030	\$0	\$0	\$109,635	\$0	\$109,635
2031	\$0	\$0	\$109,680	\$0	\$109,680
2032	\$0	\$0	\$109,558	\$0	\$109,558
2033	\$0	\$0	\$109,435	\$0	\$109,435
2034	\$0	\$0	\$109,313	\$0	\$109,313
2035	\$0	\$0	\$109,191	\$0	\$109,191
2036	\$0	\$0	\$109,069	\$0	\$109,069
2037	\$0	\$0	\$108,909	\$0	\$108,909
2038	\$0	\$0	\$108,750	\$0	\$108,750
2039	\$0	\$0	\$108,590	\$0	\$108,590
2040	\$0	\$0	\$108,431	\$0	\$108,431

Table H-9.3

Year	Revenue	Expenses	Annual Surplus/Deficit (\$)	Balance (\$)
2017			Ending Balance	\$594,694
2018	\$104,745	\$97,027	\$7,718	\$602,412
2019	\$134,141	\$53,881	\$80,260	\$682,673
2020	\$89,849	\$66,160	\$23,689	\$706,362
2021	\$82,207	\$42,077	\$40,130	\$746,492
2022	\$6,965	\$53,528	-\$46,563	\$699,929
2023	\$3,623	\$82,137	-\$78,514	\$621,415
2024	\$0	\$108,830	-\$108,830	\$512,585
2025	\$0	\$84,276	-\$84,276	\$428,308
2026	\$0	\$81,405	-\$81,405	\$346,903
2027	\$0	\$83,090	-\$83,090	\$263,813
2028	\$109,546	\$84,819	\$24,727	\$288,540
2029	\$109,591	\$93,488	\$16,102	\$304,642
2030	\$109,635	\$119,833	-\$10,198	\$294,445
2031	\$109,680	\$92,750	\$16,930	\$311,374
2032	\$109,558	\$88,426	\$21,131	\$332,506
2033	\$109,435	\$89,369	\$20,066	\$352,572
2034	\$109,313	\$90,330	\$18,983	\$371,555
2035	\$109,191	\$99,490	\$9,701	\$381,257
2036	\$109,069	\$127,210	-\$18,141	\$363,115
2037	\$108,909	\$98,834	\$10,076	\$373,191
2038	\$108,750	\$94,356	\$14,394	\$387,585
2039	\$108,590	\$95,411	\$13,179	\$400,764
2040	\$108,431	\$98,156	\$10,275	\$411,039

Conclusions/Findings

The District has reacted to the closing of the Celina Landfill and has committed to a \$2.75/ton contract fee effective 1/1/28 that will maintain a fund balance equal to over two years of operating expenses. This responsible, conservative funding option will provide for the potential of expanding future programming and for covering unexpected expenses. The District has also provided a contingency budget in Appendix O Figure O-11a that provides for the implementation of the contract fee as early as 1/1/26.

H-10 REGIONAL ANALYSIS

The purpose of the regional analysis is to consider regional opportunities for collaboration and partnerships, and to also consider how the policy committee's decisions may impact other stakeholders in the region.

Collaboration is a process where people or organizations come together to solve problems with a common goal. Through the process of sharing differing perspectives, experiences, and resources we can expand opportunity and improve performance. Collaboration enables decision makers to realize multiple benefits, including mutual respect for agency/jurisdictional authority, unified efforts, collective support with mutually beneficial financial outcomes. Geographically differing economic challenges, program performance, constituent demands and emerging technologies, issues faced by all Ohio's SWDs, dictate that regional concepts be explored.

Jurisdictional collaboration is not new. Medical, public safety, utilities, water/sewer, entertainment entities have all capitalized upon the beneficial dynamics of regionalization. Solid waste managers are similarly familiar as RCRA's Sub-Title D lined landfill mandates (late 1980's) and their subsequent waste reduction and recycling goals were all catalyst for the formation of Ohio's MSWD (HB 592) and similar governing agencies across the US. As such, by joining forces and economies of scale, communities have been able to explore best available technologies while implementing projects that individually would have been too expensive to develop for a single entity. Urban, rural plus small and large communities have benefited as costs and volume responsibilities are spread over a larger population of participants while educational, management and purchasing power are shared.

The District identified stakeholders in the region that may have a key interest and involvement in District programs, problems, and solutions.

- Mercer County Sanitary Engineer
 - Shared personnel and administrative management
 - Participation with annual Litter Collections
- Neighboring SWMD's (Van Wert, Darke, and Auglaize)
 - Regional Partnerships for HHW, Tire Collection, and other programming.
 - Partnership with Auglaize for recycling processing and drop off management.
- Mercer County Soil and Water Conservation District
 - Education and Outreach regarding composting
- Ohio State Extension Office
 - Pre-school to adult education and outreach regarding litter prevention and recycling
- Mercer County Sheriff
 - Illegal dumping investigation and enforcement
- Mercer County Health Department
 - Illegal dump clean up and enforcement
 - Vector and public health hazards related to improper waste management
- Mercer County Emergency Management Agency
 - Disaster clean up management
- Mercer County Township Association
 - Education, participation, and assistance with annual litter collections.
- Private service providers
 - Promotion of PAYT and recycling services

- Non-profit organizations
 - Reuse and food rescue programming
- Chamber of Commerce
 - Promotion of District business services and market development
- Ohio EPA
 - Materials Marketplace

Regional partnerships could help with costs and provide more opportunities for programs and promotions. Costs and convenient outlets are similar issues for neighboring SWMDs that partnerships could benefit including the close relationship with Auglaize County related to drop off recycling centers and processing.

Conclusions/Findings

The region has adequate capacity and infrastructure for managing trash and recyclables. Potential program opportunities include:

- Collaborate with Auglaize County District to secure plans for future programming and targeted education.
- Work regionally to promote food rescue, food banks and donation programs.
- The District could help bring together local and regional non-profits, SWMDs and other partners to discuss building a better food redistribution network.

H-11 DATA COLLECTION ANALYSIS

This analysis evaluates the District's current data collection efforts and identifies ways to improve its data.

Waste is generated by three sectors: residential, commercial, and industrial. Waste source reduced, recycled, composted, incinerated, and disposed are measured to establish a baseline and determine waste generation, and measure recycling rates. Collecting data is challenging due to a variety of factors and takes considerable time and effort to gather and analyze. Regardless, the primary objective of the District is to divert materials from landfills, therefore an accurate measurement of diversion from landfills is needed. The data collection process from beginning to end for each sector is described below.

Residential

The District gathers data from District collection of the curbside recycling bags sold and drop-off recycling service.

Commercial & Industrial Businesses

The District gathers data from District collection of commercial and industrial recycling services through surveying work. District contracts out surveying to collect data from larger businesses. Local haulers and processors are reticent to provide data to the District, so business surveys are necessary to meet Goal #2.

The District makes an effort to understand how materials are obtained and managed by entities that submit recycling information. The District also tries to identify if there are any materials that might be reported by more than one entity. The District also has a close relationship with Auglaize County that manages a portion of the drop off collections.

In 2020, the District added an online surveying option to reduce the use of paper surveys. In 2023, the District sent Annual District Report surveys to 366 businesses, 76 industries, and 13 brokers/processors resulting in 73 responses.

Conclusions/Findings

Overall, data collection is vital to measuring waste reduction and recycling rates. Potential program opportunities include:

- Target top 20 largest businesses and open conversations about their interest in recycling services and asking what materials they are recycling or would like to recycle.
- Survey phone follow-up efforts are critical to ensuring accurate and thorough data.
- Encourage Ohio Recycling, Chickasaw, OH to participate in the survey and share other data on volumes, haulers, and markets.
- Continue to expand the relationship with Maharg Transfer Station in order to acquire accurate recovery data.

H-12 EDUCATION/OUTREACH ANALYSIS

The 2020 State Plan goals restructured the education and awareness goals with the intention of creating minimum standards for outreach programming but still allow for flexibility for localized outreach and education. The 2020 State Plan refocused the general “awareness” of recycling to changing behavior through outreach. This analysis evaluates the SWMD’s existing education, outreach, and technical assistance efforts to determine:

- If the programs address all five target audiences (residents, schools, industries, institutions and commercial businesses, and communities and elected officials).
- Effectiveness and adequacy of programs.
- Strategy for incorporating Goal 4 into the programs.

Audiences

The 2020 State Solid Waste Management Plan established ten goals for District s to achieve. One of the goals requires that solid waste management District s (SWMDs) shall provide education, outreach, marketing, and technical assistance regarding reduction, recycling, composting, reuse, and other alternative waste management methods to identify target audiences using best practices. The District has five target audiences, including:

- Residents
- Schools
- Industries
- Commercial businesses and institutions
- Communities and elected officials

The following chart shows the targeted audience for each of the District’s existing programs:

Education/Outreach Program	Target Audience				
	Residents	Schools	Industries	Institutions & Commercial Businesses	Communities & Elected Officials
District Website and Facebook Page	X	X	X	X	X
Public, Elected Officials, and School Communication	X	X	X	X	X
Educational Presentations/Displays	X	X		X	X
HHW and Scrap Tire Education	X				X
Institutional and Commercial Solid Waste and Recycling Assessments and Technical Assistance				X	
Industrial Solid Waste and Recycling Assessments and Technical Assistance			X		
Materials Marketplace Referrals			X	X	

Existing Programs

District Website & Facebook Page

The District maintains a website that meets the requirements specified by Goal 3 of the 2020 State Plan. The website is a resource that provides much of the information that residents and educational institutions would seek. The website is updated as often as needed or at least annually. The District site is a county web address site maintained by the District Coordinator in partnership with the County Sanitary Engineer. The District website includes information on

upcoming recycling events, information on how to recycle, information about educational presentations, contact information, and related links. The District continues to monitor the success and any changes necessary for the website. The District website includes information on upcoming recycling events, information on how to recycle, information about the education specialist, a link to the Solid Waste Management Plan, contact information, and related links. The District continues to monitor the success and any changes necessary for the website.

www.mercercountyohio.org/county-services/solid-waste-management/

The District also maintains and regularly posts to their Facebook page with educational information and programming schedules:

<https://www.facebook.com/search/top?q=mercer%20county%20solid%20waste%20management%20District>

Comprehensive Resource Guide

The District publishes a resource guide that details the inventory of outlets available for recyclable materials. The resource guide is maintained on the website and on the District Facebook Page and is reviewed and updated regularly.

www.mercercountyohio.org/county-services/solid-waste-management/drop-off-locations/

Inventory

The District provides a complete infrastructure inventory within the solid waste management plan, which is updated every 5 years. In addition the District website maintains a limited inventory. Items on the website include:

- How to Recycle – Details of County Curbside Recycling Program
- HHW Programming Options
- Recycling Drop Off Locations
- FAQ's

Public Communication and Educational Presentations

Educational programs are specific to a target group and focus on what and how to recycle, why recycling and litter prevention is important and how waste affects our environment. Participants can enjoy hands-on activities and/or games and receive take-home information and items made from recycle materials.

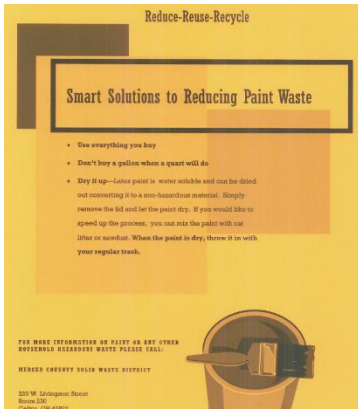
The District education specialist provides information and materials on closed loop recycling, buy recycled, and landfills at presentations throughout the District . In 2023, the Education Specialist made 26 presentations throughout the District reaching 600 students.



The District also works to inform the township trustees of upcoming recycling opportunities and litter cleanups happening in the District and their semi-annual meetings.

The District has traditionally participated in the County Fair hosting a booth where educational materials are handed out to residents and businesses. The District also expects to continue County Fair presentations on ion on backyard composting and managing yard waste.

The District also distributes a U.S. EPA produced brochure titled "Greenscaping".



HHW Education

Details about bi-annual HHW Collection events sponsored by the District are listed on the web page. Residents are encouraged to call the District for information.

A collage of informational graphics. On the left, a white box titled "What to do with your old tires" lists pre-approved whole tire projects such as "Crash bumpers", "Crash barriers at race tracks", "Rifle range backstops", "Agricultural use to hold down covers", and "To hold down tarps and covers at landfills". To the right, there are three blue boxes with white text providing contact information for the Mercer County Solid Waste Management District, Mercer County - Delina City Health Department, and Mercer County Soil & Water Conservation District. A large blue box on the far right says "SCRAP TIRES In Our Area" with an image of tires. At the bottom right, there is a logo for "EMERGO BELL" and "The Ohio Department of Natural Resources, Division of Recycling & Litter Prevention".

Scrap Tire Disposal

A brochure is available to educate the public on scrap tire disposal laws and the nuisance they can create if improperly disposed. The brochure was also available at the Health Department, the Farm Service Agency, the Commissioner's office, and the District office.

Residential Education and Outreach – Hard to Manage Wastes

Details of where residents may dispose of hard to manage and restricted waste streams are available by calling the District. The District advertised recycling locations for scrap tires, lead acid batteries, and used oil on the updated District website in 2023 in addition to the bi-annual HHW collection program.

Commercial Solid Waste and Recycling Assessments

The District provides resources on the website for institutions and commercial businesses. Technical assistance is provided by District staff upon request. Technical assistance includes instructions on use of the Ohio EPA Materials Marketplace, waste assessments, broker and hauler references, operational enhancements, and use of state grants available for market development and recycling equipment.

Recycling Assessments

The District provides resources on the website for the industrial sector. Technical assistance by District staff is provided upon request. Technical assistance includes instructions on use of the Ohio EPA Materials Marketplace, waste assessments, broker and hauler references, operational enhancements, and use of state grants available for market development and recycling equipment.

Materials Marketplace Referrals

The District provides technical details upon request to Ohio Materials Marketplace.

Elected Officials Education and Outreach

The District maintains close contact with local appointed and elected officials by providing updates on District programming and individual community recovery and participation statistics. The District will upon request present at public meetings to provide details and educational information to assist the communities in achieving their resource recovery goals. The District will also consider developing community specific web content that can be used to increase recycling collection participation and decrease contamination.

Behavior Change

All the District's education and outreach is designed to impact behavior change that supports the District's waste reduction and recovery goals. Specific targeted behavior changes include:

- Encouraging participation in the District's curbside and drop off recycling programming.
- Recycle Right - Understanding acceptable and unacceptable recyclables materials
- Encouraging Proper disposal of hard to recycle materials such as tires, HHW, e-waste, and batteries.
- Adopting a lifestyle that minimizes waste generation and includes environmentally friendly purchasing habits.

Conclusions/Findings

Possible opportunities include:

- Consider adding education resources for schools and businesses such as: how to waste audit guide, classroom lessons, workplace recycling guide, waste-free classroom, etc.
- Consider adding more waste reduction tips and guides for homes and businesses seeking a zero waste lifestyle.
- Educate residents on the importance of recycling right and keeping contamination out of the recycling stream for drop-off and curbside programs.
- Develop customizable materials that can be posted on community webpages and/or social media platforms that educate residents on allowable and unacceptable materials for curbside and drop-off recycling programs.
- Offer reduction tips on social media and the webpage.
- Outreach to multi-family housing landlords and property management companies to help establish or improve multi-family housing recycling programs.
- Provide resources for self-conducting waste-audits on the webpage.
- Online flyer samples provided to each political jurisdiction to customize their residential recycling program contact information details to clarify what is and is not recyclable.
- Continue the distribution of the Annual District Report to the County Commissioners to demonstrate the program implementation and performance for the previous
- The District will endeavor to monitor and update the site at least quarterly to contain accurate and up-to-date information at all times.
- The District will offer all political jurisdictions the opportunity to add the SWMD's website link to their home webpages and help to add community recycling information to their specific websites.
- The District will consider adding a Business content page which will include recycling resources such as the drop-off containers in the District that accept newspapers, Waste Audit How-To Guide and Steps to Better Business Recycling.

H-13 PROCESSING CAPACITY ANALYSIS

The purpose of this analysis is to evaluate the existing capacity for processing recovered materials. The analysis evaluates material recovery facilities (MRFs) in the District and surrounding areas. A MRF is a specialized facility that receives, separates, and prepares recyclable materials for marketing to end-user manufacturers.

Drop off residential and commercial curbside collection is processed by the Auglaize SMWD MRF located in St. Mary's, OH. Both residential and commercial curbside collection and drop-off materials are collected by Maharg Inc., but processing information is not available.

Ohio Recycling, Chickasaw, OH is the only recycling processor in the District . This facility accepts a wide range of materials from residential, commercial, and industrial sectors including aluminum, steel, cardboard, mixed paper, office paper, white goods, other metals, and other materials. Actual tonnages and participation from this facility are not available.

The District could rely on regional facilities to process recyclables including the Rumpke Dayton, Ohio Facility, which is in Montgomery County and Rumpke Cincinnati MRF, which is located in Hamilton County.

Rumpke's Dayton, Ohio facility is a Category III facility which pre-sorts, compacts, and transfers recyclables. This facility sorts out inbound materials, screening glass to send to a processor and sending the other materials to the Cincinnati MRF. Rumpke's Cincinnati facility processes 27 tons per hour. Rumpke processes a large range of materials including glass bottles & jars, aluminum & steel cans, plastic bottles, jugs & tubs, mixed paper, and cartons.

