



Reduce. Reuse.
Recycle!
It starts with you.

CALHOUN COUNTY, MICHIGAN

Calhoun County Solid Waste

Strategic Plan

2018 – 2020

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Mission

Calhoun County Solid Waste's mission is to develop and operate sustainable programs that encourage and enable the community to reduce, reuse, and recycle to improve the environmental quality of our community.

Guiding Principles

Environmental Sustainability

Acting as environmental stewards, Calhoun County Solid Waste will endeavor to operate a material management program that complies with all regulatory requirements.

Education and Outreach

Calhoun County Solid Waste will strive to provide quality education to its committee members, stakeholders, community organizations, and our residents on recycling, reuse, proper disposal, and sustainability.

Public-Private Relationships

Calhoun County Solid Waste will seek innovative methods to achieve higher rates of recycling, composting, and proper disposal of material through collaboration and adopting technological advancements and new processes where appropriate.

Sufficient System Capacity

Calhoun County Solid Waste will ensure that program services are timely and serve our resident's needs while acting as responsible stewards of the financial resources allocated to the program.

Adaptive Programs and Processes

Calhoun County Solid Waste will be dedicated to implementing material management projects, programs, and processes that meet existing needs and challenges while anticipating the future and planning ahead to ensure successful programming.

Historical Perspective

Calhoun County has been formally involved in recycling and solid waste management since its Solid Waste Management Plan was developed in 1992. The county's services have focused on waste diversion and the proper disposal of household hazardous waste. Although the county has provided drop-off recycling centers starting in 1995, special collection events, and since 2015 some processing of recyclables, the private sector has provided waste disposal, curbside recycling service, drop-off recycling centers, processing and marketing of recyclables, and landfill services.

Who We Are

The Calhoun County Solid Waste Program is part of the Calhoun County Community Development Department and is housed at the Calhoun County Building (315 West Green St., Marshall, MI 49068). The Solid Waste Program provides drop-off recycling centers and special collections for appliances, electronics, eyeglasses, household hazardous waste, medication, polystyrene, and scrap tires. These services are for residential use only and are funded through the Solid Waste Management Fund which collects revenue through a host agreement with the C&C Landfill located in Convis Township. General fund and tax revenue are not used to support Solid Waste Program activities. The annual budget for solid waste activities is developed by the Solid Waste Program staff, reviewed by the Solid Waste Management Planning Advisory Committee (SWMPAC), and then recommended to the County Commissioners for review and approval.

The SWMPAC recommends solid waste and recycling program activities. This committee was implemented in 1992 as part of the Calhoun County Solid Waste Management Plan. The Committee is comprised of 14 members representing the solid waste management industry, environmental interest groups, county government, city and township governments, regional solid waste planning agency, industrial waste generators, and the general public. Committee members are volunteers and are appointed by the Board of Commissioners as required by Section 11534 of Part 115 of the Natural Resources and Environmental Protection Act of 1994, PA 451. When the Calhoun County Solid Waste Management Plan was completed in 1993, the County elected to maintain its (SWMPAC) to serve in an advisory role. Their duties include recommending solid waste programs, reviewing the annual budget, and recommending the activation of the County's siting process.

The Calhoun County Solid Waste Program is staffed with a Solid Waste and Recycling Coordinator who serves as the liaison between the County and the SWMPAC and two Program Technicians who staff the Albion and Marshall Recycling Centers.

Demographics

According to the 2010 U.S. Census, Calhoun County had a population of 136,146 people. The U.S. Census estimates the 2017 population to be 134,128. The County's three primary population centers are as follows: the City of Battle Creek located in the northwest region of the County, the City of Albion located in the east central region of the County, and the City of Marshall located in the center of the County. These three cities account for just less than half the County's population.

2018 Calhoun County Solid Waste Management Planning Advisory Committee

The Calhoun County Solid Waste Management Planning Advisory Committee has a diverse membership. The committee has 32 years' worth of combined service. The longest serving member has served since 2008. Another member is the former member of the Solid Waste staff.

