



Monroe County Solid Waste Management District



2021

Five Year Solid Waste Management Plan

3400 S. Walnut St.
Bloomington, IN 47401

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gogreendistrict.com

This document is intended to provide an overview of current waste reduction, reuse, recycling and disposal activities occurring within the Monroe County Solid Waste Management District. Additionally, this plan provides estimates for future volumes of materials to be managed by these activities, and a strategy to encourage increased waste diversion, resource conservation, and other sustainability practices.

MISSION

The mission of the Monroe County Solid Waste Management District is to promote and contribute to long-term sustainability and a healthier environment by reducing the amount of waste going to final disposal. We recognize that waste reduction plays an important role in mitigating climate change and improving environmental quality, and we place our mission in this global and local context.

DISTRICT ADMINISTRATION

BOARD OF DIRECTORS

The Board of Directors of the Monroe County Solid Waste Management District is established by state statute (IC 13-21-3-5) and consists of the three Monroe County Commissioners; the Mayor of Bloomington, Indiana; a representative from the Monroe County Council; a representative of the City Council of Bloomington, Indiana; and a representative of the Town Council of Ellettsville, Indiana.

<p>Cheryl Munson Chairperson Monroe County Council</p>	<p>Isabel Piedmont-Smith Vice-Chairperson Bloomington City Council</p>	<p>Penny Githens Secretary Monroe County Commissioner</p>	
<p>Julie Thomas Monroe County Commissioner</p>	<p>John Hamilton Mayor, City of Bloomington</p>	<p>Lee Jones Monroe County Commissioner</p>	<p>Dan Swafford Ellettsville Town Council</p>

DISTRICT STAFF

A dedicated staff manages the day-to-day operations of the District. The administrative staff is comprised of three full-time and two part-time employees, these individuals are dedicated to providing the public with reliable information, education and services related to waste management in Monroe County.

<p>Executive Director Tom McGlasson Jr.</p>	<p>Controller Catherine Martin</p>	<p>Community Outreach Coordinator Elisa Pokral</p>
<p>Operations Director Scott A. Morgan</p>	<p>Office Manager Connie Hudson</p>	

The District is also responsible for the management, monitoring, and maintenance of the closed Monroe County Landfill. The two full-time employees with this responsibility also coordinate the District’s Adopt-A-Road program and enforce the County’s solid waste disposal ordinance.

<p>Landfill & Environmental Compliance Director Lee Paulsen</p>	<p>Environmental Compliance Investigator & Landfill Assistant Mary Beth King</p>
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Additionally, the District’s Household Hazardous Waste facility and five Recycling Centers are staffed by the following positions:

<p>Assistant Operations Director Recycling & Reuse Coordinator Green Business Network Coordinator Truck Driver</p>	<p>Hazardous Materials Technician (2) Materials Handler (2) Rural Site Operators (8) Relief Site Operators (4)</p>
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CITIZENS ADVISORY COMMITTEE

The District recognizes the value of input and support from its Citizens Advisory Committee (CAC), which is established by state statute (IC 13-21-3-11). With members appointed by the Board of Directors, the CAC is comprised of knowledgeable and interested residents of Monroe County, and employees of waste management companies operating in Monroe County. The CAC provides valuable feedback regarding the District’s annual budget and input on a variety of District projects and programs.

- Joseph Wynia, Chairperson**
Monroe County Resident
- Randi Cox, Vice-Chairperson**
Monroe County Resident
- John Arnold, Co-Secretary**
Monroe County Resident
- Andrew Manley, Co-Secretary**
Monroe County Resident
- Paul White Sr.**
Monroe County Resident

- Lily Kleinlein**
Monroe County Resident
- Ryan Conway**
EarthKeepers Bloomington Compost
- Nelson Shaffer**
Monroe County Resident
- Lauren Kot**
Rumpke Waste & Recycling
- Morning Wilder**
Monroe County Resident

Monroe County Demographics

Monroe County is located in south central Indiana and encompasses 395 square miles, including the following bodies of water: Lake Monroe (16.8 mi²); Lake Lemon (2.6 mi²); and Griffy Lake (0.2 mi²). It is home to Indiana University and Ivy Tech Community College, and boasts a thriving business community, which includes companies specializing in medical device and pharmaceutical manufacturing, healthcare, education, hospitality, construction, and retail sales. Additionally, Monroe County is home to a multitude of locally-owned restaurants and specialty shops.

Monroe County is comprised of eleven townships, and includes the municipalities of the City of Bloomington, the town of Ellettsville and the town of Stinesville. In 2019, nearly 58% of the county’s population lived in the City of Bloomington (85,755), and another 4.7% lived in the town of Ellettsville (6,747) and the town of Stinesville (218). In early 2021, the City of Bloomington announced plans to annex approximately 14.46 square miles of unincorporated area, estimated to include 14,377 residents, whose waste and recycling needs would potentially become serviced by the City’s Sanitation Department.

Below are statistics related to the demographics of Monroe County. The data presented is from STATS Indiana, a web service of the Indiana Business Research Center at the Indiana University Kelley School of Business.

POPULATION (2019): 148,431

Population Estimates by AGE

Pre-School	(0 to 4)	6,430	4.3%
School Age	(5 to 17)	16,768	11.3%
College Age	(18 to 24)	38,603	26.0%
Young Adult	(25 to 44)	37,461	25.2%
Older Adult	(45 to 64)	29,055	19.6%
Senior	(65+)	20,114	13.6%

Income and Poverty (2019)

Median Household Income	\$53,113
Per Capita Personal Income	\$43,660
Poverty Rate for Total Population	20.8%
Poverty Rate for Children Under 18	15.0%

Population Estimates by RACE

White Alone	127,577	86.0%
Asian Alone	10,821	7.3%
Black Alone	5,519	3.7%
2 or More Race Groups	3,923	2.6%
American Indian or Alaska Native	484	0.3%
Native Hawaiian & Other Pacific Island	107	0.1%

Housing (2019)

Total Households:	55,624	
Married w/ Children	7,947	14.30%
Married w/o Children	14,419	25.90%
Single Parents	3,833	6.90%
Living Alone	18,176	32.70%
Owner Occupied	31,105	55.9%
Renter Occupied	24,518	44.1%