Conclusions/Findings

The District relies heavily on the partnership with Auglaize County to provide processing capacity but does have back up capacity available through regional MRFs. The District will explore expanding the partnership with the Auglaize District regarding education and outreach on accepted materials.

APPENDIX I: CONCLUSIONS, PRIORITIES, AND PROGRAM DESCRIPTIONS

A. Actions and Priorities

The current fifteen-year (2020 – 2034) Mercer County Solid Waste Plan was developed to meet the goals as established in the Ohio EPA Solid Waste management Plan Format 3.0. To fulfill the directives in Ohio Revised Code Section 3734.50, the SWMD's Plan must now demonstrate strategies and programs in place to address nine of the ten mandatory goals outlined in the new Plan Format 4.1.

This 2026 Mercer County Solid Waste Plan Update is prepared to comply with the current 2020 State Plan. Appendix K shows the SWMD's progress to meeting Goal 2 of the 2020 State Plan. To obtain approval from Ohio EPA for the solid waste management plan, SWMDs must demonstrate being able to achieve either Goal 1 or Goal 2. The District demonstrates Goal 2 by diverting 30% of residential and commercial waste exceeding the minimum 25% diversion requirement.

This Appendix describes the accomplishments of the strategies/programs and their future direction for the 2026 Plan using 2022 as the base line reference year.

Potential Actions

Appendix H evaluates the District's performance of strategies/programs in offering and maintaining services as outlined in the current plan. The process of the evaluation shows whether actual performance is what was expected or desired. If strategies/programs didn't perform as intended or challenges were identified, then suggestions were provided to strengthen programs, improve performance, and/or increase effectiveness. The list below is a quick summary of conclusions and findings found from the Appendix H evaluation.

Conclusions/Findings

The core of the District waste reduction programming is the success of the residential, commercial, and industrial recycling programs that yield a 30% recovery that exceeds the state minimum mandate of 25% recovery. This recovery has been accomplished with a carefully planned and financially sustainable educational and outreach program. However, the District's goal is to further increase recycling from all three sectors (residential, commercial, and industrial).

1. Actions (what could be addressed)

Appendix H evaluates the SWMD's performance of strategies/programs in offering and maintaining services as outlined in the 2020 Plan. The process of the evaluation shows whether actual performance is what was expected or desired. If strategies/programs didn't perform as intended or challenges were identified, then suggestions were provided to strengthen programs, improve performance, and/or increase effectiveness. The list below is a quick summary of conclusions and findings found from the evaluation.

A full list of what the District could do includes:

Category	List of Actions
Residential Sector Reduction and Recycling Programs	Leverage enhanced education and outreach through in-school programming, online District media communications, and distribution of shared content for publication on local communities' websites/social media.
	Continue to encourage participation in the curbside collection program with enhanced promotion of the cost savings from this PAYT program as described in Section H-5.
	Conduct awareness campaigns to targeted communities to communicate value of contracting for waste and recycling
	Consider stakeholder meetings with community leadership including township trustees and public service personnel, residents, and haulers to understand the issues preventing contracting of curbside services and to determine workable solutions
	Work with communities to develop suitable bid specifications for contracting for non-subscription curbside waste and recycling services
	Continue the District's practice of reviewing abuses of the drop-off program including signs noting who is and is not allowed to use the drop-offs, education on the convenience of the curbside bag system, and encouragement to townships to participate in the curbside bag system.
	Evaluate options of conducting regional cooperative contracts for multiple smaller villages and cities for purchasing curbside waste and recycling services.
Commercial/Institutional Sector Reduction and Recycling Programs	Update the website with a business tab with easy access to waste reduction information specific to this sector including how local businesses can explore and participate in the free on-line platform sponsored by Ohio EPA.
	Enhance the working relationship with the school systems and consider a survey to gather more information on what materials schools are currently recycling and what needs still exist.
	Promote and encourage commercial businesses to require their hauler to provide the tonnages of how much they recycle.
	Consider a recognition award for businesses that are participating in recycling programs. This would help encourage other surrounding businesses to become active in the program.
Industrial Sector Reduction and Recycling Programs	Update the website with an industry tab with easy access to waste reduction information specific to this sector including how local businesses can explore and participate in the free on-line platform sponsored by Ohio EPA
	Consider a recognition award for industries that are participating in recycling programs. This would help encourage other surrounding businesses to become active in the program.
	Continue to apply for Ohio EPA grants to help industries expand or implement recycling programs and market development opportunities.
	Promote and encourage industries to require their hauler to provide the tonnages of how much they recycle
Specific Waste Streams: Yard Waste, Food Waste, Fiber	Work with the communities with compost facilities to make sure residents are informed about the program offering/services. Encourage backyard composting in partnership with Ohio Cooperative Extension.
	Offer school administration and custodial staff education on food and yard waste recovery options.
	Boost outreach and education around backyard composting, smart landscaping, grass-cycling, and leaf mulching or mowing in place.
	Work with the communities with compost facilities to make sure residents are informed about the program offering/services.
	Focus on education and resources on the changes in the area's expansion of plastics recycling
	Support end market development through grants, business assistance, or other programs.

Category	List of Actions
Grants/Incentives	<p>Celina's PAYT program is effective at incentivizing diversion and encouraging recycling participation. This successful PAYT program could possibly be adopted by other Mercer County haulers and the District will continue to play a role in the potential promotion of this PAYT model.</p>
	<p>Grant support or other financial encouragement to communities are not viable strategies based on the limited resources available to the District. However, the District will continue to provide technical support for communities that apply for outside funding assistance.</p>
Restricted & Difficult to Manage Wastes	<p>The District will evaluate enhancing education on using less-harmful ingredients and more environmentally friendly products to minimize the cost of the bi-annual HHW collection events. The District will also continue to promote local outlets available for other difficult to manage waste such as: chargeable batteries, lead-acid batteries, tires, prescriptions, used motor oil, cell phones and electronics.</p>
	<p>The District will consider providing future grant funded District matched scrap tire round up events. Past scrap tire round ups were successful and effective at providing an affordable alternative to retail store tire fees.</p>
Special Programs, Enforcement, Clean Ups	<p>The District finds value and expects to continue special program activity funding for the Health Department monitoring of solid waste facilities and well testing.</p>
Financial	<p>The District has reacted to the closing of the Celina Landfill and has committed to a \$2.75/ton contract fee effective 1/1/28 that will maintain a fund balance equal to over two years of operating expenses.</p>
Education/Outreach	<p>Consider adding education resources for schools and businesses such as: how to waste audit guide, classroom lessons, workplace recycling guide, waste-free classroom, etc.</p>
	<p>Consider adding more waste reduction tips and guides for homes and businesses seeking a zero waste lifestyle.</p>
	<p>Educate residents on the importance of recycling right and keeping contamination out of the recycling stream for drop-off and curbside programs.</p>
	<p>Develop customizable materials that can be posted on community webpages and/or social media platforms that educate residents on allowable and unacceptable materials for curbside and drop-off recycling programs.</p>
	<p>Offer reduction tips on social media and the webpage.</p>
	<p>Outreach to multi-family housing landlords and property management companies to help establish or improve multi-family housing recycling programs.</p>
	<p>Provide resources for self-conducting waste-audits on the webpage.</p>
	<p>Online flyer samples provided to each political jurisdiction to customize their residential recycling program contact information details to clarify what is and is not recyclable. Continue the distribution of the Annual District Report to the County Commissioners to demonstrate the program implementation and performance for the previous</p>
Grants, Economic Incentives, Enforcement /Clean Ups, Market Development, Facilities	<p>Celina's PAYT program is effective at incentivizing diversion and encouraging recycling participation. This successful PAYT program could possibly be adopted by other Mercer County haulers and the District will continue to play a role in the potential promotion of this PAYT model.</p>
	<p>Grant support or other financial encouragement to communities are not viable strategies based on the limited resources available to the District. However, the District will continue to provide technical support for communities that apply for outside funding assistance</p>
	<p>Encourage industries to explore and participate in the free on-line platform sponsored by Ohio EPA. This OEPA Materials Marketplace allows businesses, manufacturers, non-profits, and other organizations to connect and find reuse and recycling solutions for their waste, byproducts, and surplus materials.</p>
	<p>Work with Auglaize County SWMD to secure plans for future programming and targeted education.</p>
Other Programs, Regional Cooperative, Surveys	<p>Work regionally to promote food rescue, food banks and donation programs. The SWMD could help bring together local and regional non-profits, SWMDs and other partners to discuss building a better food redistribution network.</p>
	<p>Encourage Ohio Recycling, Chickasaw, OH to participate in the survey and share other data on volumes, haulers, and markets.</p>

Category	List of Actions
	Work with Auglaize County SWMD to secure plans for future programming and targeted education.
	Continue to expand the relationship with Maharg Transfer Station in order to acquire accurate recovery data.
	Target top 20 largest businesses and open conversation if they have recycling services and asking what materials they are recycling or would like to recycle.

The list of actions does not commit the District to undertake every specific action. Strategies and actions to streamline operations and continue high diversion were discussed, identified, and prioritized.

2. Priorities

Priority areas to focus efforts in the 2024 Plan include:

Priority Program	Priority Area
Processing Capacity	Collaborate with Auglaize County SWMD to secure plans for future programming and targeted education.
Financial	In response to the closing of the Celina Landfill, implement a \$2.75/ton contract fee effective 1/1/28. Annually review actual expenses, revenues, and fund balance to determine need to accelerate contract fee implementation schedule.
Website	Update and enhance website and social media presence.

Strategies/programs being implemented currently address these priority areas. However, based on the evaluation, the programs can adapt specific actions to continue to progress towards the broad goal.

B. Programs

1. Residential Recycling Infrastructure

Curbside Recycling Services

Status	Name	Start Date	End Date	Goal
Non-Subscription Curbside				
Existing	None	Existing	Ongoing	1, 2
Subscription Curbside				
Existing	Celina City	Existing	Ongoing	1, 2
Existing	Coldwater Village	Existing	Ongoing	1, 2
Existing	St. Henry Village	Existing	Ongoing	1, 2
Existing	Fort Recovery Village	Existing	Ongoing	1, 2

Private haulers operate dual-stream, subscription curbside recycling programs in the following communities: Celina, Coldwater, Fort Recovery, and St. Henry.

Subscription curbside recycling means that residents have to opt-in or pay additional fees to participate.

Subscription curbside recycling is provided to all residents in single-family homes who purchase recycling bags at local businesses for a set amount. Residents separate their fiber recycling and commingled container recycling (dual stream) in two bags for curbside collection.

Drop-off Recycling Services

Status	Name	Start Date	End Date	Goal
Full-Time, Urban Drop-offs				
Existing	Jefferson Township/Green Business Solutions	Existing	Ongoing	1, 2
	Dumpster outside building Monday-Friday 9AM- 3PM			
Part-Time, Urban Drop-offs				
None	None			
Full-Time, Rural Drop-offs				
Existing	Burkettsville Village Granville Township Church St., Burkettsville, OH	Existing	Ongoing	1, 2
	Alley Cat Trailer transported by the Village to Ohio Recycling			
Existing	Chickasaw Village – Ohio Village 7837 State Route 274 Chickasaw, OH 45826 Ohio Recycling	Existing	Ongoing	1, 2
	MRF Public Drop Off Monday-Friday 8:30 a.m. to 4:30 p.m. Saturday 8:00 a.m. to 11:30 a.m.			
Existing	St. Henry’s Village – St. Henry High School transported to Ohio Recycling	Existing	Ongoing	1, 2
	Alley Cat Trailer transported by the school			
Existing	Franklin Township Zuma Park	Existing	Ongoing	1,2
	24/7 access. Dumpsters picked up by the Auglaize County SWMD			
Part-Time, Rural Drop-offs				
Existing	Rockford Village – Parkway High School	Existing	Ongoing	1,2
	400 Buckeye Street Rockford, OH 45882 Dumpsters picked up by the Auglaize County SWMD Open to the public on the 3rd Saturday of the month 9:00 a.m. to 12:00 p.m.			

There are four full time rural drop offs, one part time rural drop off, and one full time urban drop off. Material collected from the majority of drop-offs is processed at private material recovery facilities (MRFs) and at the Auglaize County Material Recovery Facility. Drop-off tonnage from residential sources totaled 75 tons for full time sites and 53 tons for the part time site.

The District monitors participation in the drop-off program to identify whether any sites should be merged. In 2022, no site mergers occurred. One new site was added August 2022 in Franklin Township.

2. Residential Sector Reduction and Recycling Programs

Status	Name	Start Date	End Date	Goal
Existing	Curbside Recycling Initiatives	Existing	Ongoing	1,2
	Maintain curbside recycling programs for existing curbside programs including analysis, status, and assistance.			
New	Curbside Recycling Promotion	2025	Ongoing	3, 4
	Initiate awareness campaigns to targeted communities to communicate value of contracting for waste and recycling Curbside Recycling Expansion Issues. Promotion also includes stakeholder meetings with community leadership including township trustees and public service personnel, residents, and haulers to understand the issues preventing contracting of curbside services and to determine workable solutions including the value of PAYT.			
Existing	Curbside Recycling Cooperatives	Existing	Ongoing	1,2 3, 4

Curbside Recycling Cooperatives - Evaluate options of conducting regional cooperative contracts for multiple smaller villages and cities for purchasing curbside waste and recycling services				
Existing	Drop Off Efficiency and Operational Assistance	Existing	Ongoing	4
Conduct review of all drop offs to identify illegal dumping and contamination and provide solutions to abate issues including signage, education, and operational changes.				
New	Enhanced Education and Outreach	2024	Ongoing	3, 4
Leverage enhanced education and outreach through in-school programming, online District media communications, and distribution of shared content for publication on local communities' websites/social media to increase participation, recovery, and decrease contamination.				

3. Commercial/Institutional Sector Reduction and Recycling Programs

Status	Name	Start Date	End Date	Goal
Existing	Commercial Sector Technical Assistance	Existing	Ongoing	3, 4
Offer of technical assistance to commercial business and institutional sector. Assistance could include assistance with grants, waste audits, recycling assessments, recycling programming, and collection options.				
Existing	Paper Shredding	Existing	Ongoing	2
Provide co-sponsored paper shredding event annually.				
Existing	School Recycling	Existing	Ongoing	2
Leverage enhanced working relationship with the school systems to continue or expand collection at Parkway, St. Henry recycling program & Coldwater schools and potentially other school systems.				
Existing	County Office Recycling	Existing	Ongoing	3, 4
Continued collection of cardboard, mixed paper, aluminum, ferrous metals, non-ferrous metals, and plastic from various county offices.				
New	Recognition Award	2025	Ongoing	3, 4
Design a recognition award for businesses that are participating in recycling programs. This would help encourage other surrounding businesses to become active in the program.				
New	OEPA Materials Marketplace Promotion	2025	Ongoing	2, 4
Include on the business website tab details on how local businesses can explore and participate in the free on-line platform sponsored by Ohio EPA.				

4. Industrial Sector Reduction and Recycling Programs

Status	Name	Start Date	End Date	Goal
Existing	Industrial Sector Technical Assistance	Existing	Ongoing	3,4, 5
Offer of technical assistance to industrial sector. Assistance could include assistance with grants, waste audits, recycling programming, and collection options.				
New	Recognition Award	2025	Ongoing	2, 4, 5
Design a recognition award for businesses that are participating in recycling programs. This would help encourage other surrounding businesses to become active in the program.				
New	OEPA Materials Marketplace Promotion	2025	Ongoing	1, 5
Include on the business website tab details on how local businesses can explore and participate in the free on-line platform sponsored by Ohio EPA.				