- Jim Porter, Solid Waste Management Industry
- Eric Shafer, Solid Waste Management Industry
- Brandy VanHorn, Solid Waste Management Industry
- Bradley Wey, Solid Waste Management Industry
- Zach Olson, Environmental Interest Group
- Tiffany Welsh, City Government
- Steve Frisbie, County Government
- Howard Johnson, Township Government
- Art Kale, Regional Planning Agency
- James Coury, General Public
- Aya Hashimoto, Industrial Waste Generator

Calhoun County Solid Waste and Recycling Coordinator, Sarah Kelly

Sarah Kelly was hired as the Solid Waste and Recycling Coordinator in December 2013. She also serves on the Southwest Michigan Solid Waste Consortium and is a Board of Director for the Michigan Recycling Coalition.

County Solid Waste Summary

The majority of Calhoun County solid waste is disposed of at the C&C Landfill in Calhoun County and the Westside Recycling and Disposal Facility in St. Joseph County. In FY2017, the County disposed of 431,253 cubic yards of waste in Michigan landfills as reported by the Michigan DEQ in its annual *Report of Solid Waste Landfilled in Michigan*.

The C&C Landfill accepted 297,210 cubic yards of material from within Calhoun County and 862,403 cubic yards of material from outside of Calhoun County in FY 2017 as reported by the Michigan DEQ in its annual *Report of Solid Waste Landfilled in Michigan*.

C&C Landfill and the Solid Waste Management Fund

Calhoun County has one operational landfill, the C&C Landfill located in Convis Township. It is currently owned and operated by Republic Services, Inc. In FY2017 the landfill received 1,159,613 cubic yards of material and as of October 1, 2017, and it reported a remaining capacity of 1,139,683 cubic yards (estimated remaining life of 3 years) to the Michigan DEQ.

The County entered into a new host agreement with C&C Expanded Sanitary Landfill, LLC on January 1, 2017. This agreement includes the payment of a Capacity Fee, or host fee, to the County. The County will receive \$0.75 per ton of waste disposed of by C&C or C&C affiliates.

Third party customer waste will be charged \$0.65 per ton for the first 250,000 tons of waste disposed and then \$0.75 per ton on remaining waste during a calendar year. The agreement also included a CPI-U Adjustment for each calendar year beginning in January 2018 and per ton rates shall never drop below the rates established in January 2017. The Capacity Fee payments will be made quarterly to the Calhoun County Solid Waste Management Fund and used to fulfill its statutory obligations and for other purposes as permitted by law. In FY2017, the total revenue received from the C&C Landfill amounted to \$358,964.85.

Included in the new host agreement was a landfill expansion that would give the landfill another 50 years of capacity. On July 19, 2017, Republic Services, Inc. made a presentation on the C&C Landfill expansion to the SWMPAC. SWMPAC voted in favor of the proposed expansion at that meeting, and the Calhoun County Board of Commissioners voted to activate the siting criteria on July 20, 2017. The Michigan DEQ approved the expansion permit in April 2018.

Legislation, Regulations, and Policies Governing Recycling and Composting

Michigan Public Act 451 of 1994, Part 115, Solid Waste Management

<http://www.legislature.mi.gov/documents/mcl/pdf/mcl-451-1994-ii-3-115.pdf>

Calhoun County's Commitment to Solid Waste Management

According to Calhoun County's 2000 Solid Waste Management Plan, the county's efforts regarding solid waste management are based on the following two principals: (1) to help prevent adverse effects on the public health and on the environment resulting from improper solid waste collection, transportation, processing, and disposal; and (2) to utilize to the maximum extent possible the resources available in the County's solid waste stream through source reduction, source separation, and other means of resource recovery.