Education Attainment for Residents 25 Years of Age and Older (2019)

Less than 9th Grade	1,626	1.9%
9th to 12th Grade	4,517	5.3%
High School Graduate	18,748	22.2%
Some College	14,679	17.4%
Associates Degree	6,289	7.4%
Bachelor's Degree	20,575	24.4%
Graduate Degree	18,062	21.4%

WASTE GENERATION (2020):

According to the Indiana Department of Environmental Management *Solid Waste Quarterly Report Database*, the following tons of waste were generated in Monroe County, Indiana in 2020:

Municipal Solid Waste	Construction / Demolition	Other Non-Municipal	Alternative Daily Cover / Reuse	TOTAL
104,175	32,916	36,325	695	174,111

*Municipal Solid Waste (MSW) includes waste from homes, businesses, schools and non-infectious hospital waste. This is the only waste classification tonnage considered for the purposes of calculating the data below.

MSW Generation Per Capita: 3.84 pounds per day 1,403 pounds per year
 MSW Generation Per Household: 10.26 pounds per day 3,746 pounds per year

RECYCLING GENERATION (2019)

According to the Indiana Department of Environmental Management *2019 Recycling Activity Summary* (this is the most recent report available as of this writing), Monroe County generated 10,087 tons of recyclables in 2019. The report shows two (2) categories of recyclables generated in Monroe County: "Shipments to In-State Recycler Facilities" (7,558 tons); and "Shipments through Brokers" (2,529 tons).

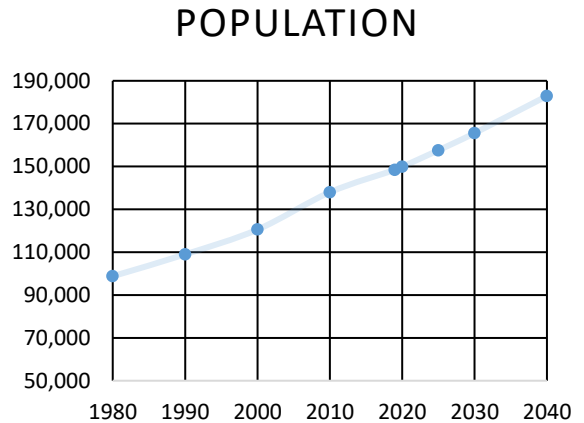
Recyclable Material Generation Per Capita: 0.37 pounds per day 135 pounds per year
 Recyclable Material Generation Per Household: 0.99 pounds per day 361 pounds per year

Projections

POPULATION

The following table includes historical population data from the STATS Indiana website, and projected population figures using the *Indiana Population Projection* tool (https://www.stats.indiana.edu/pop_proj/) for Monroe County.

YEAR	POP.	DIFFERENCE		ANNUAL GROWTH RATE
		INCREASE	PERCENT	
1980	98,785	N / A	N / A	N / A
1990	108,978	10,193	10.3%	0.9%
2000	120,563	11,585	10.6%	1.0%
2010	137,974	17,411	14.4%	1.4%
2019*	148,431	10,457	7.6%	0.7%
2020**	150,620	2,189	1.5%	1.5%
2025**	156,689	6,069	4.0%	0.8%
2030**	162,024	5,335	3.4%	0.7%
2040**	171,175	9,151	5.6%	0.6%



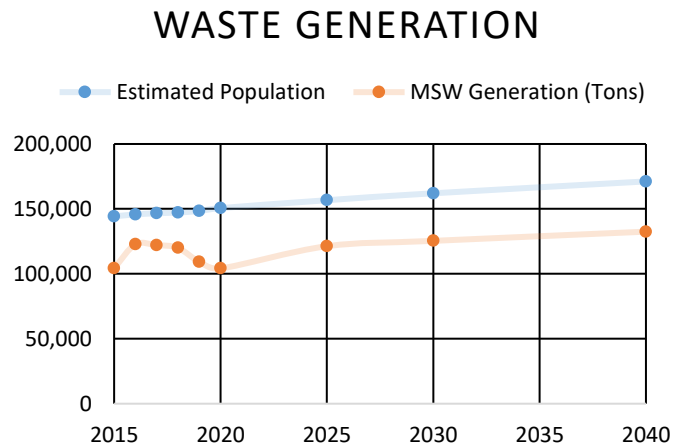
*Estimated – source: STATS Indiana website

** Data projections sourced from STATS Indiana *Population Projections* tool

WASTE GENERATION

Focusing on the MSW waste classification, it is possible to use the data available from IDEM to calculate historical generation tonnage trends, and using the previously provided future population estimates, calculate estimates for future waste generation.

Year	Estimated Population	MSW Generation (Tons)	Annual Per Capita (Pounds)
2015	144,247	104,323	1446.45
2016	145,757	122,693	1683.53
2017	146,638	122,127	1665.69
2018	147,230	119,989	1629.95
2019	148,431	109,228	1471.77
2020	150,620	104,175	1389.79
2025*	156,689	121,266	1547.86
2030*	162,024	125,395	1547.86
2040*	171,175	132,477	1547.86



*Data for 2025, 2030, & 2040 is estimated

Two (2) other categories of waste classification are also generated in Monroe County according to the data available from IDEM:

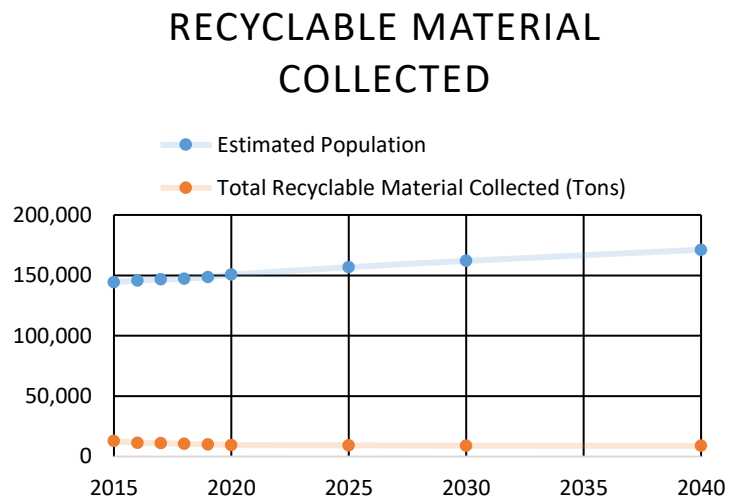
1. Construction/Demolition (C/D): The volume of this material generated can be dependent on economic and other factors that impact development within the county. C/D waste generation in 2015 was 12,337 tons, and was decreasing annually through 2018 to 6,690 tons, before increasing dramatically in 2019 to 30,369 tons, and 32,916 tons in 2020.