5. Restricted & Difficult to Manage Wastes, Special Collection Events

Status	Name	Start Date	End Date	Goal
Existing	Bi-Annual HHW Collection Event	Existing	Ongoing	2, 4
<p>The SWMD offers an bi-annual electronic collection event. Items are typically sent to Veolia. Materials collected include: pesticides, flammables, corrosive acids, flammable paints and aerosols, solvents and oils, poisons, mercury, fluorescent lamps, batteries, glues, and fire extinguishers. The District may consider annual HHW collection events based on the availability of future funding.</p>				
Existing	Restricted/Difficult to Manage Wasted: Used Oil, Scrap Tires, Appliances, E-Waste	Existing	Ongoing	2, 4
<p>Collection of hard to recycle waste including used oil is available at the bi-annual District HHW collection events. The District also publishes and advertises education materials on the website including retail and private locations where residents can take hard to recycle or restricted waste streams including tires, appliances, e-waste and other difficult to manage wastes. The District periodically holds tire amnesty events and will consider future events based on the availability of grants and District funding.</p>				
Existing	Lead Acid Batteries.	Existing	Ongoing	2, 4
<p>Ohio Recycling runs a year-round buyback program for lead acid batteries. The District advertised on the website retailers that accepted lead-acid batteries. Lead-acid batteries are also accepted at the District's HHW collection events, which are held in even-numbered years</p>				
New	District Yard and Food Waste Management Promotion	2025	Ongoing	2, 4
<p>The District will consider a more active role in and yard and food waste management by offering school administration and custodial staff education on food and yard waste recovery options. The District will also boost outreach and education around backyard food and yard composting, smart landscaping, grass-cycling, and leaf mulching or mowing in place.</p>				
Existing	Yard Waste Collection from Municipalities/Private Haulers	Existing	Ongoing	2, 4
<p>Yard waste management is decentralized. Collection or drop-off opportunities are made available by some cities, villages, and townships. Either the public entity provides the service or contracts with a private business/hauler. Collection frequency varies (each city or village maintains their own level of service list). Five municipalities, Celina, Coldwater, St. Henry, Fort Recovery, and Chickasaw, provide some form of curbside yard waste pick-up. In the reference year, Celina provided their residents the opportunity to place limbs and brush at the curb utilizing a private hauler, Maharg, to haul materials. The Village of Fort Recovery also provides limb and brush curbside pickup collected by the Village. The District will also investigate the Wenning Poultry Farm as a viable yard or food waste composting option.</p>				

6. Education/Outreach

Status	Name	Start Date	End Date	Goal
Existing	Yard Waste Information	Existing	Ongoing	2, 3,4
The District will continue to host a display at the County Fairgrounds which presents information on backyard composting and managing yard waste. The District also distributes a U.S. EPA produced brochure titled "Greenscaping". These brochures were also available at the District office.				
Existing	HHW and Hard to Manage/Restricted Waste Streams	Existing	Ongoing	3, 4, 6
The District publishes and advertises education materials on the website including HHW events, retail, and private locations where residents can take hard to recycle or restricted waste streams including tires, appliances, e-waste and other difficult to manage wastes. The District will include education on less hazardous options to traditional HHW.				
Existing	Educational Presentations/Displays	Existing	Ongoing	3, 4
The District will continue to participate at the County Fair in August of each year including a booth where educational materials are handed out to residents and businesses. The District is also available to give a presentation at the fair about recycling.				
New	District Website and Social Media Enhancement	2025	Ongoing	3, 4
The SWMD maintains a website meeting the requirements prescribed by Goal 3 of the 2020 State Plan. The site promotes recycling and includes locations where materials may be taken and information about the Education and Awareness Program.				
The website has the essential information but could improve ease of navigability. The District will endeavor to monitor and update the site at least quarterly to contain accurate and up-to-date information at all times and offer all political jurisdictions the opportunity to add the SWMD's website link to their home webpages and help to add community recycling information to their specific websites.				
The District will consider adding a Business content page which will include recycling resources such as the drop-off containers in the District that accept newspapers, Waste Audit How-To Guide and Steps to Better Business Recycling.				
The District will use the website and social media to share details of the Recycle Right Campaign including the list of correct materials, and the local recycling opportunities				
The District will post regular social media updates on recycling tonnages and achievements from the campaign.				
To increase recycling program credibility and value - The District will include in their social media campaign photos of baled recycled materials, and examples of consumer items that are made from recycled material similar to those collected in Mercer County. Non-participants will be provided with regular details on PAYT savings resulting from local resident testimonials. The District will evaluate methods to target this audience. Participating residents and commercial outlets will be encouraged to share and like Recycle Right messages in order to maximize message distribution, impact, and behavior changes.				
The District will reach out to communities to ensure each individual community website has current updates and that each community social media pages are current and feature Recycle Right messaging. Communities will be encouraged to include recycling promotion and PAYT opportunities. The goal will be to have all major community websites updated within a two year period.				
The District will work with the Mercer County Engineers Office to promote resource conservation life style and behavioral changes				
Existing	Adult and School Education and Outreach	Existing	Ongoing	3, 4, 6
The District works with the education specialist to provide information and materials upon request on closed loop recycling, buy recycled, and landfills at adult events and school presentations throughout the District. The District will consider adding education resources for schools and businesses such as: how to waste audit guide, classroom lessons, workplace recycling guide, waste-free classroom, etc.				
Existing	Elected Officials Education & Outreach	Existing	Ongoing	3, 4

Status	Name	Start Date	End Date	Goal
	The township trustees are informed of the upcoming recycling opportunities and litter cleanups happening in the district and their semi-annual meetings. District staff will upon request present at individual city, township, or village public meetings.			
New	Residential Education and Outreach: Yard and Food Waste	2025	Ongoing	3, 4
	Boost outreach and education messaging on social media and around backyard composting, smart landscaping, grass-cycling, and leaf mulching or mowing in place.			
Existing	Commercial/Institutional Education and Outreach	Existing	Ongoing	3, 4
	The District will continue to provide general technical assistance: answer questions on solid waste management issues, provide resources on recycling and solid waste management. The District provides contacts to entities that can assist them with their recycling needs, including Ohio Recycling and Auglaize Co. SWMD.			
Existing	County Office Recycling Program	Existing	Ongoing	3, 4
	The District provides the Annual District Report to the County Commissioners to demonstrate the program implementation and performance for the previous year.			
Existing	Scrap Tire Education	Existing	Ongoing	3, 4
	The District provides educational information to encourage residents to contact local tire dealers that accept scrap tires for a fee. A brochure is also distributed by the District with this information. The brochure was also available at the Health Department, the Farm Service Agency, the Commissioner's office, and the District office.			
New	Residential Education Webinar and Extended Outreach	2025	Ongoing	3, 4
	The District will enhance the education and outreach with a webinar and/or public meetings at local libraries with survey of hands on understanding of basic waste reduction strategies.			

7. Grants, Economic Incentives, Market Development, Facilities

Status	Name	Start Date	End Date	Goal
Existing	Health Department Funding	Existing	Ongoing	2, 4
	The District provides financial assistance to the health department for landfill inspections and well testing. Inspections include the Celina Landfill during the post closure process, the Maharg Transfer Facility, and the Liberty Environmental Storage Facility.			
Existing	Plan Preparation, Implementation and Monitoring	Existing	Ongoing	1, 10
	The District will continue to monitor the plan implementation process, and complete annual District reports based on survey work and programming status.			
New	Recognition Award	2025	Ongoing	3, 4
	Include on the business website tab details on how local businesses can explore and participate in the free on-line platform sponsored by Ohio EPA.			
Existing	OEPA Materials Marketplace Promotion	Existing	Ongoing	3, 4
	The District has developed materials on "closed loop recycling" and incorporates "Buy Recycled" into education programs.			
Existing	Other Facilities	Existing	Ongoing	2, 4
	The District has a relationship with facilities located in the District that either support or play an active role in management of solid waste including Auglaize County that provides some processing and collection services. The District will continue to expand the relationship with Maharg Transfer Station in order to acquire accurate recovery data.			
New	Other Facilities	2025	Ongoing	2
	The District will collaborate with Auglaize County SWMD to secure plans for future programming and targeted education			

8. Enforcement & Clean-up

Status	Name	Start Date	End Date	Goal
Existing	Roadside Litter Collection Program	Existing	Ongoing	None
The District collaborates annually with the Mercer County Engineers and the Mercer County Township Trustees to conduct a Spring Roadside Litter Cleanup.				

9. Other Programs

Status	Name	Start Date	End Date	Goal
New	Food Waste Diversion	2025	Ongoing	2, 4
The District will consider a campaign to work regionally to promote food rescue, food banks and donation programs. The District will also consider a program to bring together local and regional non-profits, SWMDs and other partners to discuss building a better food redistribution network.				

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

A. Residential Sector Opportunity to Recycle in the Reference Year

Goal 1: Recycling Infrastructure
 The SWMD shall ensure adequate infrastructure to give residents and commercial businesses opportunities to recycle solid waste.

Table J-1 Opportunity to Recycle

ID #	Mercer	2021		2025		2029		2034		2039	
	Name of Community	Pop.	Pop. Credit	Pop.	Pop. Credit	Pop.	Pop. Credit	Pop.	Pop. Credit	Pop.	Pop. Credit
Non-subscription curbside											
NSC1	None	0	0	0	0	0	0	0	0	0	0
Subscription curbside											
SC1	Celina City	10,881	2,720	10,988	2,747	11,010	2,752	10,957	2,739	10,866	2,716
SC2	Coldwater Village	4,705	1,176	4,751	1,188	4,761	1,190	4,738	1,184	4,698	1,175
SC3	St. Henry Village	2,614	654	2,640	660	2,645	661	2,632	658	2,610	653
SC4	Fort Recovery Village	1,478	370	1,493	373	1,496	374	1,488	372	1,476	369
Full-time, urban drop-off											
FTU1	Jefferson Township	13,751	5,000	13,887	5,000	13,914	5,000	13,847	5,000	13,732	5,000
Part-time, urban drop-off											
PTU1	None										
Full-time, rural drop-off											
FTR1	Burkettsville Village (Granville township)	4,223	2,500	4,265	2,500	4,273	2,500	4,252	2,500	4,217	2,500
FTR2	Chickasaw Village - Ohio Recycling (Marion township)	3,336	2,500	3,369	2,500	3,376	2,500	3,359	2,500	3,331	2,500
FTR3	St. Henry Village - St. Henry High School (Granville township)	4,223	2,500	4,265	2,500	4,273	2,500	4,252	2,500	4,217	2,500
FTR4	Franklin Township, Zuma Park (Franklin township)	2,536	2,500	2,561	2,500	2,566	2,500	2,554	2,500	2,532	2,500
Part-time, rural drop-off											
PTR1	Rockford Village - Parkway High School (Dublin township)	2,057	2,500	2,077	2,500	2,081	2,500	2,071	2,500	2,054	2,500
Total County Population		42,412		42,831		42,914		42,707		42,352	
Total Population Credit		22,420		22,468		22,478		22,454		22,413	
Percent of Population		53%		52%		52%		53%		53%	

Residential infrastructure the SWMD credits to moving toward Goal 1 includes non-subscription curbside recycling and part-time urban and rural drop-offs. The SWMD is using the standard demonstration established in the 2020 State Plan to show its efforts to meet Goal 1. Demonstration involves assigning population credits to the

opportunities. Generally, the most convenient programs that serve the largest populations receive the most population credits.

Non-subscription curbside recycling programs credit the entire population of a jurisdiction that is served by a qualifying non-subscription curbside program toward the population that has the opportunity to recycle. The following five minimum materials are collected: corrugated cardboard, mixed paper, steel containers, plastic containers, and wood.

Drop-offs, as demonstrated in this Plan Update, assign default population credit if the drop-offs: collect at least five of the materials listed in the Format 4.1 Appendix J Reference Table A; easily accessible to residents; meet minimum capacity standards; have adequate signage; and meets the demand of the population. The default population credit for part-time urban drop-offs is 2,500. The following five minimum materials are collected: corrugated cardboard, mixed paper, steel containers, plastic containers, and wood. Each part-time drop-off is manned at least 4 hours, monthly.

Format 4.1 limits the credit for infrastructure in a community to the population of an entire community, up to and including the entire credit for a drop-off that would be needed to achieve providing 100% of the residential population with access to recycling infrastructure. This limit does not affect the access credit demonstration for the SWMD.

The SWMD did not achieve Goal 1 in the reference year and will not achieve Goal 1 throughout the planning period as shown in Table J-1.

Format 4.1 provides alternate demonstrations for achieving Goal 1 requiring completion of Tables J-2 or J-3. The SWMD demonstrated achieving Goal 1 using the default population credits thus Tables J-2 and J-3 are not used.

B. Commercial Sector Opportunity to Recycle

Table J-4 Demonstration of Commercial Opportunity to Recycle

Service Provider	Type of Recycling Service Provided	Corrugated Cardboard	Mixed Paper	Steel Containers	Plastic Containers	Wood
Mercer						
Republic	Curbside/Drop-off	✓	✓	✓	✓	
Ohio Recycling	Curbside/Drop-off	✓	✓	✓	✓	
Kamps Pallets Inc.	Pallet Recycling					✓

Source(s) of Information: District programming

Commercial infrastructure the SWMD credits to achieving Goal 1 includes recycling service providers/haulers that offer collection services to commercial/institutional generators throughout the county and buybacks operations/scrap yards located within the county. The following five minimum materials are collected: corrugated cardboard, mixed paper, steel containers, plastic containers, and wood.

C. Demonstration of Other Requirements for Achieving Goal 1

1. Residential/Commercial Waste Reduction and Recycling Rate

According to Goal 1 of the 2020 State Plan, the District must demonstrate meeting at least 80% of its residential population in each county and ensure that commercial generators have access to adequate recycling opportunities. Tables J-1 and J-4 respectively show that the District does not yet meet Goal 1.

The District will continue to strive towards Goal 1 and meet Goal 2 with a 25 percent residential/commercial waste reduction and recycling rate. Appendix K calculates the residential/commercial solid waste reduction and

recycling rate for the reference year and the planning period. The reference year rate is 29.5 percent and will reach 32 percent by the end of the planning period.

2. Industrial Waste Reduction and Recycling Rate

In format 4.1, there is no requirement to achieve an industrial waste reduction and recycling rate in the reference year or will achieve annual increases in the reduction and recycling rate during the planning period. Appendix K calculates the industrial solid waste reduction and recycling rate for the reference year and the planning period. The reference year rate is 90 percent.

3. Encouraging Participation

The SWMD will encourage residents and commercial generators to participate in available recycling infrastructure. Programs include:

- District website: Listing of available services
- Recycling Drop Off Sites available to residents, commercial, and industrial users
- Residential and Commercial curbside collection services and PAYT opportunities.
- Industrial recycling collection and specialty waste collection programs such as pallet collection.

Appendices I and L provide more explanation on outreach/education programs planned for this planning period.

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

A. The SWMD is demonstrating compliance with Goal 2.

Goal 2: Waste Reduction and Recycling Rates
 The SWMD shall reduce and recycle at least 25% of the solid waste generated by the residential/commercial sector.

Table K-1 Residential Commercial Annual Rate of Waste Reduction

Year	Population	Recycled	Disposed	Total Generated	Waste Reduction & Recycling Rate (%)	Per Capita Waste Reduction & Recycling Rate (ppd)
2022	42,412	8,123	36,759	44,882	18.1%	1.05
2023	42,412	10,821	33,055	43,876	24.7%	1.40
2024	42,390	12,059	33,038	45,097	26.7%	1.56
2025	42,368	12,112	33,021	45,133	26.8%	1.57
2026	42,831	12,154	33,382	45,535	26.7%	1.55
2027	42,852	12,182	33,398	45,580	26.7%	1.56
2028	42,873	12,211	33,414	45,625	26.8%	1.56
2029	42,893	12,240	33,430	45,671	26.8%	1.56
2030	42,914	12,271	33,446	45,717	26.8%	1.57
2031	42,935	12,301	33,463	45,764	26.9%	1.57
2032	42,878	12,333	33,418	45,751	27.0%	1.58
2033	42,821	12,365	33,374	45,738	27.0%	1.58
2034	42,764	12,397	33,329	45,727	27.1%	1.59
2035	42,707	12,430	33,285	45,715	27.2%	1.59
2036	42,650	12,464	33,241	45,705	27.3%	1.60
2037	42,576	12,499	33,183	45,682	27.4%	1.61
2038	42,501	12,534	33,125	45,659	27.5%	1.62
2039	42,427	12,570	33,067	45,637	27.5%	1.62
2040	42,352	12,607	33,009	45,616	27.6%	1.63

Source:
 Population – Appendix C, Table C-1
 Recycled – Appendix E, Table E-4, and E-5
 Disposed – Appendix D, Table D-3

Sample Calculation:

Total Generated = Recycled + Disposed

Waste Reduction & Recycling Rate = Recycled / Total Generated

Per Capita Waste Reduction & Recycling Rate = (Recycled x 2000 lbs./ton) / (Population x 365 days)

The District achieved a 24.7% residential/commercial waste reduction and recycling rate in 2023 which is expected to increase to 26.7% in year 2024 which exceeds the 25% state goal. The District will continue to meet the 25% state goal with a projected rate of 27.6% by the end of the planning period.

Table K-2 Industrial Annual Rate of Waste Reduction

Year	Waste Reduced and Recycled (tons)	Waste Disposed (tons)	Waste Generated (tons)	Waste Reduction and Recycling Rate (percent)
2022	60,918	6,421	67,339	90%
2023	60,918	6,421	67,339	90%
2024	60,918	6,421	67,339	90%
2025	60,918	6,421	67,339	90%
2026	60,918	6,421	67,339	90%
2027	60,918	6,421	67,339	90%
2028	60,918	6,421	67,339	90%
2029	60,918	6,421	67,339	90%
2030	60,918	6,421	67,339	90%
2031	60,918	6,421	67,339	90%
2032	60,918	6,421	67,339	90%
2033	60,918	6,421	67,339	90%
2034	60,918	6,421	67,339	90%
2035	60,918	6,421	67,339	90%
2036	60,918	6,421	67,339	90%
2037	60,918	6,421	67,339	90%
2038	60,918	6,421	67,339	90%
2039	60,918	6,421	67,339	90%
2040	60,918	6,421	67,339	90%

Source:

Recycled – Appendix F, Table F-4, and F-5

Disposed – Appendix D, Table D-3

Sample Calculation:

Total Generated = Recycled + Disposed

Waste Reduction & Recycling Rate = Recycled / Total Generated

Adoption of the 2020 State Plan removed the 66% industrial reduction and recycling rate goal. As shown in Table K-2, the District demonstrates a diversion rate of 90%.