Current Participation in Recycling Programs throughout Calhoun County as of 2017

Municipalities with single hauler contracts:

City of Albion

- Curbside yard waste – did not report volume

City of Battle Creek

- Curbside recycling – 2,751 tons
- Curbside yard waste – 1,495.23 tons

City of Springfield

- Curbside recycling – 126.89 tons
- Curbside yard waste – 347.89 tons

Village of Tekonsha

- Curbside recycling – 52.42 tons

Calhoun County recycling centers:

- Albion – 97.93 tons
- Bedford Township – 25.26 tons
- Clarence Township – 14.44 tons
- Marshall – 181.41 tons
- Pennfield Township – 78.61 tons

Private sector recycling centers:

- GFL recycling center – 70 tons

Private sector subscription based recycling and hauler operated recycling centers:

- Republic Services rural route curbside recycling – 112.57 tons
- Republic Services City of Marshall area curbside recycling – 117.86 tons
- Republic Services C&C Landfill recycling center – 86.98 tons
- Waste Management curbside recycling and transfer station recycling center – 275 tons

Registered compost facilities (*number of cubic yards x 250 lbs. /2000 lbs.*):

- City of Albion Tree Dump – 93.75 tons
- City of Battle Creek Brice Pit – 400 tons
- City of Marshall Garage – 557.5 tons

Current Municipal Solid Waste (MSW) Landfilled by Calhoun County

(*number of cubic yards x 550 lbs. /2000 lbs.*):

- C&C Landfill – 43,241.55 tons
- Granger Grand River Landfill – 24.48 tons
- Granger Wood St. Landfill – .55 tons
- McGill Landfill – 575.58 tons
- Orchard Hills Sanitary Landfill – 4.13 tons
- SC Holdings, Inc. Landfill – 8.25 tons
- South Kent Landfill – 14.85 tons
- Westside Recycling and Disposal Facility Landfill – 27,946.05 tons

Calhoun County Recycling Rate:

(*Total tons MSW Recycled and composted, divided by the total tons MSW recycled, composted, landfilled, and incinerated*) x 100 = Recycling Rate

$$6,884.74/78,700.18 \times 100 = 8.75\%$$

Overview of Current County System

Understanding the current County Solid Waste Program is vital to building a solid foundation for the Strategic Plan and selecting future programs and procedures that will move the County towards its Solid Waste Program goals. This section gives an overview of the current County Solid Waste Program services.

Recycling Centers

Calhoun County provides residents with free access to five recycling centers located across the county.

Staffed Residential Recycling Centers

Albion Recycling Center, 216 N. Eaton St., Albion, MI 49224

- This recycling center is a collaboration with the City of Albion and opened in February 2015. The county and city have a 5-year agreement which was signed in December 2014.
- Center is staffed by one employee and community volunteer(s) who unload sorted recycling from vehicles and load the recycling into shipping containers on a semi-trailer. If material arrives unsorted, staff and volunteers sort the material.
- Accepts: office paper, magazines, catalogs, newspaper, phone books, cardboard, paper bags, paperboard, clear glass, tin cans, aluminum, #1 plastic bottles, #2 natural plastic jugs, #2 colored plastic jugs, mixed plastic #1-#7, household batteries, polystyrene and vinyl siding.
- Depending on the current recycling market, the county receives revenue from the sale of some of the items collected at the center. Some items may also cost the county money to recycle, and that cost is subtracted from the revenue check.

Marshall Recycling Center, 13300 15 Mile Rd., Marshall, MI 49068

- The Marshall Recycling Center is located on the grounds of the Calhoun County Road Department and opened in February 2017.
- Center is staffed by three employees and community volunteer(s) who unload sorted recycling from vehicles and load the recycling into shipping containers on a semi-trailer. If material arrives unsorted, staff and volunteers sort the material.
- Accepts: office paper, magazines, catalogs, newspaper, phone books, cardboard, paper bags, paperboard, clear glass, tin cans, aluminum, #1 plastic bottles, #2 natural plastic jugs, #2 colored plastic jugs, mixed plastic #1-#7, household batteries, and polystyrene.
- Depending on the current recycling market, the county receives revenue from the sale of some of the items collected at the center. Some items may also cost the county money to recycle, and that cost is subtracted from the revenue check.

One Weekend a Month Single Stream Recycling Centers

Bedford Township Offices, 115 S. Uldriks Dr., Battle Creek, MI 49037

- Second weekend of the month. Roll-off arrives on Friday and is picked up on Monday.
- Accepts: magazines, catalogs, junk mail, office paper, phone books, newspaper, cardboard, paper bags, paperboard, plastic jugs/bottles (#1 & #2), household plastic (#3 - #7), aluminum cans, steel & tin cans, clear and colored glass.
- No revenue is generated from the material collected at this center.