2. Non-Municipal Other Waste (NMOTH): This consists of wastes generated predominantly from industrial, agricultural, and mining operations. In 2015, Monroe County generated 10,228 tons of NMOTH waste. With the construction of I-69 through Monroe County, this volume increased to 22,863 tons in 2016, 40,421 tons in 2017, and 70,731 tons in 2018. This waste is now trending downward with 45,923 tons generated in 2019 and 36,325 tons in 2020.

RECYCLING GENERATION

The State of Indiana did not track recycling data until 2015, when it began requiring recycling companies to report the amount of recyclable materials they were collecting. The annual recycling activity reports produced by the Indiana Department of Environmental Management only divide recyclable materials into the following categories: “Shipments to In-State Recycling Facilities”; “Shipments through a Broker”; “Shipments to In-State Manufacturers/End Users”; and “Shipments to Out-of-State Destinations”. However, this information can be used to generate general predictions concerning generation of recyclable material in Monroe County.

YEAR	Estimated Population	Total Recyclable Material Collected (Tons)	Annual Per Capita (Pounds)
2015	144,247	12,855	178.24
2016	145,757	11,404	156.48
2017	146,638	11,100	151.39
2018	147,230	10,509	142.76
2019	148,431	10,087	135.92
2020*	149,915	9,527	127.09
2025*	157,562	9,363	118.85
2030*	165,599	9,202	111.13
2040*	182,925	9,505	103.92



*Data for 2020, 2025, 2030, & 2040 is estimated

Waste Management Facilities and Activities

WASTE MANAGEMENT FACILITIES

LANDFILLS

NAME	Dillman Road WWTP Landfill
PERMIT #	53-02
ADDRESS	100 W. Dillman Road, Bloomington, IN 47403
OWNER	City of Bloomington Utilities
PERMIT EXPIRES	May 15, 2023
NOTES	This facility is a non-municipal landfill and is not open to the public for MSW disposal.

TRANSFER STATIONS

NAME Hoosier Disposal & Recycling
PERMIT # 53-01
ADDRESS 6660 S. State Road 37, Bloomington, IN 47401
PHONE 812-824-7998
OWNER Republic Services
PERMIT EXPIRES August 31, 2021
NOTES Permit renewal application submitted to IDEM on 2/10/21

PROPOSED FACILITY: On 5/7/2021, Rumpke of Indiana, LLC, submitted a permit application to IDEM for a proposed solid waste processing facility (transfer station) to be located in Monroe County.

REGISTERED YARD WASTE COMPOSTING FACILITIES

NAME Good Earth
REGISTRATION # 53-01C
EXPIRES August 16, 2024
ADDRESS 650 E. Empire Mill Road
 Bloomington, IN 47401
OWNER Good Earth, LLC

NAME Mary’s Children, Inc.
REGISTRATION # 53-06
EXPIRES September 1, 2023
ADDRESS 8200 W. Hendricks Road
 Bloomington, IN 47403
OWNER Mary’s Children, Inc.

NAME Green Earth
REGISTRATION # 53-03C
EXPIRES September 1, 2021
ADDRESS 7333 W. Gifford Road
 Bloomington, IN 47403
OWNER Kevin Huntley

NAME Fable Farms Indiana, LLC
REGISTRATION # 53-09
EXPIRES March 20, 2023
ADDRESS 8200 W. Hendricks Road
 Bloomington, IN 47403
OWNER Fable Farms Indiana, LLC

NAME Indiana University
REGISTRATION # 53-05C
EXPIRES August 16, 2024
ADDRESS 650 E. Empire Mill Road
 Bloomington, IN 47401
OWNER Indiana University
NOTES Registration renewal submitted to IDEM in October 2020

REGISTERED COLLECTION CONTAINER SYSTEMS

NAME Northeast Recycling Center
REGISTRATION # 53-UP-01
ADDRESS 6015 E. State Road 45
 Bloomington, IN 47408
OWNER MCSWMD

NAME Ellettsville Recycling Center
REGISTRATION # 53-UP-03
ADDRESS 6200 N. Matthews Drive
 Ellettsville, IN 47429
OWNER MCSWMD

NAME Southside Recycling Center
REGISTRATION # 53-UP-02
ADDRESS 400 W. Dillman Road
 Bloomington, IN 47408 3
OWNER MCSWMD

NAME Westside Recycling Center
REGISTRATION # 53-UP-04
ADDRESS 341 N. Oard Road
 Bloomington, IN 47403
OWNER MCSWMD

REGISTERED COLLECTION CONTAINER SYSTEMS (cont.)

NAME South Walnut Recycling Center
REGISTRATION # 53-006CC
ADDRESS 3400 S. Walnut Street
 Bloomington, IN 47401

OWNER MCSWMD

REGISTERED E-WASTE STORAGE & PROCESSING

NAME ModusLink PTS
PERMIT # 53-03 EW
ADDRESS 2000 S. Liberty Drive, Bloomington, IN 47401
PHONE 812-389-4632
OWNER PTS Corporation
PERMIT EXPIRES November 4, 2021

SCRAP METAL PROCESSORS

NAME Bloomington Iron & Metal
ADDRESS 503 N. Rogers Street
 Bloomington, IN 47404
OWNER Bloomington Iron & Metal, Inc.

NAME JB's Salvage
ADDRESS 1803 Fountain Drive
 Bloomington, IN 47404
OWNER JB's Salvage, Inc.