Table K-3 Annual Rate of Waste Reduction: Total Solid Waste

Year	Waste Reduced and Recycled (tons)	Waste Disposed (tons)	Waste Generated (tons)	Waste Reduction and Recycling Rate (percent)
2022	69,041	43,180	112,221	62%
2023	71,739	39,476	111,215	65%
2024	72,977	39,459	112,436	65%
2025	73,030	39,442	112,472	65%
2026	73,072	39,802	112,874	65%
2027	73,100	39,819	112,919	65%
2028	73,129	39,835	112,964	65%
2029	73,158	39,851	113,009	65%
2030	73,189	39,867	113,056	65%
2031	73,219	39,884	113,103	65%
2032	73,251	39,839	113,090	65%
2033	73,283	39,795	113,077	65%
2034	73,315	39,750	113,065	65%
2035	73,348	39,706	113,054	65%
2036	73,382	39,661	113,044	65%
2037	73,417	39,603	113,020	65%
2038	73,452	39,545	112,998	65%
2039	73,488	39,487	112,976	65%
2040	73,525	39,429	112,954	65%

Recycled – Appendix F, Table F-4 and F-5 and Appendix E, Table E-4, and E-5

Disposed – Appendix D, Table D-3

Sample Calculation:

Total Generated = Recycled + Disposed

Waste Reduction & Recycling Rate = Recycled / Total Generated

The combined Waste Reduction and Recycling Rate for residential/commercial and industrial sectors is shown in Table K-3. For the reference year, the overall rate was 64% and is projected to increase to 66% by the end of the planning period.

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

A. Minimum Required Education Program

Goal 3: Waste Reduction and Recycling Rates The SWMD shall provide the following required programs:

- A website;
- A comprehensive resource guide;
- An inventory of available infrastructure; and
- A speaker or presenter.

1. Website

Name	Start Date	End Date	Goal
District Website and Social Media Presence	ongoing	ongoing	3 and 4

The District maintains a website that meets the requirements specified by Goal 3 of the 2020 State Plan. The website is a resource that provides much of the information that residents and educational institutions would seek. The website is updated as often as needed or at least annually. The District site is a county web address site maintained by the District Coordinator in partnership with the County Sanitary Engineer. The District website includes information on upcoming recycling events, information on how to recycle, information about educational presentations, contact information, and related links.

The District continues to monitor the success and any changes necessary for the website. During the course of the regular update, the District will review and evaluate other District’s websites to see what works well for other Districts and also consult with them for their feedback on their respective websites. The District website includes information on upcoming recycling events, information on how to recycle, information about the education specialist, a link to the Solid Waste Management Plan, contact information, and related links. The District continues to monitor the success and any changes necessary for the website

www.mercercountyohio.org/county-services/solid-waste-management/

Mercer County Solid Waste Management District Website:

<https://www.mercercountyohio.org/county-services/solid-waste-management/>

The District also maintains and regularly posts to the Facebook page with educational information and programming schedules:

<https://www.facebook.com/search/top?q=mercer%20county%20solid%20waste%20management%20district>

2. Resource Guide

Name	Start Date	End Date	Goal
Resource Guide	ongoing	ongoing	3 and 4

The District publishes a resource guide that details the inventory of outlets available for recyclable and hard-to-recycle materials. The resource guide is maintained on the website and on the District Facebook Page and is reviewed and updated regularly. The District expects to conduct regular enhancements to the Resource Guide including strategies for managing the scrap tires, yard waste, lead-acid batteries, household hazardous waste and obsolete/end-of-life electronic devices in compliance with Goal 6.

www.mercercountyohio.org/county-services/solid-waste-management/drop-off-locations/

3. Infrastructure Inventory

Name	Start Date	End Date	Goal
Inventory	ongoing	ongoing	3 and 4

The District provides a complete infrastructure inventory within the solid waste management plan, which is updated every 5 years. In addition the SWMD website maintains a limited inventory. Items on the website include:

- Biennial Household Hazardous Waste and Steel Drop-Off Day
- How to Recycle – Details of County Curbside Recycling Program
- Recycling Drop Off Locations

4. Speaker/Presenter

Name	Start Date	End Date	Goal
Educational Specialist	ongoing	ongoing	3 and 4

The District works with an education specialist in partnership with The Ohio State Extension Office. Presentations are free of charge and can be adapted for pre-school to adult programs. The educational programs helps groups learn what and how to recycle, why recycling and litter prevention is important and how waste affects our environment. The education specialist also provides information and materials on closed loop recycling, buy recycled, and landfills at presentations.

B. Outreach and Education – Outreach Plan and General Education Requirements

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 target audiences using best practices.

As prescribed by the 2020 State Plan, each SWMD will provide education, outreach, marketing, and technical assistance regarding education and reuse through an outreach and marketing plan. Per *Format 4.1* the outreach and marketing plan needs to have the following components:

1. Five target audiences as identified in Ohio EPA Format 4.1.
2. Follow basic best practices when developing and selecting outreach programs.
3. Outreach priority.
4. Education and outreach programs to all appropriate audiences in the context of the priority using social marketing principles and tools.

The outreach and marketing plan needs to demonstrate these best practices

- Demonstrate that the SWMD will address all of the five target audiences;

- Explain how the SWMD will align its outreach and education programs with recycling opportunities (both existing and needed); and
- Explain how the SWMD will incorporate principles and tools for changing behavior into the outreach and marketing plan.

To align with *Format 4.1* the SWMD’s existing programs were organized by target audience. Some of the existing SWMD programs cross several target audiences.

Education/Outreach Program	Target Audience				
	Residents	Schools	Industries	Institutions & Commercial Businesses	Communities & Elected Officials
District Website and Facebook Page	X	X	X	X	X
Public and Commercial Communication/Webinars/Surveys	X	X	X	X	X
Educational Presentations/Displays	X	X		X	X
HHW Education	X				X
Scrap Tire Disposal Education	X				X
Yard Waste Education	X				X
Commercial Solid Waste and Recycling Assessments	X			X	
Industrial Solid Waste and Recycling Assessments			X		
Materials Marketplace Referrals			X	X	

Each SWMD’s outreach and marketing plan must address, at a minimum, five target audiences (residents, schools, industries, institutions and commercial businesses, communities, and elected officials).

The District describes in Appendix O the committed funding dedicated throughout the entire planning period to ensure compliance with Goal 4 and recognizes the statutory responsibility to conduct the programming necessary to continue compliance during the planning period.

1. Residents

Program	Start Date	End Date	Goal
District Website	Ongoing	Ongoing	3 & 4
Public Communication	Ongoing	Ongoing	4
Educational Presentations/Displays/Webinars	Ongoing	Ongoing	3 & 4
HHW Education	Ongoing	Ongoing	4
Scrap Tire Disposal Education	Ongoing	Ongoing	4
Yard Waste Education	Ongoing	Ongoing	4

Needs of the Audience: The District has identified that a web presence is an effective affordable strategy to reach residents and other stakeholders. The District has a regularly refreshed webpage and uses it to share information such as collection events and general District programming options. The District will continue to use the website as a tool to provide information to residents.

Behavior Change: In the District’s advancement of a campaign to recycle right, specific actions will be addressed for residents to impact behavioral change. For example, adding a small recycling bin inside the house, visiting a recycling drop-off once per week, participating in collection events, printing District flyers to distribute at special events. The District may consider a corresponding advertising program with similar messaging based on funding availability.

Measuring Outcomes: The District does obtain some limited recycling tonnage for the curbside and drop-off programs. The number of recycling bags solid is also an indicator of program performance. The District may use statistics of interactions from website traffic to ascertain what topics are of most interest. Show of hands and other survey techniques are expected to be used to ascertain the based of knowledge from the targeted audience and determine the enhancement of future education to impact behavior change.

Consistent/Frequent Messaging: All promotional material will have the same logo and branding to represent the District. Messages will be kept simple, concise, and repetitive for residents to remember the main message being communicated.

Evaluating Results: The District is able to analyze recycling tonnages for the curbside and drop-off programs.

2. Schools

Program	Start Date	End Date	Goal
District Website	Ongoing	Ongoing	3 & 4
Public Communication	Ongoing	Ongoing	4
Educational Presentations/Displays	Ongoing	Ongoing	3 & 4

Needs of the Audience: The education specialist has created a curriculum that provides information and materials on closed loop recycling, buy recycled, and landfills. The lessons are adjusted to ensure that each is appropriate for students in preschool through adult age and are hands-on.

Behavior Change: The District educator’s effectiveness will be evaluated to determine strategies to further engage audiences and maximize the emphasis and impact of behavior change. Options could include additional interactives related to how to recycle right specifically at school. The District will also update and enhance the flyer used to describe how to recycle at school and at home and what common materials at school are recyclable.

Measuring Outcomes: The number of lessons and attendance are quantitative measures. The District tracks the number of lessons and individuals present.

Consistent/Frequent Messaging: The District’s messaging at schools will link recycling infrastructure in the schools with curbside and drop-off programs. The message will be similar to what students were told during the presentation.

Evaluating Results: Participation trends for presentations and the number of school districts visited will allow for the schools to have visibility of the District’s programs.

3. Industries

Program	Start Date	End Date	Goal
District Website and Facebook Page	Ongoing	Ongoing	3 & 4
Public Communication	Ongoing	Ongoing	4
Industrial Solid Waste Recycling Assessments and Technical Assistance	Ongoing	Ongoing	4
Materials Marketplace Referrals	Ongoing	Ongoing	4

Needs of the Audience: The District provides resources on the website for industries. Technical assistance from District staff is available upon request. To satisfy the needs of the Industrial Sector regarding available programming, the District website and Facebook page will be updated during 2025 potentially with a Business Recycling Tab. This tab will provide details on waste assessments and technical assistance along with promoting the Ohio Material Marketplace as programs.

Behavior Change: The District will attempt to impact industrial behaviors change with technical assistance and direct contact. Technical assistance could include instructions on use of the Materials Marketplace, waste assessments, broker and hauler references, operational enhancements, and use of state grants available for market development and recycling equipment. The presence of the industrial survey opens opportunities for interaction between industries and the District.

The presence of the industrial survey opens opportunities for interaction between industries and the District.

Measuring Outcomes: The District can track the number of surveys sent and received in addition to the number of requests for technical assistance.

Consistent/Frequent Messaging: The District will use a branded message to focus on what opportunities the District can provide technical assistance.

Evaluating Results: The District can track the results by recycling tonnages reported on surveys.

4. Institutions & Commercial Businesses

Program	Start Date	End Date	Goal
District Website and Facebook Page	Ongoing	Ongoing	3 & 4
Public Communication	Ongoing	Ongoing	4
Educational Presentations/Displays	Ongoing	Ongoing	3 & 4
Commercial Solid Waste Recycling Assessments & Technical Assistance	Ongoing	Ongoing	4
Materials Marketplace Referrals	Ongoing	Ongoing	4

Needs of the Audience: The District provides resources on the website for institutions and commercial businesses. Technical assistance by District staff is provided upon request.

Behavior Change: The District will attempt to impact commercial/institutional behavioral change with technical assistance and direct contact. Technical assistance could include instructions on use of the Materials Marketplace, waste assessments, broker and hauler references, operational enhancements, and use of state grants available for market development and recycling equipment. The presence of the commercial/institutional survey opens opportunities for interaction between this sector and the District.

Measuring Outcomes: The District can track the number of requests for technical assistance and related activity.

Consistent/Frequent Messaging: The District will use a branded message to focus on what opportunities the District can provide technical assistance.

Evaluating Results: The District can track the results by recycling tonnages reported to brokers/MRFs.

5. Communities & Elected Officials

Program	Start Date	End Date	Goal
District Website and Facebook Page	Ongoing	Ongoing	3 & 4
Public Communication	Ongoing	Ongoing	4
Educational Presentations/Displays	Ongoing	Ongoing	3 & 4
HHW Education	Ongoing	Ongoing	4
Scrap Tire Disposal Education	Ongoing	Ongoing	4
Yard Waste Education	Ongoing	Ongoing	4

Needs of the Audience: The District has a good relationship with many communities and elected officials and can provide technical assistance as needed. The District provides resources on the website for this audience. Officials may benefit from an email update such as one from the District on changes or improvements with infrastructure in their communities.

Behavior Change: The District may benefit from notifying and inviting communities and elected officials to include District programming and messaging on their community webpages and social media sites.

Measuring Outcomes: The District can keep track of any responses to shared communication with communities or elected officials.

Consistent/Frequent Messaging: The District can send emails or other notifications for events with a consistent message to keep officials up to date.

Evaluating Results: The District may use results tracked by responses to shared communication to determine message effectiveness.

C. Outreach Priority

Program	Start Date	End Date	Goal
Recycle Right and Often Outreach Campaign	Existing	Ongoing	3 & 4

Goal/Purpose: The District will focus on correct materials in the recycling stream campaign with a goal of changing behaviors:

Targeted Audience: Residents and Community Leaders

Target	Life/style Behavior Change Message
Existing recyclers	Maximize the amount of acceptable materials by purchasing recyclable packaging, properly preparing the material for recycling, and avoiding 'wish recycling.'
Non-participants	Reduce your trash bill with PAYT programming by recycling. Recycling makes economic sense and recovers valuable resources.
All residential	Adopt responsible consumer habits - buy items with minimal packaging, made from recycled materials, or packaging that could be reused or refilled.

Strategy:

The District will use the website to share and remind residents of the correct materials which go into the recycling programs. The District will assist in reaching out to communities to ensure their community website update and share the correct materials accepted list.

Opportunities: The District will focus on at least one educational outreach engagement per year. This may be in the form of the following but not limited to:

- Webinar
- Addition slotted time to other public meetings
- In person meeting at a library or other public space

Behavior Change Strategy:

- The District will use the website and social media to share details of the Recycle Right Campaign including the list of correct materials, and the local recycling opportunities.
- The District will post regular social media updates on recycling tonnages and achievements from the campaign.
- To increase recycling program credibility and value - The District will include in their social media campaign photos of baled recycled materials, and examples of consumer items that are made from recycled material similar to those collected in Mercer County.
- Non-participants will be provided regular details on PAYT savings resulting from local resident testimonials.
- Participating residents and commercial outlets will be encouraged to share and like Recycle Right messages in order to maximize message distribution, impact, and behavior changes.
- The District will reach out to communities to ensure each individual community website has current updates and that each community social media pages are current and feature Recycle Right messaging. Communities will be encouraged to include recycling promotion and PAYT opportunities.
- The District will work with the Mercer County Engineers Office to promote resource conservation life style and behavioral changes.

Milestones:

- Collaborate with local haulers and processors to ensure District is sharing consistent messaging
- Consistent signage for correct materials and new materials education on all drop-off sites
- Outreach to all community leaders for website and consistent messaging
- Increase in recycling tonnage reported by businesses on surveys
- Increase in relationships built with businesses, schools, and community officials

Implementation Responsibility:

The District will be responsible for collaborating with the local haulers and processors and sharing content on the District website and social media page. Communities will be responsible for updating their websites to the latest accepted materials list. No new personnel expenses are anticipated during the planning year to provide the programming outlined in Appendix L.

The Measure of Success:

- The District will regularly monitor recycling rates from the drop off program and request from haulers a summary of material quality overall once per year per community.
- The District will track social media statistics including trends over times, likes and shares, and comment reactions to different posts.
- The District will analyze the number of bags purchased for recycling in their communities and track participation over time in response to the social media campaign.

APPENDIX M: CAPACITY ANALYSIS

This appendix provides the SWMD’s strategy for ensuring access to solid waste management facilities. While the primary focus of this strategy is ensuring access to adequate disposal capacity, the SWMD will also ensure that it has access to processing capacity for recyclables, and if needed, access to transfer facilities.

A. Access to Publicly-Available Landfill Facilities

Table M-1 Remaining Operating Life of Publicly-Available Landfills

Facility	Location	Years of Remaining Capacity
In-District		
None		
Out-of-District		
Defiance County Sanitary Landfill	Defiance	26
Cherokee Run Landfill	Logan	41
County Environmental of Wyandot	Wyandot	170
Out-of-State		
Jay County Landfill	Jay	89
National Serv-All Landfill	Allen	31
Randolph Farms Landfill	Randolph	60

Source(s) of Information:

2022 and 2021 Ohio Solid Waste Facility Data Report Tables (Table 13) published by Ohio EPA, Waste Received Excel File by Indiana Department of Environmental Management, and LMOP Database by EPA.

Table M-1 lists the municipal solid waste landfills where waste from the SWMD was disposed in the reference year. The landfills listed include those that accepted direct-haul and those that accepted transferred waste. Over the reference year, the SWMD sent material for disposal to 3 in-state landfills and 3 out-of-state landfills.

The majority of the SWMD’s waste was disposed of out-of-state at the Jay County Landfill. Jay County Landfill reported 89 years of remaining capacity at the end of 2022. To demonstrate the SWMD has adequate disposal capacity the landfill that historically took the largest amounts of the SWMD’s waste must have adequate remaining life for the first eight years of the planning period. Jay County Landfill has 89 years of remaining capacity which means the landfill has enough permitted airspace to accept waste through the year 2111. The first 8 years of the SWMD’s planning period are 2026 through 2034. Jay County Landfill has adequate remaining life to manage the SWMD’s waste.

B. Capacity at Private Landfill Facilities

Captive or residual waste landfills are designated exclusively for the disposal of one or any combination of wastes from seven specific industrial categories. Due to regulations these facilities will not receive municipal solid waste. Residual/captive landfills are landfills used to dispose of waste generated exclusively by the manufacturing company that owns the landfill. The SWMD did not send waste to captive landfills in the reference year.

APPENDIX N: EVALUATING GREENHOUSE GAS

The Waste Reduction Model (WARM)

WARM is a tool that US EPA developed to quantify the effects of waste management decisions on greenhouse gas emissions. The model demonstrates the benefits of alternative management technologies over traditional management methods. The WARM model is updated regularly. A SWMD can use a different but comparable modeling program to calculate greenhouse gas emission reductions provided the model accounts for waste management and recycling activities.