Clarence Township, 27052 R Dr. N., Albion, MI 49224

- Third weekend of the month. Roll-off arrives on Friday and is picked up on Monday.
- Accepts: magazines, catalogs, junk mail, office paper, phone books, newspaper, cardboard, paper bags, paperboard, plastic jugs/bottles (#1 & #2), household plastic (#3 - #7), aluminum cans, steel & tin cans, clear and colored glass.
- No revenue is generated from the material collected at this center.

Pennfield Township, 20260 Capital Ave. N.E., Battle Creek, MI 49017

- Forth weekend of the month. Roll-off arrives on Friday and is picked up on Monday.
- Accepts: magazines, catalogs, junk mail, office paper, phone books, newspaper, cardboard, paper bags, paperboard, plastic jugs/bottles (#1 & #2), household plastic (#3 - #7), aluminum cans, steel & tin cans, clear and colored glass.
- No revenue is generated from the material collected at this center.
- This center is scheduled to close after its August 2018 weekend due to concerns over abuse at the location. Residents will be directed to the new pilot program recycling center located at the C&C Landfill, 14800 P Drive North, Marshall.

Pilot Program

C&C Landfill Recycling Center Pilot Program, 14800 P Dr. N., Marshall, MI 49068

- Expands access to free recycling by offering residents a drop-off recycling center that is open 6 days a week.
- Residents can bring loads of recycling equivalent to what can be held in a 96-gallon cart per visit.
- Single stream recycling
- Accepts: magazines, catalogs, junk mail, office paper, phone books, newspaper, cardboard, paper bags, paperboard, plastic jugs/bottles (#1 & #2), household plastic (#3 - #7), aluminum cans, steel & tin cans, clear and colored glass.
- No revenue is generated from the material collected at this center.
- Pilot runs through December 31, 2018 at which point it will be evaluated.

Special Events

Calhoun County holds special event collections for several items throughout the year. These special events are often in collaboration with local governments within the County.

Recyclerama

- This is an annual event held in April that accepts appliances, electronics, eyeglasses, household hazardous waste, medication, and polystyrene.
- The County collaborates with the City of Battle Creek and holds the event in Bailey Park (**1392 Capital Ave. NE, Battle Creek, MI 49017**).
- No cost to residents.

Household Hazardous Waste Collections

- Offered independently three times a year.
 - Two collections are held in Marshall in the County Building parking lot.
 - One collection is held in Battle Creek in the Toeller Building parking lot (**190 East Michigan Ave., Battle Creek, MI 49014**).
- No cost to residents.

Electronics and Polystyrene Collection

- This annual event is held in collaboration with the City of Battle Creek. The city pays for the electronics vendor and the county provides staff and volunteers for the event.
- This event is held at the City of Battle Creek Department of Public Works Building (**150 South Kendall St., Battle Creek, MI 49037**).
- No cost to residents.

January Polystyrene Collection

- This annual event is held in collaboration with the City of Battle Creek.
- This event is held at the City of Battle Creek Department of Public Works Building.
- No cost to residents.

Michigan DEQ Grant Funded Scrap Tire Collections

- The county partners with local government to host three residential scrap tire collections each year between May and the end of September.
- 2018 host sites are the City of Albion, Athens Township, and the Village of Tekonsha.
- Added a grant funded collection for scrap tires located on Calhoun County Treasurer's Office and Land Bank owned properties.
- No cost to residents.

Compost Center Options

Calhoun County does not operate a composting facility. Currently, there is no facility located within Calhoun County that will accept material for all County residents. Municipal Compost Centers only accept material from their residents.