REGISTERED WASTE TIRE TRANSPORTERS

NAME Monroe County Solid Waste Management District
REGISTRATION # 53-T-00546
ADDRESS 3400 S. Walnut Street, Bloomington, IN 47401
OWNER MCSWMD

WASTE HAULERS (PERMITTED BY THE MONROE COUNTY HEALTH DEPARTMENT)

MUNICIPAL

NAME City of Bloomington
ADDRESS 3406 S. Walnut Street
 Bloomington, IN 47401

NAME Monroe County Airport
ADDRESS 972 S. Kirby Road
 Bloomington, IN 47403

NAME Monroe County Solid Waste Management District
ADDRESS 3400 S. Walnut Street
 Bloomington, IN 47401

PRIVATE

NAME Ava's Waste Removal
ADDRESS 8325 W. State Road 46
 Ellettsville, IN 47429

NAME B & D Waste Removal
ADDRESS 3227 R Street
 Bedford, IN 47421

NAME Bland's LLC
ADDRESS P.O. Box 593
 Ellettsville, IN 47429

NAME Bloomington Iron & Metal
ADDRESS 503 N. Rogers Street
 Bloomington, IN 47404

NAME Green Camino
ADDRESS 5285 E. State Road 45
 Bloomington, IN 47408

NAME Hoosier Outdoor Services
ADDRESS P.O. Box 352
 Clear Creek, IN 47426

PRIVATE (cont.)

NAME J & A Trash Removal, Inc.
ADDRESS 3982 W. State Road 46
 Nashville, IN 47448

NAME JB’s Salvage
ADDRESS 1803 Fountain Drive
 Bloomington, IN 47404

NAME K & S Rolloff, Inc.
ADDRESS 4810 W. State Road 45
 Bloomington, IN 47403

NAME Monster Trash
ADDRESS 689 Morgan St.
 Spencer, IN 47460

NAME Ray’s Trash Service
ADDRESS 3859 E. U.S. Highway 40
 Clayton, IN 46118

NAME Republic Services of Indiana
 Transportation, LLC
ADDRESS 832 Langsdale Avenue
 Indianapolis, IN 46202

NAME Rumpke Transportation
 Company, LLC
ADDRESS 10795 Hughes Road
 Cincinnati, OH 45251

NAME Sl6, dba Express Waste
 Removal
ADDRESS P.O. Box 6988
 Bloomington, IN 47407

REUSE & RECYCLING SERVICES

RECYCLING COLLECTION PROGRAMS

The City of Bloomington offers single stream recycling curbside collection services for single family homes and buildings with up to four (4) housing units, duplex, and triplex residences.

A number of private haulers offer single stream recycling curbside collection services to both residences and businesses.

The District’s Green Business Network offers collection of segregated recyclable materials to local small businesses and not-for-profit entities.

DROP-OFF RECYCLING PROGRAMS

The District provides five (5) recycling drop-off locations, these are the previously identified registered collection container systems.

Ray’s Trash Service provides drop-off containers for mixed fiber materials at a number of local grocery stores, schools, and churches.

REUSE OPTIONS

The five (5) District recycling drop-off locations all have space reserved for reusable items where residents can leave items for reuse or take available items they have a use for.

The District also provides its *Materials for the Arts* program, which accepts reusable materials and items from local residents and businesses and makes them available at no cost to schools and teachers, not-for-profit organizations, and local artists working on community projects.

A number of not-for-profit and charitable organizations accept reusable items and materials which are made available to residents in need, or for resale:

- Goodwill Industries
- Habitat Re-Store
- Indiana University Surplus Store
- My Sister’s Closet
- Opportunity House
- Salvation Army
- St. Vincent de Paul

Additionally, there are multiple private sector entities offering used items for resale.

Solid Waste Management Policy

The District will strive to provide services and educational programs aimed at reducing the amount of material going to final disposal. Promoting source reduction, reuse, recycling, e-cycling, composting, mulching, and other alternatives to final disposal will be the primary focus of these efforts, and such programs will be offered to local schools, businesses, not-for-profits, other community groups, organizations, and residents. Coordinated efforts with other local governmental entities and State and local agencies with responsibilities related to waste management and ecological sustainability will be necessary to the success of these efforts.

Promoting alternatives to final disposal is particularly important since Monroe County does not have an operating final disposal facility. All waste generated in Monroe County must be transported to an out of county permitted final disposal facility. Reducing the amount of material transported will have a positive environmental impact by reducing the carbon footprint generated by Monroe County.

The District’s education programs will also promote and educate the public on the benefits of composting and mulching for the management of vegetative material. Proper management of Household Hazardous Waste (HHW) will also be a focus of services and educational programs. Educating residents and businesses on the benefits of keeping HHW out of the waste stream, and providing services for collection of these materials for proper disposal or for reuse, are essential to the District’s mission.

Solid Waste Problems and Disposal of Specified Wastes

SOLID WASTE PROBLEMS

While the District has made tremendous progress in addressing many of the solid waste problems identified in its previous solid waste management plan, there are still areas where improvements can be made, or new problems that have been identified, including:

1. Apartment Recycling
 - While the City of Bloomington provides curbside collection for residences with four (4) or fewer units, residential properties with five (5) or more units within the City and apartments outside the City limits are reliant on the private sector for collection of recyclables. Unlike with solid waste, local codes and ordinances do not require these types of residential properties to provide for recycling collection and as such, most do not offer it due to space and cost constraints.
2. Construction/Demolition Debris/Waste
 - The Environmental Protection Agency (EPA) estimates that over seventy percent (70%) of this type of waste is recyclable, Monroe County does not have any facilities or programs that offer recycling for these materials.