WARM is intended to compare municipal solid waste management scenarios. Therefore, use data for only the residential/commercial sector.

Each SWMD will run WARM twice and include the results in the solid waste management plan:

- For the first run, enter all quantities recycled in the reference year in the landfill column (for the baseline year) and for the alternative scenario, enter the quantities recycled in the tons recycled column.
- For the second run, enter the quantities of residential/commercial material recycled in the reference year in the tons recycled column (for the baseline scenario), and then enter the quantities projected to be recycled in the sixth year of the planning period in the alternative scenario column.

Include printouts of the results for both runs in the solid waste management plan.

A. GHG Measurement

Gases that trap heat in the atmosphere are called greenhouse gases. The main greenhouse gases are carbon dioxide (CO₂), methane (CH₄), nitrous oxide (N₂O), and fluorinated gases. Each gas's effect on the climate depends on how much is in the atmosphere, how long they stay in the atmosphere, and how strongly they impact the atmosphere. Disposal and treatment of materials results in greenhouse gas emissions from collection, transport, landfill disposal, manufacture, etc.

The most common way to measure climate impact of waste management is to state the impact in carbon equivalents. Since waste reduction results in the reduction of several types of greenhouse gases, the conversion to a standard carbon equivalent (CO₂E) measurement allow for a total quantification of the impact. It also provides a standard language for people to compare these actions to others such as transportation and energy conservation efforts. A carbon equivalent CO₂E is simply the amount of CO₂ that would have the same global warming potential as the waste reduction impacts, when measured over a specified timescale. The international reporting standard for CO₂ emissions is metric tons, so carbon dioxide amounts may be reported as MTCO₂E, metric tons of carbon equivalent.

Produced by US EPA, the Waste Reduction Model (WARM) was designed to help solid waste planners, municipal leaders, and other stakeholder organizations track and report greenhouse gas emissions reductions. It is a database tool that helps decision makers predict the strategies that most reduce GHG emissions. The WARM model calculates GHG emission across six waste management modalities (source reduction, recycling, composting, anaerobic digestion, combustion, and landfilling). Modeling different combinations of waste management practices sees which approach leads to the least GHG entering the atmosphere.

This report shows the metric tons of carbon dioxide equivalent (MTCO₂E), which describes the global-warming potential of all common greenhouse gases as an equivalent of carbon dioxide. Negative values indicate GHG savings and positive values indicate increasing emissions. In 2022, Mercer County generated 52,854 tons of MSW from the residential and commercial sectors, landfilled or incinerated 70% (36,759 tons), recycled 28% (14,842 tons) and composted 2% (1,253 tons).

EPA’s estimates of the GHG-related impacts of composting organics were developed within the framework of the larger WARM development effort and therefore, the presentation of results, estimation of emissions and sinks, and description of ancillary benefits is not comprehensive. One of the limitations is the lack of data and resources, thus analyzing a small sampling of feedstocks and specific application scenarios for compost. A full range of soil conservation and management practices are not considered. This makes using the WARM model challenging for modeling GHG biosolids management. Biosolids are not one of the material category types to model in WARM, so food waste was used a proxy. Also, HHW and motor oil were excluded because of lack of material category and no relevant proxy.

Total GHG Emissions from Baseline (Year 2022) if landfilled	443 MTCO ₂ E
Total GHG Emissions from Baseline (Year 2022) if recycled/composted	(52,644) MTCO ₂ E
Total GHG Emissions from Alternative (Year 2030) if recycled/composted	(50,633) MTCO ₂ E
Incremental GHG Emissions	Stable MTCO ₂ E

If the SWMD had no diversion programs in place and all the diverted tons instead went to landfill, the MTCO₂E savings would be nonexistent. With the current diversion programs, the SWMD reduces GHG emissions by 52,644 MTCO₂E. To put this into perspective, the diversion programs are equivalent to:

- Removing emissions from 11,271 passenger vehicles annually
- Conserving 5,973,602 gallons of gasoline annually
- Conserving 2,211,975 cylinders of propane used for home barbeques

Diversion is projected to remain stable throughout the planning process so that the GHG emissions reduction from waste diversion programs will stay roughly around 51,500 MTCO₂E per year.

APPENDIX O: FINANCIAL PLAN

Ohio Revised Code Section 3734.53(B) requires a solid waste management plan to present a budget representing how the SWMD will obtain money to pay for programs and operations and how the SWMD will spend that money to ensure compliance with the State Plan. For revenue, the solid waste management plan identifies the sources of funding the SWMD will use to implement its approved 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 demonstrate that planned expenses will be made in accordance with ten allowable uses that are prescribed in ORC Section 3734.57 including:

1

- Preparation and monitoring of plan implementation.

2

- Implementation of approved plan.

3

- Financial assistance to boards of health for solid waste enforcement.

4

- Financial assistance to defray the costs of maintaining roads and other public services related to the location or operation of solid waste facilities.

5

- Contracts with boards of health for collecting and analyzing samples from water wells adjacent to solid waste facilities.

6

- Out-of-state waste inspection program.

7

- Financial assistance to local boards of health to enforce ORC 3734.03 or to local law enforcement agencies having jurisdiction within the District for anti-littering.

8

- Financial assistance to local boards of health for employees to participate in Ohio EPA's training and certification program for solid waste operators and facility inspectors.

9

- Financial assistance to local municipalities and townships to defray the added cost of roads and services related to the operation of solid waste facilities.

10

- Payment of any expenses that are agreed to awarded or ordered to be paid under section 3734.35 of the Revised Code and any administrative costs incurred pursuant to that section.

Ultimately, the solid waste management plan must demonstrate that the SWMD will have adequate money to implement the approved solid waste management plan for a period of 15 years, from 2026 to 2040.

A. Funding Mechanisms and Revenue Generated

There are a number of mechanisms SWMDs can use to raise the revenue necessary to finance their solid waste management plans. This section describes the sources considered by the District Policy Committee for future funding of District programming.

1. Disposal Fee

In accordance with ORC 3734.57(B), a solid waste policy committee can establish a disposal fee that is collected at landfills and remitted to the receiving SWMD in which the landfill is located. The District no longer receives revenues from disposal fees. The District previously levied fees in accordance with ORC Section 3734.57(B) on the Celina Landfill in Celina. The District’s fee structure remains \$2.00 collected on each ton of solid waste that is generated within the District and disposed at a solid waste landfill located within the District, \$4.00 collected on each ton of solid waste generated outside the District but within Ohio and disposed at a solid waste landfill located within the District, and \$2.00 collected on each ton of solid waste generated outside of Ohio and disposed at a solid waste landfill located within the District.

The District no longer has active operating landfills in the District after the closure of the Celina Landfill. It does not plan to have operating landfills in the District’s borders at this time. Revenues are not collected and will not be collected from disposal fees at this time or during the planning period.

Table 6-2 demonstrates disposal fee revenue leading up to and after the closure of the Celina Landfill in 2021.

Table 6-2 Disposal Fee Schedule and Historical Revenue

Year	Disposal Fee Schedule (\$/ton)			Revenue (\$)			Total Disposal Fee Revenue (\$)
	In-District	Out-of-District	Out-of-State	In-District	Out-of-District	Out-of-State	
2018	\$2.00	\$4.00	\$2.00	\$21,109.36	\$75,616.68	\$0.00	\$96,726.04
2019	\$2.00	\$4.00	\$2.00	\$28,613.56	\$86,028.48	\$14,849.94	\$129,491.98
2020	\$2.00	\$4.00	\$2.00	\$24,508.36	\$61,839.68	\$0.00	\$86,348.04
2021	\$2.00	\$4.00	\$2.00	\$28,426.38	\$50,081.32	\$9.64	\$78,517.34
2022	\$2.00	\$4.00	\$2.00	\$0.00	\$0.00	\$0.00	\$0.00
2023	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
2024	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00

2. Generation Fee

In accordance with ORC 3734.573, a solid waste management policy committee may levy fees on the generation of solid wastes within the district. The District Policy Committee did not choose this option that would not apply to waste sent to out-of-state landfills. The District does not plan to initiate a generation fee during the planning period.

3. Parcel Fee – Rates and Charges

In accordance with ORC 343.08, a SWMD can fix reasonable rates or charges against any improved parcels to which solid waste collection, storage, transfer, disposal, recycling, processing, or resource recovery is provided by the SWMD. The District does not have and does not plan to initiate a Parcel Fee during the planning period.

4. Designation/Contract Fee

In accordance with Ohio Revised Code 343.014, a solid waste management district may adopt designation fees to assure adequate financing to implement the approved solid waste plan.

The Mercer County Solid Waste District Policy Committee met on May 9, 2024, to review all available funding options. The Policy Committee agreed at that meeting that an alternative funding mechanism was necessary to supplement its income after the closure of the Celina Landfill. The Policy Committee agreed to implement a Contract Fee of \$2.75 per ton when its future fund balance falls below \$300,000 which represented over two years of operational expenses. The fund balance is projected to be \$263,813 by the end of 2027 which would trigger the implementation of a \$2.75/ton Contract Fee effective Jan. 1, 2028. The Designation process as described in ORC 343.014 would begin January 2027.

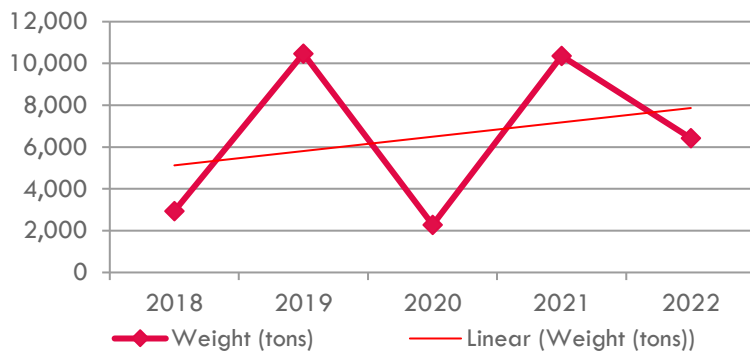
The District Policy Committee on May 9, 2024, evaluated the advantages of a Contract Fee compared to other funding options and determined that Contract Fee:

- Provides a reliable source of predictable income.
- Maintains a responsible and conservative fund balance of greater than a two-year operating expense.
- The Contract Fee was considered as a viable option in the previous Solid Waste Plan and was projected to be higher at \$3.50/ton starting 2020.
- Encourages waste reduction and recycling.
- Anticipated to be acceptable to the Ohio EPA as a responsible income source.
- Equitable for seniors and small households since the fee is based on tons generated.
- The \$2.75/ton fee was a modest affordable increase from the previous \$2.00/ton disposal fee. The economic impact of the \$2.75 compared to the previous \$2.00 fee equates to 6 cents/month/household.

Contingency Budget

The District has prepared a Contingency Budget described in App. O: Para. C with implementation described of a \$2.75/ton Contract Fee effective Jan. 1, 2026. The Designation Process as described in ORC 343.014 would then begin as early as 2025. The Contingency Budget will become effective if the fund balance would drop below \$300,000 prior to the projected 2028 date. This could happen if projected industrial tonnages did not continue the positive generation trend as illustrated in Figure O-1A. Evidence suggests that industrial volumes are increasing over time but are volatile and potentially unpredictable. Industrial disposal has historically represented 15% of total disposal tonnages. Note that without an industrial contribution, revenues could drop as low as \$88,000/yr.

Table O-1A Historical Disposal Data – Industrial



Annual Review

The District intends to annually review and reevaluate the implementation schedule for the \$2.75/ton Designation/Contract Fee. The District reserves the right to lower the \$2.75/ton Designation/Contract Fee based

on updated industrial tonnage projections, future budget needs, and the Policy Committee commitment to maintaining a fiscally responsible and conservative fund balance.

Table O-3 demonstrates designation/contract fee revenue throughout the planning period.

Table O-3 Designation/Contract Fee Schedule

Year	Designation Fee Schedule (\$ per ton)	Total Designation Fee Revenue (\$)
2018	\$0.00	\$0
2019	\$0.00	\$0
2020	\$0.00	\$0
2021	\$0.00	\$0
2022	\$0.00	\$0
2023	\$0.00	\$0
2024	\$0.00	\$0
2025	\$0.00	\$0
2026	\$0.00	\$0
2027	\$0.00	\$0
2028	\$2.75	\$109,546
2029	\$2.75	\$109,591
2030	\$2.75	\$109,635
2031	\$2.75	\$109,680
2032	\$2.75	\$109,558
2033	\$2.75	\$109,435
2034	\$2.75	\$109,313
2035	\$2.75	\$109,191
2036	\$2.75	\$109,069
2037	\$2.75	\$108,909
2038	\$2.75	\$108,750
2039	\$2.75	\$108,590
2040	\$2.75	\$108,431

5. Loans

The District does not have outstanding debt due to existing loans and the Policy Committee does not intend to secure loans to finance implementing this 2024 Plan; therefore, Table O-4 has been omitted.

6. Other Sources of District Revenue

Grants Revenue

The District has received Ohio EPA grant funding for a variety of waste reduction programs. Grant funding for the period 2018 to 2023 has averaged \$3,512 per year. Grant funding is not guaranteed and is therefore not included in planning period projections. Table O-5 has been omitted. See Table O-6 for historical details.

Other Revenue

The District has received Other Revenue from a variety of reimbursements and other sources. Other Revenue for the period 2018 to 2023 has averaged \$1,562 per year. Other Revenue funding is not guaranteed and is therefore not included in planning period projections. Table O-5 has been omitted. See Table O-6 for historical details.

Table O-6 includes all funding mechanisms that will be used, and the total amount of revenue generated by each method for each year of the planning period. The SWMD's primary funding mechanism will be the

Contract/Designation Fee to be implemented as early as 2026. The District has from 2018 to 2023 received other sources of revenue from grants, reimbursements, and other sources. As mentioned, there is no guaranteed of continued revenue from these sources and the District has not included projections for “Other Revenue “during the planning period.

7. Total Revenue

Table O-6 includes all funding mechanisms that will be used, and the total amount of revenue generated by each method for each year of the planning period. The SWMD's primary funding mechanism is the rates and charges. The SWMD also receives alternate revenues from contract/designation fees, recycling revenue and user fee

Table O-6 Total Revenue (in accordance with ORC 3734.57, ORC 3734.572 and ORC 3734.573)

Year	Disposal Fees	Generation Fees	Designation Fees	Other Revenue	Total Revenue
2018	\$96,726	\$0	\$0	\$8,019	\$104,745
2019	\$129,492	\$0	\$0	\$4,649	\$134,141
2020	\$86,348	\$0	\$0	\$3,501	\$89,849
2021	\$78,517	\$0	\$0	\$3,690	\$82,207
2022	\$0	\$0	\$0	\$6,965	\$6,965
2023	\$0	\$0	\$0	\$3,623	\$3,623
2024	\$0	\$0	\$0	\$0	\$0
2025	\$0	\$0	\$0	\$0	\$0
2026	\$0	\$0	\$0	\$0	\$0
2027	\$0	\$0	\$0	\$0	\$0
2028	\$0	\$0	\$109,546	\$0	\$109,546
2029	\$0	\$0	\$109,591	\$0	\$109,591
2030	\$0	\$0	\$109,635	\$0	\$109,635
2031	\$0	\$0	\$109,680	\$0	\$109,680
2032	\$0	\$0	\$109,558	\$0	\$109,558
2033	\$0	\$0	\$109,435	\$0	\$109,435
2034	\$0	\$0	\$109,313	\$0	\$109,313
2035	\$0	\$0	\$109,191	\$0	\$109,191
2036	\$0	\$0	\$109,069	\$0	\$109,069
2037	\$0	\$0	\$108,909	\$0	\$108,909
2038	\$0	\$0	\$108,750	\$0	\$108,750
2039	\$0	\$0	\$108,590	\$0	\$108,590
2040	\$0	\$0	\$108,431	\$0	\$108,431

B. Cost of Implementing Plan

The expense line items and categories in Table O-7 are the same as those that the District uses to report expenses for the quarterly fee report and the Annual District Report.