Registered Compost Centers in Calhoun County

- **City of Albion Tree Dump, 1000 Brownswood Dr., Albion, MI 49224**
 - City of Albion residents only
 - Requires prepaid pass
- **City of Battle Creek Brice Pit, 715 W. River Rd., Battle Creek, MI 49037**
 - City of Battle Creek residents only

- **City of Marshall Compost Center, 619 Homer Rd., Marshall, MI 49068**
 - City of Marshall residents only
 - Requires prepaid pass

Registered Private Compost Centers outside of Calhoun County

- **Lester Brothers Excavating, 5405 E. Michigan Ave., Jackson, MI 49201**
- **Miller Road Transfer Station, 2606 Miller Rd., Kalamazoo, MI 49001**
- **Granger Disposal Services, 16800 Wood St., Lansing, MI 48906**
- **Granger Disposal Services, 2600 Lansing Rd., Jackson, MI 49202**
- **Hammond Farms Landscape Supply, 5834 N. Michigan Rd., Diamondale, MI 48821**

Landfill Options

Currently, the County does not operate a landfill. This service is provided by the private sector.

Type II MSW Landfill

- **C&C Landfill, 14800 P Dr. N., Marshall, MI 49068**
 - Operated by Republic Services, Inc.
 - The landfill has received an expansion permit which would allow it to have at least 50 more years of capacity.

Strategic Goals

Strategic Goal #1

Seek Additional Funding Opportunities

Strategic Goal #1

Opportunities to Increase Funding

1. Pursue Michigan Department of Environmental Quality Recycling Grants or Community P2 Grants Program for recycling educational initiatives and infrastructure improvements that would increase recycling volume and quality within the county.
2. Grant funding available for polystyrene recycling projects through the Foam Recycling Coalition.
3. Identify and pursue other state, federal, and foundation grants to expand program services or educational materials.
4. Consider charging a fee for hard to recycle items such as CRT monitors and TVs. Other counties charge \$10-\$20 per item.
5. Although Calhoun County collaborates with some of its municipalities in the form of sharing costs, staff, and use of facilities for recycling centers and special events, many local government units do not contribute financial or in-kind services. Forming more collaborations with municipalities and even private businesses could assist the county in providing more opportunities for recycling, composting, and proper disposal.
 - a. Annual report
 - i. Distribute annual report to all units of local government to keep them informed of participation and opportunities available to all county residents.
 - b. Meetings
 - i. Participate in meetings where program information can be shared and input from local governments on problems and solutions can be collected.
 - c. One-on-one meetings
 - i. Meet individually with key local units of government to have open discussions and see if they would be willing to collaborate and share resources to increase programming opportunities in their community.
 - ii. Opportunities for sponsorship from private businesses to cover costs of events or programs.
 - iii. Improve sorting of paper and eliminate “mixed paper” category which doesn’t generate any revenue for the county.
 - iv. Consider registration of haulers operating within Calhoun County.
 - v. Consider option of letting business buy access to Marshall Recycling Center.
 - vi. Consider option of letting out of county residents buy access to Calhoun County Solid Waste Program services.
 - vii. Competitively bid out contracts for recycling center and special event vendors to keep operating costs as low as possible.
 - viii. If state and/or national product stewardship legislation is passed requiring retailers/producers to assume responsibility for their products when those items reach the end of their life, businesses will incorporate the costs recycling these items into the purchase price. This offers a self-funding system that would help ensure hard to recycle items get recycled.

Strategic Goal #1

Benefits of Increased Funding

1. Expanded programming
 - a. More collection events could be scheduled throughout the year. These could be expanded to areas that are not currently served by special events or the frequency or length of events could be increased.
 - i. Residents are requesting more options to recycle electronics and HHW material.
 1. Increasing the number of household hazardous waste collections or length of the events would divert more of this hazardous material from improper disposal in the landfill. Residents of the City of Albion are requesting the convenience of a HHW collection in their municipality.
 2. There is limited opportunity for the proper disposal of televisions and computer monitors. Currently, residents are restricted to two free collections open to all Calhoun County residents each year. Volumes collected at these events continue to increase. Increasing access to recycling options would result in fewer items left along the side of the road.
 - b. Access to county recycling centers could be increased through extending hours at staffed recycling centers, changing the one-weekend a month recycling centers into a two-weekend a month program, or extending public private partnership options to the Waste Management transfer station recycling center.
2. Increased staff levels
 - a. Hiring staff to replace positions that are currently filled by volunteers to increase reliability and customer satisfaction. Volunteers would become extra staffing and no longer be essential to program success.
 - b. Hiring additional staff member whose job tasks would include covering for staff, helping with special events, and assistance with special projects.
 - c. Hiring or paying for dedicated hours of administrative support to assist with potential increases in scheduling programs, development of educational materials, and fielding phone calls.
 - d. Option to contract out services for educational material development.
3. Educational opportunities
 - a. Additional educational material could be created and distributed both online and in hard copy. This could include educational material on recycling, special events, and resource guides for residential and commercial use.
 - b. Educational programs can be developed and marketed to area schools and Scout groups.
 - c. Participate in more community outreach events. This would increase mileage reimbursement, may include some registration fees, and could require additional staffing.