3. Yard Waste
 - While composting options are available for yard waste in Monroe County, there are limited collection options for this material and many residents resort to open burning for disposal.
4. Waste Tires
 - In 2020, the District responded to thirty (30) reports of illegally dumped tires, and collected a total of one hundred and seventy-seven (177) tires.
5. Illegal Dumping
 - In 2020:
 - The District received a total of one hundred and ninety-three (193) reports of illegal dumping. Remediation of these cases resulted in the collection and disposal of three thousand four hundred and twenty (3,420) pounds of waste.
 - The District's Adopt-A-Road program participants completed forty-three (43) roadside clean-ups and collected another three thousand two hundred and thirty (3,230) pounds of waste and five hundred and thirty-five (535) pounds of recyclable material.
6. Open Burning
 - The District annually receives up to one hundred (100) complaints of open burning. Most of these complaints are found to involve material that is legal to burn in the State of Indiana, with minor violations of the statute, including absence of containment and absence of extinguishing ability.
 - In 2020, the District had a total of nine (9) cases which were found to include material(s) not allowed to be burned by statute.
 - Monroe County does not have any ordinance in place to regulate open burning. The District has been advised by the County Attorney Office that it does not have the authority nor the jurisdiction to enforce

DISPOSAL OF SPECIFIED WASTES

1. Waste Tires
 - Monroe County has limited opportunities for the proper disposal and/or recycling of waste tires. Most retailers who sell and install tires do manage the disposal/recycling of the waste tires for the customer, however, residents who have waste tires for disposal/recycling are often times unable to locate a local option for them.
2. Household Hazardous Waste
 - The District operates a household hazardous waste facility at its 3400 S. Walnut Street recycling center. The facility accepts commonly generated household hazardous waste and some commercially exempt small quantity generator (CESQG) hazardous waste from local businesses. It is open five (5) days per week.
3. Used Oil
 - All District recycling centers accept used oil.
4. White Goods
 - All District recycling centers accept non-Freon containing white goods as scrap metal. Freon containing appliances are accepted at the District Household Hazardous Waste facility.

Goals and Objectives

The following summarizes the goals and objectives established by this solid waste management plan. Additional details pertaining to the means of achievement, capital and operating costs, metrics, timeline and other recommendations are provided in Appendix 1.

EDUCATION

1. Quick-Bite Media Outreach Campaign

In today's culture there is generally little awareness about the problems of waste generation, how it is managed, or why it is important. To make these critical matters accessible and clear to residents of the district, a series of 3 documentary-style videos on final disposal, recycling, and composting will be produced to cover the topics of 'where it goes', 'why it matters', and 'what we need to do'. The video content will be accompanied by a county-wide signage campaign to provide visibility to the information and QR links to the video content.

2. Review and Update District Website and Waste Management Guide Flyers

These existing district outreach tools are excellent platforms and should be maintained, but updated to reflect current waste best-practices and to appeal to modern internet user expectations. The District's website should serve as a centralized location for all waste management resources for residents and businesses, focusing on the most commonly requested information and featuring the latest source reduction education materials. Fliers should provide quick access to all the best waste practices and additional resources for further information.

3. Rework District's 'Go Green' brand with 'responsibility' focused language

In an age where a global climate crisis is rapidly unfolding and human activity is devastating natural planetary systems, the need to act rapidly is critical but the urgency and individual necessity to so are not adequately conveyed by the 'Go Green' slogan. A focus on what is at stake and the obligation to act will underscore the importance of the District's mission and the benefit it has to the community. Crowd sourcing the new logo, slogan, and brand could also be an effective means to increase community ownership, involvement, and awareness.

4. Improve/Expand Outreach Network

Disseminating materials and information to the district's citizens quickly and extensively is critical to improving waste education and practices. While the district has its own outlets for this information, it will be essential to connect with other individuals and organizations who can extend the reach and re-broadcast its message and content to further circles in the community.

SOURCE REDUCTION

1. Broad Education

Source reduction is the most effective practice for impacting the waste generation problem and needs to be the primary emphasis of the District. The District should inform residents by sector (residential, business, and governmental) of the need for source reduction and practical steps for accomplishing it by creating & curating resources to facilitate the process and conducting outreach to raise awareness of the resources and their importance.

2. Proactive Business Outreach

Because the current culture is slow to consider the importance or impact of uncontrolled waste production, the District should proactively identify and contact receptive businesses with resources about source reduction practices to advance the awareness and engagement.

3. Ongoing Dialog with Major Community Stakeholders

There are a small number of organizations in the community that have considerable influence or authority on waste management practices for a large number of residents. The District can maximize its impact by regularly engaging directly with these organizations, such as municipalities, universities, and others, to continue the conversation about opportunities for source reduction.

4. Local Political Engagement

Without the authority to create legislation, the district must rely on and will therefore engage with the local governing bodies to propose and lobby for policies that will support the advancement of source reduction in all sectors of the community.

WASTE DIVERSION

1. Diversion Education

Both recycling and composting require clear guidance and adherence to best practices to ensure a successful end result. The district can provide business and residents with easily accessible, streamlined resources to explain these practices and the importance of following them. Digital and printable versions of accepted materials, contamination control, home composting, and food waste diversion guides will help residents divert their waste reliably and minimize land-filled material.

2. Coordinate Re-Routing of Usable Waste

With the long term goal of developing a new stream for usable 'waste', the District can serve as a coordinator for new & existing organizations in the District working to achieve these goals. Particular examples include routing food leftovers, consumer goods, white goods, construction materials, and other usable items to new or existing re-use destinations like Hoosier Hills Food Bank and Goodwill.

3. Seek and Support Expansion of Recycling and Composting Services with Emphasis on Multi-Family Housing Developments

Even though recycling and composting services already exist they are not always readily accessible to residents. Multi-Family Housing Developments in particular house a substantial population and often do not provide either. The district can help increase these services by engaging with the city of Bloomington on its Sustainability Action Plan goal 5.1.E to develop a prioritized plan for expanding participation in the Green Business Network, focusing on increased recycling participation by multi-family and commercial participants.

4. Expand Compost End-User Market

Advancing the widespread diversion of organics to the composting stream will not be possible without planning for the finished compost that is produced as a result. The district can reach out to public and private sector parties who can incorporate high volume compost application into their SOP for uses like back fill, public space landscaping, erosion control, and others to develop a market that makes large-scale composting a viable industry.

5. Increase Available Data on Diversion Performance and Contamination Rates/Losses

Because recycling data is not closely tracked or widely available, the efficacy of management practices is difficult to analyze. The district should work with the Association of Indiana Solid Waste Management District's, the Indiana Department of Environmental Management, and the State legislature, to lobby for improved reporting requirements on all waste streams which would provide better insight into developing optimal practices, and better means of evaluating their results in the long term.