The following categories are adjusted annually during the planning period based on the annual inflationary factors shown in Table O-7a:

Table O-7a Annual Inflationary Rates

Line #	Category/Program	2024-2025	2026-2028	2029-2039
1	1. Plan Monitoring/Prep.	3.50%	2.50%	1.00%
1.a	a. Plan Preparation	3.5%	2.5%	1.0%
1.b	b. Plan Monitoring	3.5%	2.5%	1.0%
2	2. Plan Implementation			
2.a	a. District Administration			
2.a.1	Personnel	3.5%	2.5%	1.0%
2.a.2	Office Overhead	3.5%	2.5%	1.0%
2.e	e. Special Collections			
2.e.2	HHW Collection	3.5%	2.5%	1.0%
2.e.4	Appliance Collection	3.5%	2.5%	1.0%
2.g	g. Education/Awareness			
2.g.1	Education Staff	3.5%	2.5%	1.0%
2.g.2	Advertisement/Promotion	3.5%	2.5%	1.0%
2.m	m. Litter Collection/Education	3.5%	2.5%	1.0%
3	3. Health Dept. Enforcement	0.0%	0.0%	0.0%
5	5. Well Testing	0.0%	0.0%	0.0%

Each expense by Annual District Report category for the planning period is detailed in Table O-7b:

Table O-7b Expenses

Line #	Category/Program	2018	2019	2020	2021	2022	2023	2024	2025
1	1. Plan Monitoring/Prep.	\$30,846	\$13,810	\$6,675	\$6,110	\$6,525	\$14,155	\$38,660	\$12,000
1.a	a. Plan Preparation	\$24,641	\$7,287	\$0	\$0	\$0	\$7,421	\$31,660	\$5,000
1.b	b. Plan Monitoring	\$6,204	\$6,523	\$6,675	\$6,110	\$6,525	\$6,734	\$7,000	\$7,000
2	2. Plan Implementation	\$56,181	\$30,071	\$49,485	\$25,967	\$37,003	\$57,983	\$60,170	\$62,276
2.a	a. District Administration	\$28,269	\$21,899	\$21,667	\$21,799	\$24,068	\$25,557	\$26,452	\$27,377
2.a.1	Personnel	\$20,176	\$14,567	\$14,842	\$15,454	\$18,616	\$19,707	\$20,397	\$21,111
2.a.2	Office Overhead	\$8,093	\$7,332	\$6,824	\$6,345	\$5,452	\$5,850	\$6,055	\$6,267
2.e	e. Special Collections	\$18,235	\$0	\$24,037	\$0	\$6,342	\$25,376	\$26,264	\$27,184
2.e.2	HHW Collection	\$17,835	\$0	\$24,037	\$0	\$6,342	\$25,376	\$26,264	\$27,184
2.e.4	Appliance Collection	\$400	\$0	\$0	\$0	\$0	\$0	\$0	\$0
2.g	g. Education/Awareness	\$1,305	\$4,719	\$2,146	\$0	\$765	\$330	\$500	\$518
2.g.1	Education Staff	\$1,080	\$2,760	\$1,305	\$0	\$165	\$330	\$500	\$518
2.g.2	Advertisement/Promotion	\$225	\$1,959	\$841	\$0	\$600	\$0	\$0	\$0
2.m	m. Litter Collection/Education	\$8,372	\$3,453	\$1,636	\$4,168	\$5,828	\$6,719	\$6,954	\$7,198
3	3. Health Dept. Enforcement	\$7,000	\$7,000	\$7,000	\$7,000	\$7,000	\$7,000	\$7,000	\$7,000
5	5. Well Testing	\$3,000	\$3,000	\$3,000	\$3,000	\$3,000	\$3,000	\$3,000	\$3,000
	Total Expenses	\$97,027	\$53,881	\$66,160	\$42,077	\$53,528	\$82,137	\$108,830	\$84,276

Table O-7 Expenses Continued

Line #	Category/Program	2026	2027	2028	2029	2030	2031	2032	2033
1	1. Plan Monitoring/Prep.	\$7,000	\$7,000	\$7,000	\$14,792	\$40,242	\$12,250	\$7,000	\$7,000
1.a	a. Plan Preparation	\$0	\$0	\$0	\$7,792	\$33,242	\$5,250	\$0	\$0
1.b	b. Plan Monitoring	\$7,000	\$7,000	\$7,000	\$7,000	\$7,000	\$7,000	\$7,000	\$7,000
2	2. Plan Implementation	\$64,405	\$66,090	\$67,819	\$68,697	\$69,590	\$70,500	\$71,426	\$72,369
2.a	a. District Administration	\$28,062	\$28,763	\$29,482	\$29,777	\$30,075	\$30,376	\$30,680	\$30,986
2.a.1	Personnel	\$21,638	\$22,179	\$22,734	\$22,961	\$23,191	\$23,423	\$23,657	\$23,893
2.a.2	Office Overhead	\$6,424	\$6,584	\$6,749	\$6,816	\$6,884	\$6,953	\$7,023	\$7,093
2.e	e. Special Collections	\$27,863	\$28,560	\$29,274	\$29,567	\$29,862	\$30,161	\$30,462	\$30,767
2.e.2	HHW Collection	\$27,863	\$28,560	\$29,274	\$29,567	\$29,862	\$30,161	\$30,462	\$30,767
2.e.4	Appliance Collection	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
2.g	g. Education/Awareness	\$1,030	\$1,056	\$1,083	\$1,093	\$1,104	\$1,115	\$1,127	\$1,138
2.g.1	Education Staff	\$530	\$544	\$557	\$563	\$568	\$574	\$580	\$586
2.g.2	Advertisement/Promotion	\$500	\$513	\$525	\$531	\$536	\$541	\$547	\$552
2.m	m. Litter Collection/Education	\$7,450	\$7,710	\$7,980	\$8,260	\$8,549	\$8,848	\$9,157	\$9,478
3	3. Health Dept. Enforcement	\$7,000	\$7,000	\$7,000	\$7,000	\$7,000	\$7,000	\$7,000	\$7,000
5	5. Well Testing	\$3,000	\$3,000	\$3,000	\$3,000	\$3,000	\$3,000	\$3,000	\$3,000
	Total Expenses	\$81,405	\$83,090	\$84,819	\$93,488	\$119,833	\$92,750	\$88,426	\$89,369

Table O-7 Expenses Continued

Line #	Category/Program	2034	2035	2036	2037	2038	2039	2040
1	1. Plan Monitoring/Prep.	\$7,000	\$15,181	\$41,905	\$12,513	\$7,000	\$7,000	\$7,000
1.a	a. Plan Preparation	\$0	\$8,181	\$34,905	\$5,513	\$0	\$0	\$0
1.b	b. Plan Monitoring	\$7,000	\$7,000	\$7,000	\$7,000	\$7,000	\$7,000	\$7,000
2	2. Plan Implementation	\$73,330	\$74,309	\$75,305	\$76,321	\$77,356	\$78,411	\$81,156
2.a	a. District Administration	\$31,296	\$31,609	\$31,925	\$32,245	\$32,567	\$32,893	\$34,044
2.a.1	Personnel	\$24,132	\$24,374	\$24,617	\$24,864	\$25,112	\$25,363	\$26,251
2.a.2	Office Overhead	\$7,164	\$7,236	\$7,308	\$7,381	\$7,455	\$7,529	\$7,793
2.e	e. Special Collections	\$31,075	\$31,386	\$31,699	\$32,016	\$32,337	\$32,660	\$33,803
2.e.2	HHW Collection	\$31,075	\$31,386	\$31,699	\$32,016	\$32,337	\$32,660	\$33,803
2.e.4	Appliance Collection	\$0	\$0	\$0	\$0	\$0	\$0	\$0
2.g	g. Education/Awareness	\$1,149	\$1,161	\$1,172	\$1,184	\$1,196	\$1,208	\$1,250
2.g.1	Education Staff	\$592	\$597	\$603	\$610	\$616	\$622	\$644
2.g.2	Advertisement/Promotion	\$558	\$563	\$569	\$575	\$580	\$586	\$607
2.m	m. Litter Collection/Education	\$9,810	\$10,153	\$10,508	\$10,876	\$11,257	\$11,651	\$12,059
3	3. Health Dept. Enforcement	\$7,000	\$7,000	\$7,000	\$7,000	\$7,000	\$7,000	\$7,000
5	5. Well Testing	\$3,000	\$3,000	\$3,000	\$3,000	\$3,000	\$3,000	\$3,000
	Total Expenses	\$90,330	\$99,490	\$127,210	\$98,834	\$94,356	\$95,411	\$98,156

1. Plan Monitoring/Prep.

1.a Plan Preparation

- The District contracted a consultant for developing the 2026 Plan Update using Format 4.1. The expense line item shown are for consulting fees for plan preparation. This cost includes staff and contracts with outside consultants to prepare the SWMD’s solid waste management plan updates. The SWMD assumed the cost of the contract for all subsequent plan updates would be the same.

1.b Plan Monitoring

- The District contracts with a consultant for the preparation of the Annual District Report and continued monitoring of plan progress. Costs include assistance with the District with plan implementation management, annual district reporting, annual surveying of business, future plan development, special studies and other tasks as assigned by the District Director and/or Board. This line item also includes legal assistance.

2. Plan Implementation

2.a District Administration

2.a.1 Personnel

The Personnel budget is split between the district and the Sanitary Engineering Department. Planning period expenses were projected based on the 2018 to 2023 actual expenses for salaries including District staff, PERS retirement, Medicare, insurance, supplies, postage, reproductions, advertising, printing, utilities, webpage maintenance, office equipment, and travel. Administrative costs also include staffing time for some program costs which are difficult to separate into their own line item.

2.a.2 Office Overhead – Planning period expenses were projected based on the actual 2018 to 2023 expenses.

2.e. Special Collections

- 2.e.2. HHW Collection – The costs of District Sponsored HHW collection for 2018 to 2023 are actual expenses for a bi-annual event. The projected budget for 2024 and continuing through the planning period allow for the option of an annual HHW collection.

2.g. Education/Awareness

- 2.g.1 Education Staff - This is the cost for salary and expenses associated with education/awareness and outreach including supplies. Planning period expenses were projected based on the actual costs of the program from 2018 through 2023.
- 2.g.2. Advertisement/Promotion - This is the cost for outreach and education program supplies. Planning period expenses were projected based on the actual costs of the program from 2018 through 2023.

2.m. Litter Collection

- This is the operational costs to fund annual litter collection activities provided by the County Engineer. Planning period expenses were projected based on the actual costs of the program from 2018 through 2023.

3. Health Dept. Enforcement

- The annual cost of conducting solid waste enforcement and facility post-closure maintenance inspection including the closed Celina Landfill. The flat fee of \$7,000 is not expected to change during the planning period.

4 Well Testing

- The annual cost of conducting well testing is associated with the closed Celina Landfill. The flat fee of \$3,000 is not expected to change during the planning period.

Figure O-8a Budget Summary

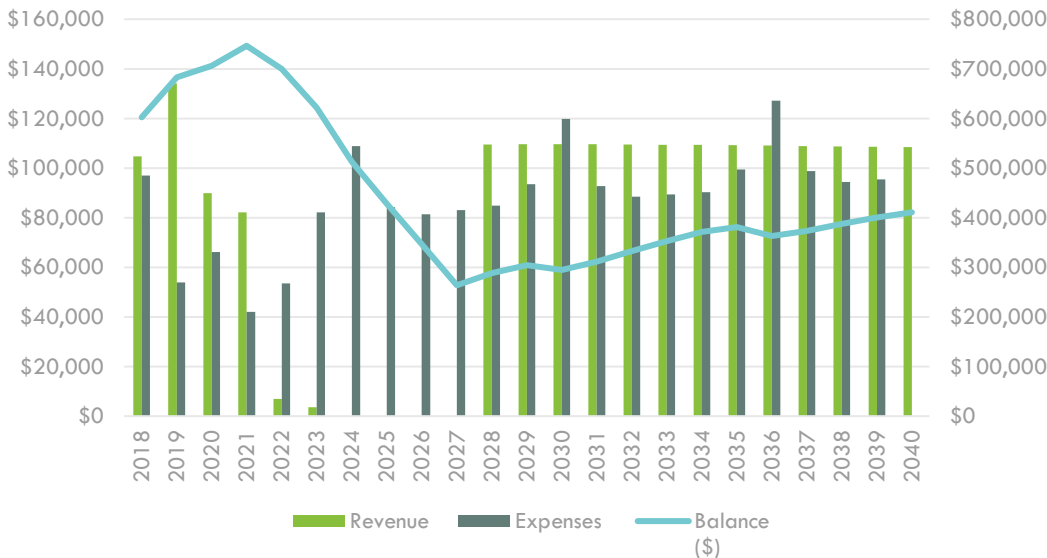


Table O-8b Budget Summary

Year	Revenue	Expenses	Annual Surplus/Deficit (\$)	Balance (\$)
2017			Ending Balance	\$594,694
2018	\$104,745	\$97,027	\$7,718	\$602,412
2019	\$134,141	\$53,881	\$80,260	\$682,673
2020	\$89,849	\$66,160	\$23,689	\$706,362
2021	\$82,207	\$42,077	\$40,130	\$746,492
2022	\$6,965	\$53,528	-\$46,563	\$699,929
2023	\$3,623	\$82,137	-\$78,514	\$621,415
2024	\$0	\$108,830	-\$108,830	\$512,585
2025	\$0	\$84,276	-\$84,276	\$428,308
2026	\$0	\$81,405	-\$81,405	\$346,903
2027	\$0	\$83,090	-\$83,090	\$263,813
2028	\$109,546	\$84,819	\$24,727	\$288,540
2029	\$109,591	\$93,488	\$16,102	\$304,642
2030	\$109,635	\$119,833	-\$10,198	\$294,445
2031	\$109,680	\$92,750	\$16,930	\$311,374
2032	\$109,558	\$88,426	\$21,131	\$332,506
2033	\$109,435	\$89,369	\$20,066	\$352,572
2034	\$109,313	\$90,330	\$18,983	\$371,555
2035	\$109,191	\$99,490	\$9,701	\$381,257
2036	\$109,069	\$127,210	-\$18,141	\$363,115
2037	\$108,909	\$98,834	\$10,076	\$373,191
2038	\$108,750	\$94,356	\$14,394	\$387,585
2039	\$108,590	\$95,411	\$13,179	\$400,764
2040	\$108,431	\$98,156	\$10,275	\$411,039

Contingency/Alternative Budget

The District has prepared a Contingency/Alternative Budget with implementation of a \$2.75/ton Contract Fee effective Jan. 1, 2026. The Designation Process as described in ORC 343.014 would then begin as early as 2025.

The Contingency Budget will become effective if the fund balance drops below \$300,000 prior to the projected 2028 Contract Fee start date as illustrated in Table O-8b. This could happen if projected industrial tonnages did not continue the positive generation trend as illustrated in Figure O-1A. Evidence suggests that industrial volumes are increasing over time but are volatile and potentially unpredictable. Industrial disposal has historically represented 15% of total disposal tonnages. The Policy Committee has adopted a conservative, responsible, and flexible approach to the implementation of future revenue options. This Contingency Budget has been prepared to outline the additional revenue and fund balance impact of a 2026 Contract Fee start date.

Note that Table O-9 Contingency Funding and Table O-10 Contingency Expenses have been omitted.

- Funding remains the same but the implementation date change from Table O-8 has been advanced from 2028 to 2026.
- Expenses remain the same as Table O-8 displacing the need for Table O-10.

Figure O-11a Contingency Budget Summary

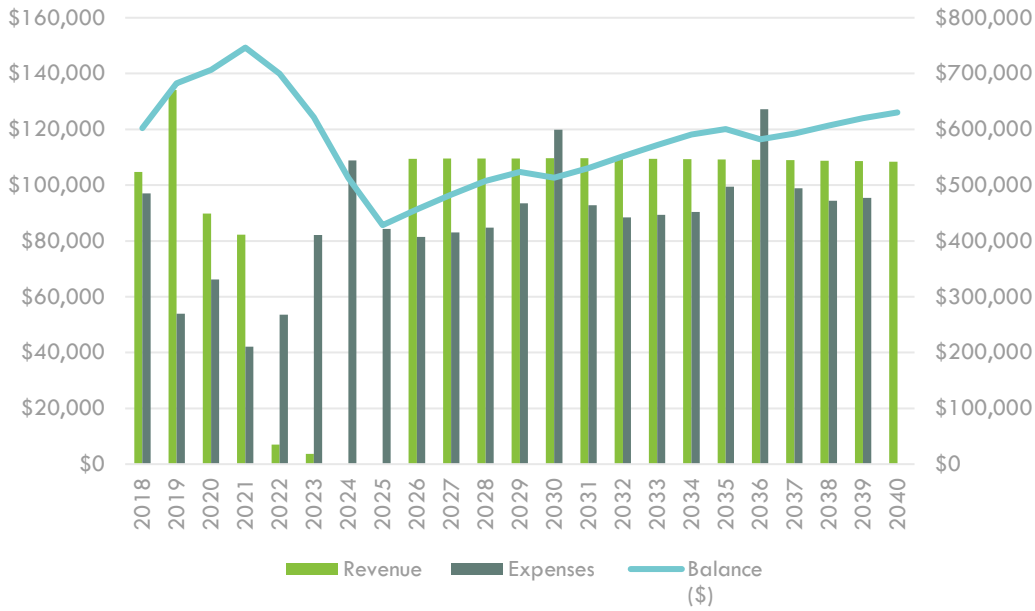


Table O-11b Contingency/Alternative Budget Summary

Year	Revenue	Expenses	Annual Surplus/Deficit (\$)	Balance (\$)
2017			Ending Balance	\$594,694
2018	\$104,745	\$97,027	\$7,718	\$602,412
2019	\$134,141	\$53,881	\$80,260	\$682,673
2020	\$89,849	\$66,160	\$23,689	\$706,362
2021	\$82,207	\$42,077	\$40,130	\$746,492
2022	\$6,965	\$53,528	-\$46,563	\$699,929
2023	\$3,623	\$82,137	-\$78,514	\$621,415
2024	\$0	\$108,830	-\$108,830	\$512,585
2025	\$0	\$84,276	-\$84,276	\$428,308
2026	\$109,457	\$81,405	\$28,052	\$456,360
2027	\$109,501	\$83,090	\$26,412	\$482,772
2028	\$109,546	\$84,819	\$24,727	\$507,498
2029	\$109,591	\$93,488	\$16,102	\$523,601
2030	\$109,635	\$119,833	-\$10,198	\$513,403
2031	\$109,680	\$92,750	\$16,930	\$530,333
2032	\$109,558	\$88,426	\$21,131	\$551,464
2033	\$109,435	\$89,369	\$20,066	\$571,530
2034	\$109,313	\$90,330	\$18,983	\$590,513
2035	\$109,191	\$99,490	\$9,701	\$600,215
2036	\$109,069	\$127,210	-\$18,141	\$582,073
2037	\$108,909	\$98,834	\$10,076	\$592,149
2038	\$108,750	\$94,356	\$14,394	\$606,543
2039	\$108,590	\$95,411	\$13,179	\$619,722
2040	\$108,431	\$98,156	\$10,275	\$629,997

C. Major Facility Project

A SWMD that is considering whether to construct and operate a new solid waste management facility or renovate an existing solid waste facility will provide a budget for the facility. For the purposes of this section, a solid waste management facility means a facility the SWMD owns and operates or will own and operate to manage solid waste and/or recyclable materials. Examples of solid waste management facilities include:

- a municipal solid waste landfill or solid waste transfer station
- a yard waste composting facility
- a material recovery facility
- a recycling center
- a permanent household hazardous waste collection facility

The SWMD is not planning to construct or operate a new solid waste management facility during this planning period.