4. Offset the cost of recycling more cost prohibitive items
 - a. Currently, the county is paying to recycle clear glass and mixed plastic. If the program could generate more revenue, these hard to recycle items would have less of an impact on the program's budget.

Strategic Goal #2

Increase Staff or Volunteers and Locations to
Meet Community Needs

Strategic Goal #2

Opportunities to Increase Staff and Volunteers

1. Ways to increase staffing
 - a. Seek collaborations that may provide additional staff for events and services
 - b. Seek internships with area colleges.
 - c. Partner with area colleges to allow students to earn credit while interning with the Solid Waste Program.
 - d. Pursue partnerships with job-training programs to find cost-effective staffing solutions.
 - e. Budget to increase staffing to levels that are needed for peak performance.
2. Ways to increase volunteers:
 - a. Increase efforts to recruit community volunteers by working with the following organizations:
 - i. Area colleges
 - ii. Area high schools
 - iii. Battle Creek Area Math + Science Center
 - iv. Court system
 - v. Juvenile court system
 - vi. Michigan Department of Corrections Parole Department
 - vii. Michigan Youth Challenge Academy
 - viii. Southwest Michigan Young Marines
 - ix. Starr Commonwealth
 - x. The Arc Volunteer Employment Program
 - xi. Scouts
 - xii. Utilizing Community Development's connections to other sources of volunteers.
 - b. Start using social media to recruit community volunteers for events and recycling centers.
 - c. Have staff foster closer relationships within the municipalities that host programs and events. Work on developing community buy-in and hosting community service days.
 - d. Strive for a better balance of staff versus volunteers to ensure volunteers have a positive experience and want to return.

Strategic Goal #2

Opportunities to Add Locations or Expand Services

1. Pursue more collaboration with local governments within Calhoun County. This will allow sharing resources such as staff, equipment, and funding while providing residents with better access to solid waste programming.
2. Seek opportunities through public-private partnerships to expand recycling, composting, and proper disposal opportunities within Calhoun County.
3. Encourage municipalities to consider single hauler contracts which include curbside recycling and yard waste pick-up. This takes the burden of recycling off drop-off recycling centers and gives residents more convenient access to recycling.
4. Support other countywide recycling programs by helping provide additional services or increase access to their facility. By using our mini-grant program or formal contract, financially support other facilities that can increase recycling access in a more cost-effective manner than the county expanding its services.
5. Ensure that county park facilities offer recycling. Collaborate on the collection and processing of the material.
6. Promote private sector options to residents through educational material.
7. Encourage the private sector and nonprofit groups to offer new or innovative recycling and composting services.
 - a. Encourage all trash haulers in the county to consider adding curbside recycling and yard waste services.
8. Budget for expanding services as revenue allows.

Strategic Goal #2

Benefits of Additional Staff, Volunteers, and Locations

1. Allow for more customer interaction
 - a. Increased staffing would allow for dedicated time spent educating the public about recycling better, all of the services the Solid Waste Program offers, and what other services are available in the community.
2. Create more efficient programs and events
 - a. Increased staff and volunteers at events and recycling centers would speed up the unloading process and decrease the amount of time residents spend in line. It would also allow staff to sort all of the material dropped off during the center's hours of operation.
3. Show citizens that recycling is a high priority
 - a. By enhancing the Solid Waste Program staffing and services, it would show Calhoun County residents that the county is committed to providing access to recycling and proper disposal methods for HHW material.
4. Generate more revenue
 - a. Increasing hours at recycling centers and improving the recycling experience could generate more recyclables being collected at the recycling centers. Greater volume reduces shipping costs and can generate greater revenue through the sale of more valuable material.
 - b. Increased staffing would also allow for better sorting of material which would increase its value.
 - c. Targeted messages can focus on items of greater value while still accepting materials that have no value or cost money to recycle.
5. As convenience increases at the recycling centers, participation will increase thus increasing volume.