FINAL DISPOSAL FACILITIES

1. Continued Environmentally Safe Post-Closure Maintenance of the Monroe County Landfill
 Post-closure monitoring and maintenance of landfills includes maintaining the soil/and or plastic cover, leachate collection, gas extraction, sedimentation and erosion controls, and monitoring ground water for any contamination for at least 30 years after completing closure. As of the published date of this document, the Monroe County Landfill is currently 17 years into the required minimum 30-year post-closure care period.

2. Explore Recreational and Educational Opportunities at the Closed Monroe County Landfill
 The 1992 MCSWD 20 Year Plan stated the District is committed to restoring the natural beauty of the area of the present landfill by means of recreation areas or county parks. The District owns approximately 110 acres of forested and cultivated land south of Anderson Road. Such opportunities can include: a partnership with Monroe County Parks and Recreation to establish a public park at this location, additional landfill tours, build a walking trail with educational signage covering the history of the Monroe County Landfill and final disposal facilities in general.

3. Explore Ways to Make the Landfill Profitable
 Solar generation and leasing greenspace for composting operations are potential ways to generate profit from the closed landfill. Additional income from on-site projects will be diverted to post closure maintenance line items. A post-five-year objective would be the establishment of the profitable activities identified to be feasible.

Finances

REVENUES

The District is a tax funded entity and tax revenues account for over seventy percent (70%) of the annual revenue received. Other major revenue sources include: the sale of bags for the District’s pay-as-you throw waste disposal program (≈ 12%/year); host fee received from Republic Services (≈ 10%/year); and the sale of recyclable materials (≈ 2.5%/year). Additional sources of revenue include fees from: Green Business Network subscribers; screened e-waste (TVs, monitors, etc.); Freon appliances; commercially exempt small quantity generator (CESQG) waste; and latex paint.

All fees charged by the District are established by, and applied in accordance with, the District’s *Fee Resolution*, originally adopted on December 16, 1991 via Ordinance 91-1. The District’s *Fee Resolution* has been amended and modified as needed, most recently in November 2019 via Resolution 2019-15.

EXPENSES

Personnel

The District currently employs twenty-six (26) staff members working varied schedules. The following work schedules are observed showing the number of employees working each scheduled (all positions with regularly scheduled hours are benefit-eligible positions):

- | | |
|------------------------------------|-------------------------|
| ● Forty (40) Hours per Week | Thirteen (13) Employees |
| ● Thirty (30) Hours per Week | One (1) Employee |
| ● Twenty-Five (25) Hours per week | One (1) Employee |
| ● Twenty-Three (23) Hours per Week | Eight (8) Employees |
| ● On-Call / As Needed | Three (3) Employees |

Expenses for personnel wages and benefits average approximately forty-nine percent (≈ 49%) of the District's annual budgeted expenditures. In recent years this has been impacted by the District's efforts to raise its minimum rate of pay to a living wage standard of \$15.00 per hour. In 2021, the minimum rate of pay for a District employee is \$14.00 per hour, and there is an expectation to increase this to \$15.00 per hour in 2022.

The District's Board of Directors and administration are cognizant of personnel costs, and while fiscal prudence is the priority, this is balanced with providing the staff with an adequate living wage. Staffing levels are reviewed regularly and changes are made when it is deemed necessary and/or prudent.

Supplies

Supply expenditures comprise a small portion of the District's annual budget, averaging approximately five percent (≈ 5.0%). The majority of these expenses go toward bags for the pay-as-you throw disposal program, fuel, and materials and items necessary to provide programs and services.

Other Services and Charges

This category of expenses comprises the largest portion of the annual budget outside of personnel expenses, averaging approximately forty-four percent (≈ 44.0%). Major expenses in this category include: insurance; landfill maintenance expenses (leachate disposal, laboratory, engineering, and contractor expenses); waste disposal; transportation (waste and recyclables hauling); recycling processing; and household hazardous waste disposal.

The District Board of Directors and staff recognize the costs associated with providing the District's programs and services to Monroe County residents, and regularly assess expenses to ensure resources are used effectively and efficiently. All purchases are made in accordance with the District's *Purchasing Policy* and IC 5-22.

Capital Expenditures

While the District does not have any annually recurring capital expenditures, it does own real estate, buildings, and equipment, and maintains a small fleet of vehicles. These assets do, from time to time, require capital expenditures for building repair and improvement, and vehicle and equipment replacement. These expenses, however, make up a small portion of the District budget, averaging approximately two percent (≈ 2.0%) annually.

Implementation, Surveillance and Enforcement

The District's Executive Director is charged with the implementation of this Solid Waste Management Plan. The District's Board of Directors, in consultation with its Citizens Advisory Committee, is charged with the surveillance (monitoring) and enforcement of the implementation of this plan. The Board of Directors and Citizens Advisory Committee will review and assess the implementation of the plan on an annual basis.

MONROE COUNTY SOLID WASTE MANAGEMENT DISTRICT FIVE YEAR PLAN

APPENDIX 1

The information contained in this appendix is meant to offer guidance and suggested recommendations to help guide the District's efforts toward achieving the goals and objectives identified in the Five Year Plan.

EDUCATION

Goal #1: Quick-Bite Media Outreach Campaign

Ideal code target locations include:

- District's existing rural drop-off sites, waste receptacles at county facilities, county parks/trails, and high traffic pedestrian ways.
- Equivalent locations for other municipalities within the district by requesting their participation.
- Major waste/recycling/composting receptacles on IU's campus by requesting their participation
- High-volume apartment complexes
- Means of Achievement
 - Production of documentary-style video shorts,
 - Printed sandwich signs/flyers
 - Written article formats of the video content
 - QR Code signing distribution
 - Collaborate with City of Bloomington on production & distribution to jointly achieve Climate Action Plan goal WM2-A-1: *"Create a comprehensive communication campaign to provide standardized information and communications on waste reduction, recycling, and organics collection options to reach the residential sector."*
- Capital & Operational Cost
 - Video production support
 - Graphic design for printed media
 - Printing services
 - Web support
- Metrics
 - Distribute a minimum of 100 signs in as diverse of locations as possibleRegularly reporting milestones will indicate the rate of progress over the plan life. Suggested milestones:
 - For videos:
 - Story boarding
 - Script
 - Filming
 - Editing
 - Hosting