The SWMD does not anticipate the need to develop an in-District sanitary landfill or transfer station by either the private or public sector given access to existing disposal capacity. However, the SWMD does recognize that over the planning period, reasonable economic access to disposal capacity may pose a problem to ensure that District-generated solid waste continues to be disposed at an acceptable rate at licensed facilities. In the event that the SWMD determines that the access to, and the costs, for the disposal becomes an economic burden for residents and businesses, the SWMD reserves the right to explore the development of a transfer facility for District-generated solid waste.

APPENDIX P: DESIGNATION

A. Statement Authorizing/Precluding Designation

The Board is authorized to establish facility designations in accordance with Section 343.013 and 343.014 of the Ohio Revised Code. In addition, facility designation will be established and governed by applicable District rules.

B. Designated Facilities

At the present time, the District has not designated any facilities to which District waste must be taken.

C. Waiver Process for the Use of Undesignated Facilities

The District is authorized to designate solid waste management facilities. If the Board elects to designate facilities after this Plan Update is approved by the Director of the Ohio EPA, the following waiver process may be followed by any person, municipal corporation, township, or other entity that wishes to deliver waste to a solid waste facility not designated by the District.

If any person, municipal corporation, township, or other entity requests permission to use a facility, other than a designated facility, for the disposal of solid waste generated within the District, the entity must submit a written request for a waiver of designation to the Board. The request must contain the following information:

1. Identification of the persons, municipal corporation, township, or other entity requesting the waiver;
2. Identification of the generators(s) of the solid waste for which the waiver is requested;
3. Identification of the type and quantity (in tons per year) of solid waste for which the waiver is requested;
4. Identification of the time period(s) for which the waiver is requested;
5. Identification of the disposal facility(s) to be used if the waiver is granted;
6. If the solid waste is to be disposed in an Ohio landfill, a letter from the solid waste management district where the solid waste will be disposed, acknowledging that the activity is consistent with that district's current plan;
7. An estimate of the fiscal impact to the District that would occur with issuance of the requested waiver; and
8. An explanation of the reason(s) for requesting the waiver.

Upon receipt of the written request containing all the information listed above, the District staff will review it and may request additional information necessary to conduct its review. The Board shall act on a waiver request within ninety days following receipt of the request. The Board may grant the request for a waiver only if the Board determines that:

1. Issuance of the waiver is not inconsistent with projections contained in the District's approved Plan Update under Section 3734.53 (A)(6) and (A)(7) of the Ohio Revised Code;

2. Issuance of the waiver will not adversely affect implementation and financing of the District's approved Plan Update; and
3. The entity is willing to enter into an agreement requiring the payment of a waiver fee to the District.

APPENDIX Q: DISTRICT RULES

The District reserves the right to adopt rules specifically authorized by the Ohio Revised Code (ORC). Section 343.01 (G) of the ORC provides the Board of County Commissioners with the authority to adopt, publish and enforce rules if the District Plan authorizes rule adoption under ORC Section 3734.53 (C).

The District is authorized under this Plan Update to adopt rules under the following provisions of the ORC:
The District reserves the right to adopt rules specifically authorized by the Ohio Revised Code (ORC). Section 343.01 (G) of the ORC provides the Board of County Commissioners with the authority to adopt, publish and enforce rules if the District Plan authorizes rule adoption under ORC Section 3734.53 (C).

The District is authorized under this Plan Update to adopt rules under the following provisions of the ORC:

ORC 3734.53 (C)(1):

Prohibiting or limiting the receipt at facilities located within the solid waste management district of solid wastes generated outside the district or outside a prescribed service area consistent with the projections under divisions (A)(6) and (7) of this section. However, rules adopted by a board under division (C)(1) of this section may be adopted and enforced with respect to solid waste disposal facilities in the solid waste management district that are not owned by a county or the solid waste management district only if the board submits an application to the director of environmental protection that demonstrates that there is insufficient capacity to dispose of all solid wastes that are generated within the district at the solid waste disposal facilities located within the district and the director approves the application. The demonstration in the application shall be based on projections contained in the plan or amended plan of the district. The director shall establish the form of the application. The approval or disapproval of such an application by the director is an action that is appealable under section 3745.04 of the Revised Code. In addition, the director of environmental protection may issue an order modifying a rule authorized to be adopted under division (C)(1) if this section to allow the disposal in the district of wastes from another county or joint solid waste management district if all of the following apply:

- (a) The district in which the wastes were generated does not have sufficient capacity to dispose of solid wastes generated within it for six months following the date of the directors' order;
- (b) No new solid waste facilities will begin operation during those six months in the district in which the wastes were generated and, despite good faith efforts to do so, it is impossible to site new solid waste facilities within the district because of its high population density;
- (c) The district in which the wastes were generated has made good faith efforts to negotiate with other districts to incorporate its disposal needs within those districts' solid waste management plans, including efforts to develop joint facilities authorized under section 343.02 of the Revised Code, and the efforts have been unsuccessful;
- (d) The district in which the wastes were generated has located a facility willing to accept the district's solid wastes for disposal within the receiving district;
- (e) The district in which the wastes were generated has demonstrated to the director that the conditions specified in divisions (C)(1)(a) to (d) of this section have been met;
- (f) The director finds that the issuance of the order will be consistent with the state solid waste management plan and that receipt of out-of-state wastes will not limit the capacity of the receiving district to dispose of its in-district wastes to less than eight years. Any order issued under division (C)(1) of this section shall not become final until thirty days after it has been served by certified mail upon the county or joint solid waste management district that will receive the out-of-district wastes.

ORC 3734.53(C)(2):

Governing the maintenance, protection, and use of solid waste collection and solid waste disposal, transfer, recycling, and resource recovery facilities within the district and requiring the submission of general plans and specifications for the construction, enlargement, or modification of any such facility to the Board of County Commissioners or Board of Directors of the district for review and approval as complying with the plan or amended plan of the District.

ORC 3734.53(C)(3):

Governing development and implementation of a program for the inspection of solid wastes generated outside the boundaries of the state that are being disposed of at solid waste facilities included in the district's plan.

ORC 3734.53(C)(4):

Exempting the owner or operator of any existing or proposed solid waste facility provided for in the plan from compliance with any amendment to a township zoning resolution adopted under Section 519.12 of the Revised Code or to a county rural zoning resolution adopted under Section 303.12 of the Revised Code that rezoned or redistricted the parcel or parcels upon which the facility is to be constructed or modified and that became effective within two years prior to the filing of an application for a permit required under division (A)(2)(a) of section 3734.05 of the Revised code to open a new or modify an existing solid waste facility.

A. Existing Rules

The District does not have any existing rules. There are no current plans to adopt new rules at the time of the development of this Plan Update.

B. Proposed Rules

The constantly changing legal landscape of the waste industry requires the District to reserve the right to use any rule making authority available to the District.

The District reserves the right to promulgate any rule in 343.01 of the Ohio Revised Code to assist in implementing any or all strategies necessary to achieve the waste management goals of this Amended Plan including:

- Prohibiting or limiting the receipt of waste generated outside the District;
- Governing the maintenance, protection, and use of solid waste collection, transfer, disposal, recycling, or resource recovery facilities;
- Governing a program to inspect out-of-state waste; and
- Exempting an owner or operator of a solid waste facility from compliance with local zoning requirement.

C. Rule Approval Process

Proposed rules shall be adopted and enforced by the Board of County Commissioners as provided in Section 343.01(G).

APPENDIX R: BLANK SURVEY FORMS AND RELATED INFORMATION

MERCER COUNTY

Solid Waste Management District

220 W. Livingston Street | Room A230 | Celina, OH 45822 | Ph: (419) 586-3695
Fax: (419) 584-1820 | Email: solidwaste@mercercountyohio.org

February 2023

Dear Mercer County Community:

THE MERCER COUNTY SOLID WASTE DISTRICT NEEDS YOUR HELP.

You can help us track local recycling efforts and fulfill our state reporting obligations by participating in a brief survey regarding the total amount recycled by your community programs in 2022. The data you provide will be combined with other communities' data. The information you supply will help us provide programs that meet the needs of our District residents.

How to participate in our brief survey:

The survey asks for the total tons recycled in 2022, which can typically be found on hauler invoices or receipts from processors/brokers of recyclable materials. If weights are not provided to you, you may be able to request this information from your service provider. Completing the survey should take only a few minutes.

Please complete your survey by **March 31, 2023** by following the steps below:

1. Visit <https://bit.ly/Mercer2022C>
2. Follow the instructions for completing the survey and check for accuracy
3. Click "Submit Survey"

If you have questions about the survey or would like to complete a paper survey, please contact Ben Dawson, the District's consultant, at GT Environmental. Ben can be reached at bdawson@gtenvironmental.com or 614-940-2870.

We greatly appreciate your willingness to participate and value your feedback.

Sincerely,



Kent Hinton
Mercer County Solid Waste District Coordinator



SCAN ME

*In the event you cannot reach the survey by the shortened link above, please use:
<https://survey.alchemer.com/s3/7208389/Mercer-County-2022-Community-Recycling-Survey> or scan:

MERCER COUNTY

Solid Waste Management District

220 W. Livingston Street | Room A230 | Celina, OH 45822 | Ph: (419) 586-3695
Fax: (419) 584-1820 | Email: solidwaste@mercercountyohio.org

February 2023

Dear Facility Manager:

THE MERCER COUNTY SOLID WASTE DISTRICT NEEDS YOUR HELP.

You can help us track local recycling efforts and fulfill our state reporting obligations by participating in a brief survey regarding the total pounds/tons recycled by your workplace in 2022. The data you provide will be combined with other businesses' data, so your individual company's or organization's information will not be identified. The information you supply will help us provide programs that meet the needs of our local community.

How to participate in our brief survey:

Please complete the survey using only calendar year 2022 information. Only materials generated **within Mercer County, OH** should be reported. Completing this survey should take only a few minutes.

Please complete your survey by **March 31, 2023** by following the steps below:

1. Visit <https://bit.ly/3jBJ2e4Mercer2022BP>
2. Follow the instructions for completing the survey and check for accuracy
3. Click "Submit Survey"

If you have questions about the survey or would like to complete a paper survey, please contact Ben Dawson, the District's consultant at GT Environmental. Ben can be reached at bdawson@gtenvironmental.com or 614-940-2870.

We greatly appreciate your willingness to participate and value your feedback.

Sincerely,



Kent Hinton
Mercer County Solid Waste District Coordinator



SCAN ME

*In the event you cannot reach the survey by the shortened link above, please use:
<https://survey.alchemer.com/s3/7208399/Mercer-County-2022-Brokers-Processors-Survey> or scan:

MERCER COUNTY

Solid Waste Management District

220 W. Livingston Street | Room A230 | Celina, OH 45822 | Ph: (419) 586-3695
Fax: (419) 584-1820 | Email: solidwaste@mercercountyohio.org

February 2023

Dear Facility Manager:

THE MERCER COUNTY SOLID WASTE DISTRICT NEEDS YOUR HELP.

You can help us track local recycling efforts and fulfill our state reporting obligations by participating in a brief survey regarding the total amount recycled by your workplace in 2022. The data you provide will be combined with other businesses' data, so your individual organization's information will not be identified. The information you supply will help us provide programs that meet the needs of our local community.

How to participate in our brief survey:

The survey asks for the total tons recycled in 2022, which can typically be found on hauler invoices or receipts from processors/brokers of recyclable materials. If weights are not provided to you, you may be able to request this information from your service provider. Completing the survey should take only a few minutes.

Please complete your survey by **March 31, 2023** by following the steps below:

1. Visit <https://bit.ly/MercerRecycles2022>
2. Follow the instructions for completing the survey and check for accuracy
3. Click "Submit Survey"

If you have questions about the survey or would like to complete a paper survey, please contact Ben Dawson, the District's consultant, at GT Environmental. Ben can be reached at bdawson@gtenvironmental.com or 614-940-2870

We greatly appreciate your willingness to participate and value your feedback.

Sincerely,



Kent Hinton
Mercer County Solid Waste District Coordinator



SCAN ME

*In the event you cannot reach the survey by the shortened link above, please use:
<https://survey.alchemer.com/s3/7208407/Mercer-County-2022-Business-Recycling-Survey> or scan:

APPENDIX S: SITING STRATEGY

The District does not specifically plan to own and/or operate any solid waste management facilities during the fifteen-year planning period. Moreover, the inventories of wastes generated and of available capacity at solid waste facilities indicate that the District does not need additional solid waste management capacity during the planning period.

Consequently, the District does not intend to adopt a siting strategy beyond that which is in accordance with Ohio Administrative Code 3745-27, 3745-30, 3745-37, or other provisions relating to the siting of solid waste facilities. As the District is not constructing a new solid waste landfill facility to secure disposal capacity, the Policy Committee is not including a siting strategy.

The District does not, as a part of this Plan, intend to site any District owned or operated facilities for the transfer or disposal of municipal solid waste. However, the District has developed a process which must be followed in the event that another party or entity wishes to site a solid waste transfer, disposal, recycling or resource recovery facility within the District.

A. Purpose and Objective

The District's Siting Strategy for Solid Waste Facilities shall ensure that proposals to construct a new Solid Waste Facility within the District or modify an existing Solid Waste Facility within the District are in compliance with the Plan. For the purpose of this Section, a modification of an existing Solid Waste Facility shall mean a significant change in the type or manner of operation at the facility (i.e., a conversion of a legitimate recycling facility to a transfer station). The Board shall not approve the General Plans and Specifications for any proposed Solid Waste Facility or the modification of any existing Solid Waste Facility where the construction and operation of the proposed facility, as determined by the Board, will have significant adverse impacts upon the Board's ability to implement the Plan, will interfere with the Board's obligation to provide for the maximum feasible utilization of existing Solid Waste Facilities within the District, will adversely affect the quality of life of residents within 5,280 feet of the proposed facility, or will have significant adverse impacts upon the local community and its resources.

All proposed Solid Waste Facilities, whether to be sited by or on behalf of the District, or by or on behalf of any person, municipal corporation, township, or other political subdivision, shall comply with the rules of the District and shall be subject to the following Siting Strategy unless granted an exemption or waiver from this requirement by the Board.

For the purposes of this Section, the following definitions shall apply:

- 1) Solid Waste Facilities shall mean all solid waste collection, storage, disposal, transfer, recycling, processing, and resource recovery facilities.
- 2) Siting Strategy shall mean the process by which the Board will review proposals for construction of any Solid Waste Facility and determine whether such proposal complies with the Plan.
- 3) General Plans and Specifications shall mean that information required to be submitted to the Board for review for the construction of any proposed Solid Waste Facility and includes, but is not limited to, a site plan for the proposed facility, architectural drawings or artists' renderings of the proposed facility, the projected size and capacity of the proposed facility.
- 4) Applicant shall mean a person, municipal corporation, township, or other political subdivision proposing to construct a Solid Waste Facility within the District.
- 5) Modify shall mean a significant change in the type or manner of operation at an existing Solid Waste Facility.

B. District Rule

The District has adopted Rule requiring that General Plans and Specifications for all proposals to construct any new Solid Waste Facility or modify any existing facility within the District be submitted to the Board for a determination by the Board of whether such General Plans and Specifications and the proposals comply with the Plan.

“No person, municipal corporation, township or other political subdivision, shall construct or modify any solid waste transfer, disposal, recycling or resource recovery facility until the general plans and specifications for the proposed improvement have been submitted to and approved by the Board as complying with the Plan or an exemption or waiver from this rule has been granted by the Board.”

C. Siting Strategy

Unless an exemption or waiver from this requirement has been granted by the Board, the following process shall be followed in the event the construction of a new Solid Waste Facility, or the modification of an existing Solid Waste Facility is proposed within the District:

STEP 1: Submittal of Plans and Specifications

Any person, municipal corporation, township, or other political subdivision proposing to construct a new Solid Waste Facility or modify an existing Solid Waste Facility within the District shall:

- 1) Provide General Plans and Specifications of the proposed facility to the Board. Such General Plans and Specifications shall include, but may not be limited to, the following documents and information:
 - a) the site plan for the proposed Solid Waste Facility;
 - b) architectural drawings or artists' renderings of the proposed Solid Waste Facility;
 - c) availability of necessary utilities;
 - d) projected size and capacity of the proposed Solid Waste Facility;
 - e) hours of operation;
 - f) anticipated source of solid waste or recyclable materials. If recycling activities will be conducted at the proposed facility, a detailed description of the recycling activity including materials to be recycled, technology to be utilized and anticipated percentage of waste reduction must be submitted;
 - g) types and anticipated number of vehicles utilizing the proposed Solid Waste facility;
 - h) routes to be used by vehicles utilizing facility and methods of ingress and egress; and
 - i) any other information necessary for the Board to evaluate whether the proposed Solid Waste Facility complies with each of the criteria listed below.