Strategic Goal #3
Increased Access to Composting in Townships

Strategic Goal #3

Benefits to Composting

1. Compost is produced through controlled biological decomposition of organic material. It is sanitized through the heat it produces. Compost is an organic matter resource that improves the chemical, physical, and biological characteristics of soils and plant growing media.
 - a. Divert organic material away from landfill and reduce methane production.
 - i. Examples of organic material:
 1. Yard clippings
 - a. Leaves
 - b. Grass clippings
 - c. Vegetable and other garden debris
 - d. Brush or tree trimmings that are less than 4 feet in length and 2 inches in diameter
 - e. Food scraps such as fruit and vegetable scraps, eggshells, nutshells, and coffee grounds
 - f. Wood wastes, including wood chips and sawdust.
 - g. Compostable paper/plastics
 - h. Waste generated in the production of livestock and poultry, such as manure and used bedding material
 - b. Compost can serve as a fertilizer while enriching soil and helping it retain moisture.
 - i. Benefits of compost:
 1. Enhances physical structure of soil
 2. Decreases soil erosion
 3. Returns nutrients to the soil
 4. Reduces the need to water
 5. Suppresses plant diseases

Composting Options

1. Home composting
 - a. Compost bins
 - b. Piles of less than 200 cubic yards of material
2. Registered compost facility
 - a. Run by municipality
 - b. Run by private operator

Strategic Goal #3

Ways to Implement or Encourage Community Composting in Townships

1. Recruit a private composting/organics processing operation to open a facility within Calhoun County.
 - a. End product would have greater opportunities for use in landscaping and agriculture.
2. Support the C&C Landfill with the addition of their compost facility which is in their expansion plans.
 - a. End product would become daily cover.
3. Provide residents with educational material on how they can compost at home.
 - a. Offer composting workshop in collaboration with MSU Extension.
4. Provide residents with resources on what composting facilities they can use in surrounding counties.

Strategic Goal #4
Development of a Community Education
Program

Strategic Goal #4

Development of a Community Education Program

1. Education is the key to a successful recycling program. When recycling is not done properly it has negative impacts on the program. A strong education and outreach program can increase a community's recycling rate, reduce the level of contamination, and make the material collected more valuable.
 - a. Improper recycling causes
 - i. Reduced revenue
 1. Contamination and dirty containers reduce the value of recyclables.
 - ii. Increased safety concerns
 1. Recyclers placing sharps, medical waste, diapers, CFL bulbs, and lithium batteries in with their recycling creates safety risks for staff and volunteers. It also can cause recycling to be rejected and landfilled.
 - iii. More garbage that will go to landfill
 1. If recycling containers have too high of rate of contamination or medical waste, they will be rejected at the sorting facility and landfilled.
 2. Create a social/behavior change marketing program to combat contamination and improper recycling.
 - a. Focus on one or two key messages each year and distribute information on improving recycling through the following outlets:
 - i. Facebook
 - ii. Newspaper/print
 - iii. Radio promotion
 - iv. Exposure in hauler flyers
 - v. Banners/posters
 - vi. Flyers in public spaces
 - vii. Messages in utility bills
 - b. Increased community education
 - i. Outreach and marketing
 1. In order for the public to become more involved in recycling, composting, and proper disposal efforts, they must be informed of what opportunities are available and how to participate.
 - ii. Develop new and updated educational material on recycling, composting, and proper disposal.
 1. Updated resource guide that would be available online and through mobile application.
 - a. Publicize take-back programs available through retailers in Calhoun County.
 - b. Publicize charitable organizations that accept donated clothing, toys, shoes, housewares, and building material.