- For printed media:
 - Posting location plan
 - Types of prints to be posted (e.g. flyer, poster, yard sign, etc.)
 - Focus group feedback
 - Graphic Design Complete
 - Final Layout
 - Print
 - Installation/distribution
- Timeline
 - Target video completion by end of year 3

Goal #2: Review and Update District Website and Waste Management Guide Flyers

- Means of Achievement
 - Improve website presentation and navigability
 - Focus design on most frequently accessed/requested information
 - Insert relevant references to district’s goals and objectives and importance of waste management practices.
- Capital & Operational Cost
 - Website redesign
 - Graphic design support
 - Staff support
- Metrics

Regularly reporting milestones will indicate the rate of progress over the plan life. Suggested milestones:

 - Website:
 - Quote for site redesign
 - Summary of Internal Review
 - Specifics of plan for new content
 - Updates on developer progress
 - Thorough User Experience testing
 - Flyers:
 - Summary of Internal Review
 - Specifics of plan for new content
 - Graphic design / layout completion
 - Print
- Timeline
 - Target updated website launch by the end of year 2

Goal #3: Rework District’s ‘Go Green’ brand with ‘responsibility’ focused language

- Means of Achievement
 - Use of terms like responsible, ethical, and moral to describe the importance of consideration of waste by the individual and collective and underscore climate action aspects
 - Replacement of language like ‘suggest’, ‘encourage’, ‘should’, with terms like ‘essential,’ ‘critical,’ and ‘must’ for guidance on waste practices
 - Produce new logo, slogan, and domain to reflect more serious and consequential stance
- Capital & Operational Cost
 - Graphic design support
 - Staff hours for content planning

- Metrics
 - Regularly reporting milestones will indicate the rate of progress over the plan life. Suggested milestones:
 - Crowd sourcing:
 - Plan
 - Public announcement
 - Final material selection
 - Internal changes
 - Identification of content to modify
 - Execution of modifications
- Timeline
 - Target re branding completion by the end of year one.

Goal #4: Improve/Expand Outreach Network

- Means of Achievement
 - Leverage social media influencers
 - Increased video viewer traffic
 - Move toward primarily electronic distribution to widen access of information
 - Provide post-plan update to programs (exchange club, & Kiwanis, rotary club, faith communities, chamber of commerce, board of realtors)
 - Ensure consistent distribution of information across all media channels
 - Adapt outreach focus according to viewership/performance feedback
 - Consider providing incentives for social media re-posts/shares
- Capital & Operational Cost
 - Staff hours
- Metrics
 - Establish average of X new followers per T
 - Connect with X new local influencers per T
 - Establish relationships with two new community leaders per month
 - Increase total website traffic by X
 - Increase YouTube video viewership by X

SOURCE REDUCTION

Goal #1: Broad Education

- Means of Achievement
 - Produce documentation that summarizes impact/importance of reduction as compared with reuse and recycle
 - Formalize documentation that organizes recommendations from '92 plan (summarized above) into each of the sectors
 - Host source reduction documentation on district website to make accessible to the public
 - PSAs & Targeted Educational Programs to raise awareness of need & availability of resources
 - Collaborate with City of Bloomington on documentation production & distribution to jointly achieve Sustainability Action Plan goal 5.1.c: *“Create a community waste reduction campaign targeted at businesses and citizens”*

- Capital & Operational Cost
 - Staff time for documentation generation
 - Media services for PSA's
- Metrics
 - Regularly reporting milestones will indicate the rate of progress over the plan life. Suggested milestones:
 - Completion of each educational document
 - Running list of PSA's generated & educational engagements executed
- After the educational materials are complete, the district should target 4 PSA and 3 educational events or 1 education program per year, distributing the activity across the given sectors.

Goal #2: Proactive Business Outreach

- Means of Achievement
 - Seek partnership with existing consultation services, or locate pre-generated resources intentionally designed for distribution for this application
 - Workshops for business owners and managers
 - One-on-one consultations/meetings
 - Curated informational packets, sites, videos, etc. (?), including information about the Bill Emerson Good Samaritan Food Donation Act for food retailers.
- Capital & Operational Cost
 - Production of informational resources
 - Producing and hosting workshops
 - Staff time for consultations & meetings
- Metrics
 - Publish list of resources located or produced for business sector source reduction.
 - Maintain an average outreach of 4 organizations per month to achieve a total of approximately of 50 organizations per year.
 - Target an average of 20 workshop/consultation per year

Goal #4: Local Political Engagement

- Means of Achievement
 - Produce reference & educational materials on waste specially tailored for local policymakers.
 - Solicit policies from City & County government that target reduction
- Capital & Operational Cost
 - Staff hours
- Metrics
 - Make an average of 2 policy recommendations for City of Bloomington & Monroe County per year on high-impact source reduction policy and/or waste regulation improvement.
- Seek a minimum 1 of opportunity per year to present source reduction educational information to governing both governing bodies (produced in goal #1)

WASTE DIVERSION

Goal #1: Diversion Education

Explain the importance of and required practices for composting & recycling to District residents, including digital & printable versions of:

- Detailed accepted materials guide, including how to identify them
- Recycling and composting contamination, & why/how to avoid

- Residential composting guide
- Food waste best-use pyramid for food service providers
- Additional information provided in Education subcommittee Goals and Objectives #1
- Means of Achievement
 - Designated how-to and resources pages on the district website to streamline self-driven education (included in Education Goals & Objectives #2)
 - Partnership with Soil & Water Conservation for home composting via workshop
 - Work with Neighborhood Associations (in and out of the Bloomington City limits) and HOAs to increase recycling and decrease contamination.
 - Media campaign series (Included in Education Goals & Objectives #1)
 - Follow up with City of Bloomington on Climate Action Plan WM1-A-4: *“Partner with Monroe County Waste District to promote drop-off of compostable material.”*
 - Collaborate closely with the city to jointly achieve Climate Action Plan WM1-A-6: *“Establish an At-Home and Community Garden Composting program supporting the expansion of food waste diversion through at-home composting. Provide backyard composting workshops, tips, and resources.”*
- Capital & Operational Cost
 - Staff hours
- Metrics
 - Successful production of printable ‘Accepted Materials’ list, ‘How-to’ recycling guide, and ‘contamination information’ documents.
 - Completion of stream-lined resources section of website.
 - After materials & web hosting are completed, maintain an average three organizational outreach efforts per month to reach a total of 35 organizations per year, targeting a diverse range of sectors.
- Report simple summaries of outreach results quarterly or semi-annually.