- 2) Adequately demonstrate to the Board that the construction or modification and operation of the proposed Solid Waste Facility:
 - a) is consistent with the goals, objectives, projections, and strategies contained in the Plan;
 - b) will not adversely affect financing for the implementation of the Plan;
 - c) will not adversely affect the Board's obligation to provide for the maximum feasible utilization of existing facilities;
 - d) will be installed, operated, and maintained to be harmonious and appropriate in appearance with the existing or intended character of the area;
 - e) will be adequately served by essential public facilities and services;
 - f) will not create excessive additional requirements at public cost for public facilities or services;
 - g) will not be detrimental to the economic welfare of the community;
 - h) will not involve the excessive production of traffic, noise, smoke, fumes, or odors;
 - i) will have vehicular approaches to the property that are designed not to create an interference with traffic;

- j) will not result in the destruction, loss, or damage of a natural, scenic, or historic feature of major importance; and
 - k) will not adversely affect property values within the surrounding community.
- 3) The Applicant shall submit any additional information as Board requests to establish to the reasonable satisfaction of Board, that the construction or modification and operation of the proposed Solid Waste Facility will comply with the above standards.

STEP 2: Board Review

The Board shall conduct a review of the information submitted for the proposed Solid Waste Facility to determine whether the Applicant has adequately demonstrated that the proposed Solid Waste Facility will be constructed or modified and operated in compliance with the standards established above. The Board may expend District funds to employ a consultant or consultants familiar with Solid Waste Facility construction and operation, land use planning and solid waste planning to assist the Board in implementing this Siting Strategy and in its determination of whether a proposed Solid Waste Facility complies with the Plan.

Within 30 days of receiving the General Plans and Specifications from an Applicant, the Board shall make a determination as to whether the General Plans and Specifications submitted by the applicant contain sufficient information for the Board to complete its review of the proposal. In the event the Board determines that more information is necessary to complete its review of the proposal, the Board shall notify the Applicant of such request in writing within 14 days.

Within 60 days of determining that the applicant has submitted a complete set of General Plans and Specifications, the Board shall determine whether the proposal complies with the Plan and the criteria identified in Step 1 herein. The Board shall notify the Applicant of its decision in writing. While the Board has broad discretion regarding the approval of General Plans and Specifications for a proposed Solid Waste Facility, it is the intent of the Siting Strategy that the Board shall not approve General Plans and Specifications for a proposed Solid Waste Facility unless the Board determines that the proposed Solid Waste Facility complies with the Plan and the criteria identified in Step 1 herein.

STEP 3: Development Agreement

In the event the Board determines that the proposed construction or modification and operation of a Solid Waste Facility complies with the Plan, the person, municipal corporation, township or other political subdivision proposing to construct the Solid Waste Facility shall enter into a development agreement with the Board which memorializes the obligations that are the basis of the Board's conclusion that the General Plans and Specifications demonstrate that the proposed facility complies with the Plan. The party proposing to construct a Solid Waste Facility shall have an ongoing obligation to comply with the Plan and the General Plans and Specifications as submitted and approved by the Board.

D. Waiver

The Board may waive application of the rule requiring the submission and Board approval of general plans and specifications, and all or any portion of the Siting Strategy or otherwise grant exceptions to the rules of the District, or unilaterally modify or amend the Siting Strategy if the Board concludes such waiver, modification or amendment is in the best interest of the District and will assist the Board in the successful implementation of the Plan and further District goals with respect to solid waste and waste reduction activities.

APPENDIX T: MISCELLANEOUS PLAN DOCUMENTS

During the process of preparing a plan, the policy committee signs three official documents certifying the plan. These documents are as follows:

1. Certification Statement for the Draft Solid Waste Management Plan – The Policy committee signs this statement to certify that the information presented in the draft solid waste management plan submitted to Ohio EPA is accurate and complies with the Format 4.1.

2. Resolution Adopting the Solid Waste Management Plan (adopted prior to distributing the draft plan for ratification) – The policy committee signs this resolution to accomplish two purposes:

- Adopt the draft solid waste management plan.
- Certify that the information in the solid waste management plan is accurate and complies with Format 4.1.

The policy committee signs this resolution after considering comments received during the public hearing/public comment period and prior to submitting the solid waste management plan to political jurisdictions for ratification. The policy committee should not make any changes to the solid waste management plan after signing the resolution.

3. Resolution Certifying Ratification of the Solid Waste Management Plan – The policy committee signs this resolution to certify that the solid waste management plan was ratified properly by the political jurisdictions within the solid waste management district. The policy committee signs this resolution after the solid waste management plan is ratified and before submitting the ratified plan to Ohio EPA)

Other documents to include in Appendix T include:





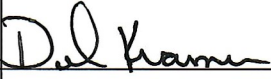

- Budget Statement signed by Commissioners
- Public notices

Copies of notices sent to:

- adjacent SWMDs;
- the director of Ohio EPA;
- the 50 industrial, commercial or institutional facilities that generate the largest quantities of solid waste within the SWMD; and
- the local trade associations representing the industrial, commercial, or institutional facilities generating the largest quantities of solid waste in the SWMD.

CERTIFICATION STATEMENT FOR THE DRAFT PLAN

We as representatives of the Solid Waste Management Policy Committee (SWMPC) of the Mercer County Solid Waste Management District (District), do hereby certify that to the best of our knowledge and belief, the statements, demonstrations and all accompanying materials that comprise the draft District Solid Waste Management Plan Update, and the availability of and access to sufficient solid waste management facility capacity to meet the solid waste management needs of the District for the fifteen year period covered by the Plan Update are accurate and are in compliance with the requirements in the *District Solid Waste Management Plan Format*, revision 4.1.

Representation	Signature for Yes Vote	Signature for No Vote
County Commissioner		
Largest City		
Health District		
Townships		
Industry		
General Interest of Citizens		
Public		
Total Votes	6	0

APPENDIX U: RATIFICATION RESULTS

Will be included post ratification period.

APPENDIX V: INVENTORY OF OPEN DUMPS AND OTHER

A. Existing Open Dump Sites and Waste Tire Dumps

Table V-1 Inventory of Open Dump Sites

Site Location (either address or description of site location)	Materials at Site (solid waste and/or scrap tires)
None	

B. Ash, Foundry Sand, and Slag Disposal Sites

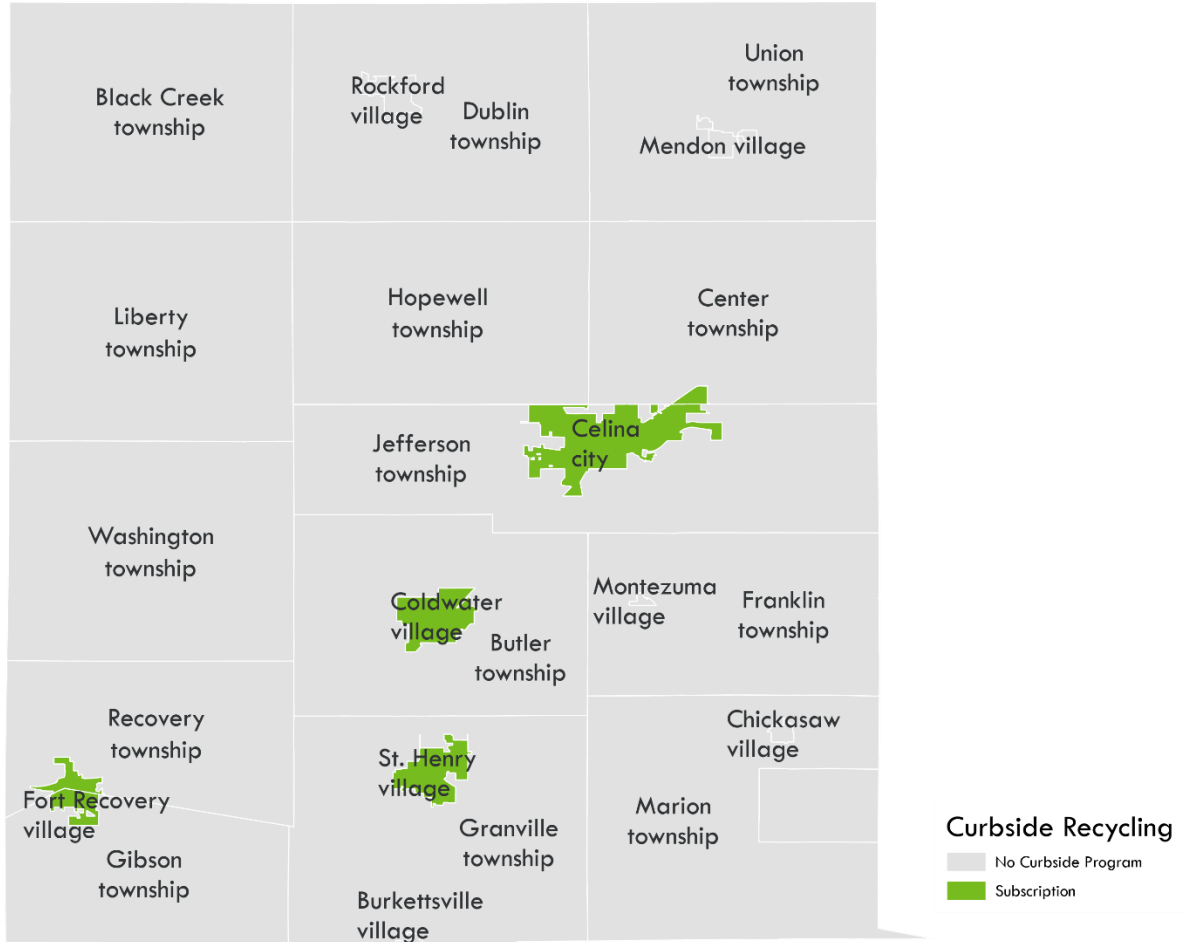
Table V-2 Inventory of Ash, Foundry Sand, and Slag Disposal Sites

Site Location (Address, description of site location)	Materials at Site (fly ash, bottom ash, foundry sand, and/or slag)
None	

APPENDIX W: DISTRICT MAP

A. Solid Waste Management and Recycling Inventories Response

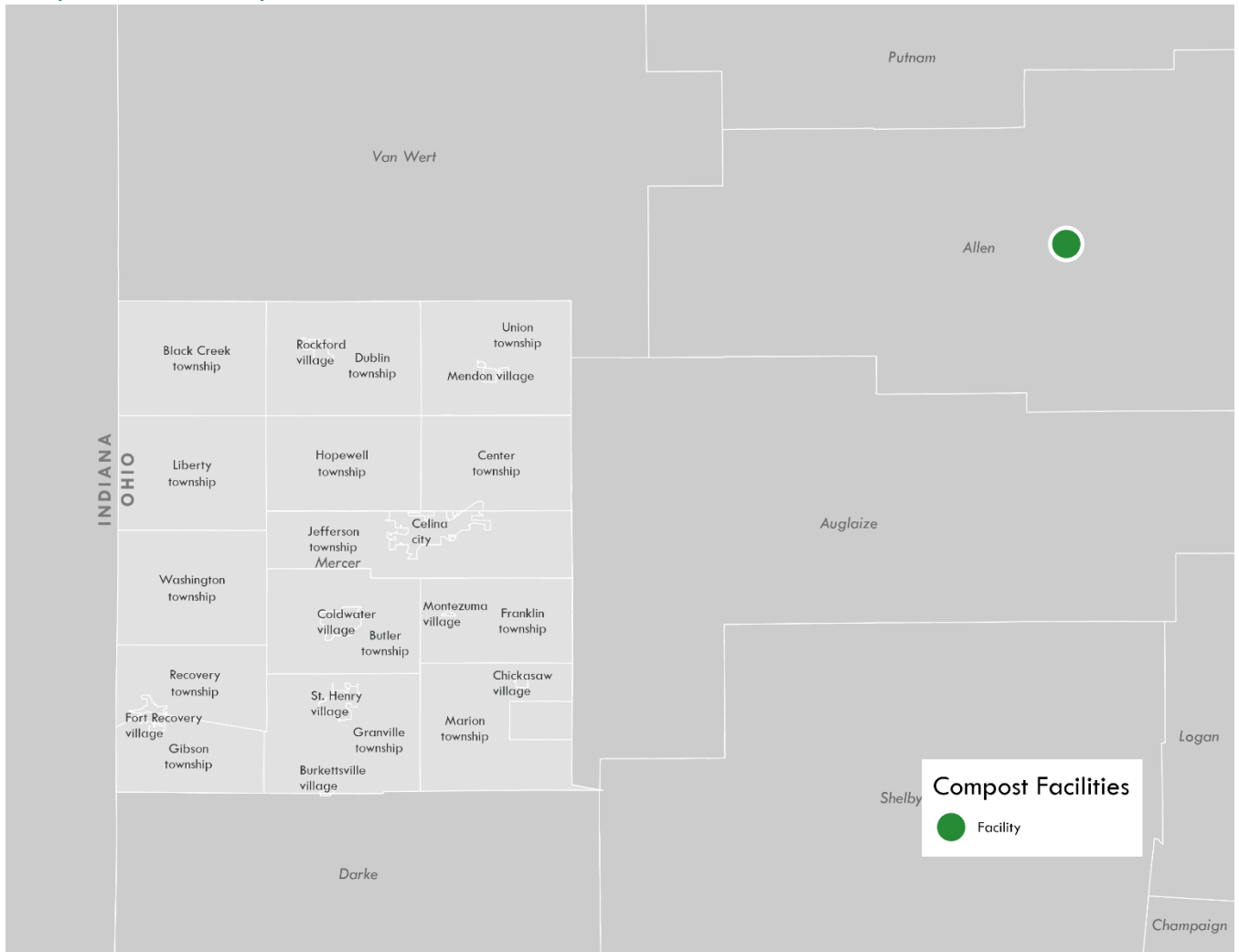
Curbside Recycling Access Map



Drop-off Recycling Access Map



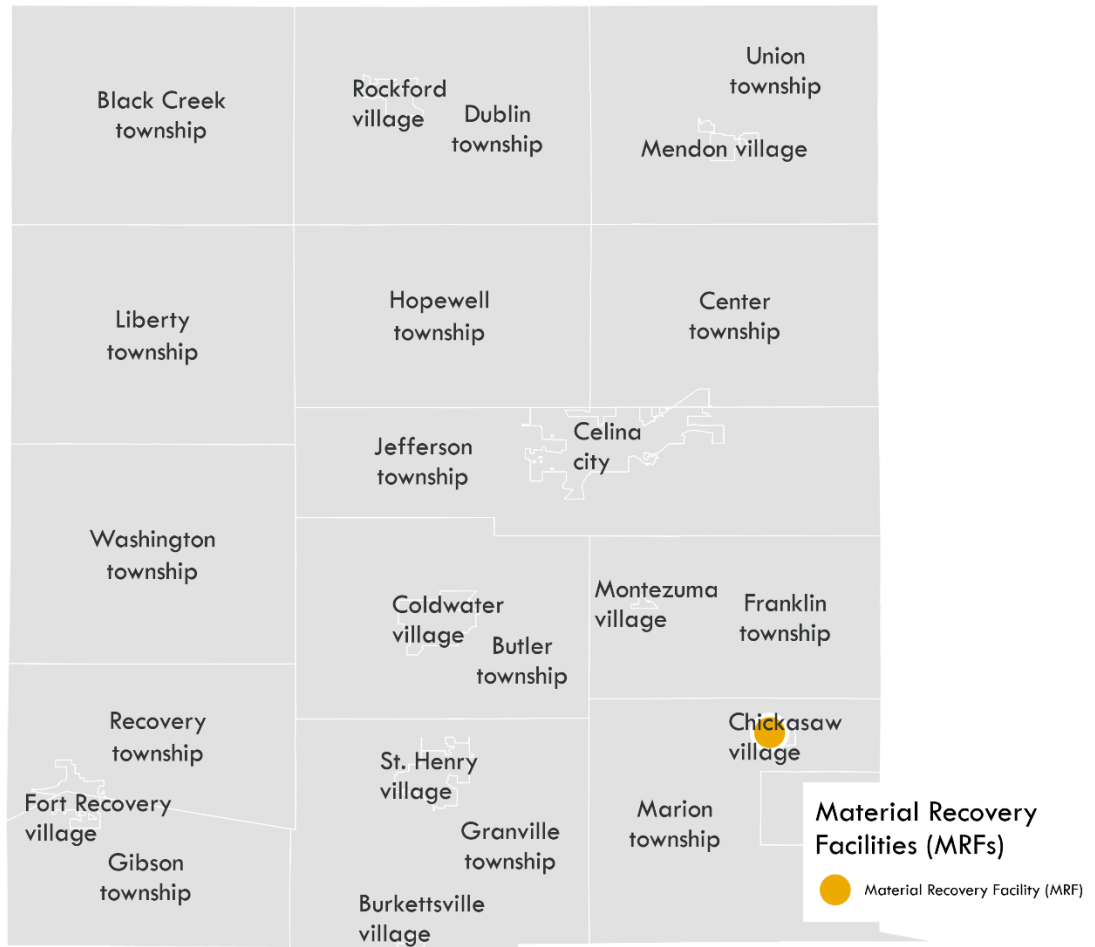
Compost Facilities Map



Solid Waste Facilities Map



Material Recovery Facility Map



Population Density Map