Goal #2: Coordinate Re-Routing of Usable Waste

- Means of Achievement
 - Outreach to existing organizations to better understand which services exist and which services are needed.
 - Organize collaboration between organizations to expand network
 - Connect with City Of Bloomington to target initiatives specified in:
 - Sustainability Action Plan goal 5.1.F: *“Establish a voluntary program with the construction industry to divert construction waste from the landfill and provide incentives and recognition for participants”*
 - Climate Action Plan goal WM1-A-3: *“Coordinate with local food banks to support edible food donation... Explore expansion of effort by identifying food retailer and restaurant partners for increased participation and support”*
 - Climate Action Plan goal WM1-C-5: *“Explore partnership with clothing reuse non-profits and businesses and a textile specialized recycling company to create a Clothing Reuse and Recycling pilot project to explore the potential of zero waste textiles within the City.”*
- Capital & Operational Cost
 - Staff hours

- Metrics
 - Seek out and contact at least two organizations per month that likely to participate in re-routing initiatives.
 - Coordinate at least two assemblies of mission or sector-aligned organizations per year
 - Report outcome of activities semi-annually
- Achieve one completed ‘usable waste’ stream diversion within plan period.

Goal #3: Seek and Support Expansion of Recycling and Composting Services with Emphasis on Multi-Family Housing Developments

- Means of Achievement
 - Engage with the city of Bloomington on its Sustainability Action Plan goal 5.1.E to: *“Develop a prioritized plan for expanding participation in the Green Business Network, focusing on increased recycling participation by multi-family and commercial participants”*
 - Encourage the city to verify that property owners who are required to have recycling facilities have honored their commitment.
 - Reach out to MFHD managers and IU student housing management to determine the extent to which recycling & composting services are offered. Provide District rural recycling site information those who do not offer services to residents.
 - Seek information from local compost/recycling haulers to determine opportunities for cost-negotiation for MFHD recycling services.
- Capital & Operational Cost
 - Staff hours
- Metrics
 - Target an average outreach of 50 MFHD properties per year
 - Contact all county registered waste haulers about MFHD service opportunities
- Report on results from outreach efforts bi-annually

Goal #4: Expand Compost End-User Market

- Means of Achievement
 - Reach out to City and County policymakers to promote policy requiring compost application
 - Contact City and County parks/public works departments to explain applications & benefits of compost use
 - Identify and engage with large private sector organizations whose activities would benefit from large volume compost use
 - Reach out to the City of Bloomington about advancing Climate Action Plan goal WM1-A-8: *“Close the loop on organics recycling; initiate a Compost Soil Amendment pilot project for use of compost as a soil amendment for public and private construction projects.”*
- Capital & Operational Cost
 - Staff hours
- Metrics
 - Contact at least two major organizations per month who could serve as significant compost buyers
 - Meet with city and county policymakers and relevant department staff to discuss compost use at least twice per year

- Compile a directory of organizations that have finished compost for sale.
- Broker at least one successful contract per quarter for a total of four per year.

Goal #5: Increase Available Data on Diversion Performance and Contamination Rates/Losses

- Means of Achievement
 - Seek existing data from local haulers and discuss opportunities for increasing local waste tracking precision for all waste streams
 - Report on viability of district hosted collaborative waste database
 - Report on viability of district created 'contamination feedback tool' for recycling haulers to report contamination rates to the district
 - Engage with AISWMD to lobby for greater data tracking
 - Perform five-yearly waste audits
- Capital & Operational Cost
 - Staff hours
- Metrics
 - Attempt to ascertain:
 - Total County waste tonnages quarterly (preferred) or annually
 - Total County recycling tonnages quarterly (preferred) or annually
 - Contact all registered haulers in the district to inquire about availability of existing data and inquire about potential for future data
 - Make reports available for review
- Complete one county waste audit near end of plan period

FINAL DISPOSAL FACILITIES

Goal #1: Continued environmentally safe post-closure maintenance of the Monroe County Landfill.

- Means of Achievement
 - Continue the District's culture for environmental protection.
 - Commit to maintaining staff that are knowledgeable landfill management professionals.
 - Provide the resources needed to fulfill their duties.
- Capital and Operational Cost
 - Per 329 IAC 10-39-3 landfill permittees are required to establish financial assurance for post-closure care.
 - Staffed positions to manage landfill activities are accounted for in the District's annual operating budget.
- Metrics
 - Measured by number of compliance violations and results of IDEM solid waste compliance inspections.

Goal #2: Explore recreational and educational opportunities at the closed Monroe County Landfill.

- Means of Achievement
 - Establish the viability of and produce a plan for a public park at the landfill.
 - Seek potential cost-sharing partners such as the Monroe County Parks and Recreation Department.
- Capital and Operational Cost
 - Staff hours.

- Metrics
 - Measure staff hours and Board hours spent discussing the feasibility and potential planning for this project.

Goal #3: Explore ways to make the landfill profitable.

- Means of Achievement
 - Continue to engage with energy companies to explore interest or viability in siting a solar farm at the landfill.
 - Review landfill regulations, permits, and legality for renting greenspace for private or public composting operations at the landfill.
 - Finalize a determination on which activities are economically feasible.
- Capital and Operational Cost
 - Solar generation would be public partnership with a utility company and is likely cost neutral.
 - Legal costs for consulting with an attorney.
- Metrics
 - Measure staff hours and Board hours spent discussing the feasibility and potential planning for this project.
 - By the end of the five-year plan, produce a report identifying which profitable options are feasible and not feasible.

Recommendation:

The Citizen Advisory Committee recommends that no new final disposal facilities are sited in Monroe County and that the Monroe County Landfill is not reopened.