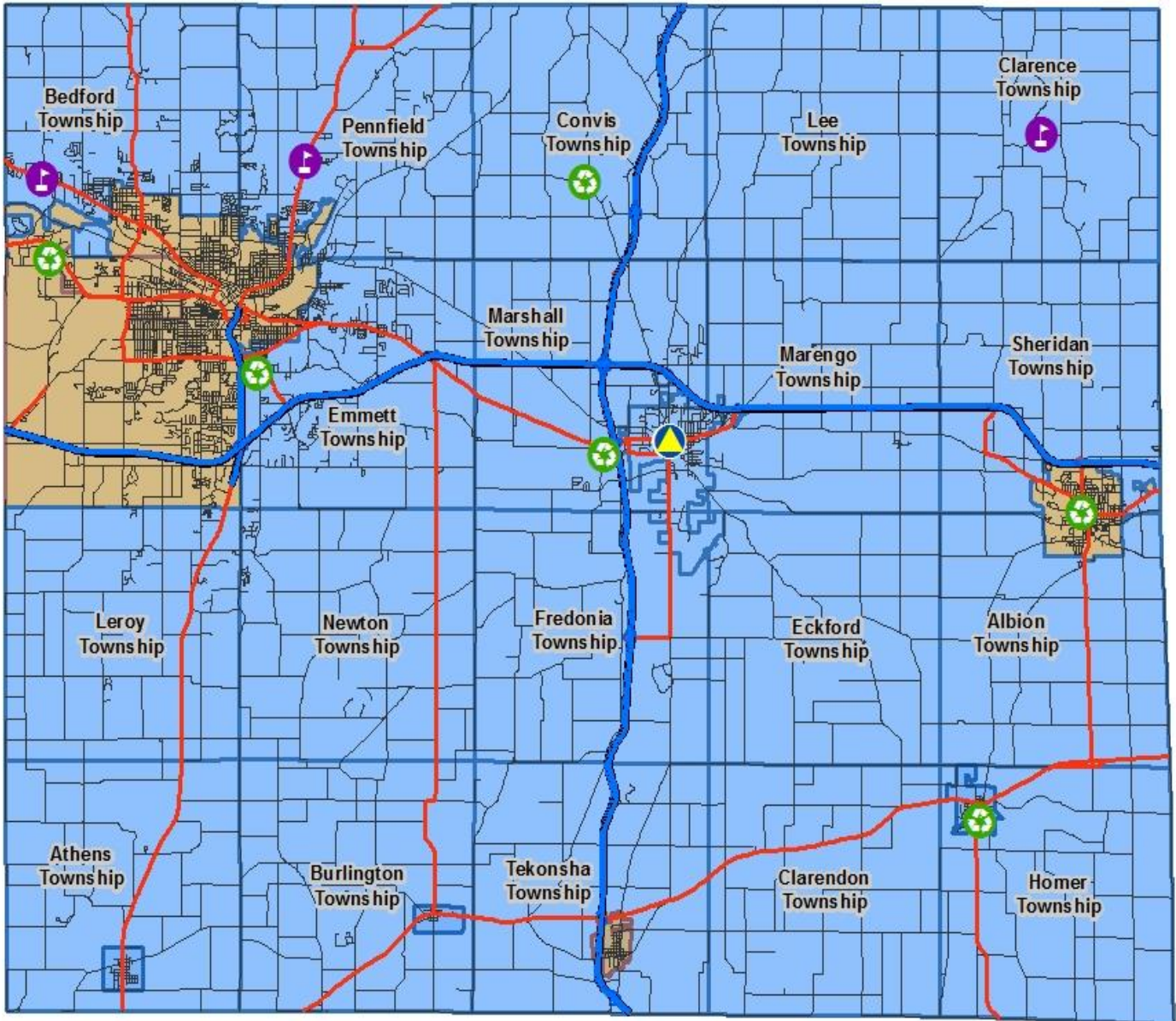
- c. Publicize alternatives to county Household Hazardous Waste Collections for residents who need to dispose of items before the next scheduled event.
 - d. Publicize hours and addresses of all private and nonprofit recycling centers within Calhoun County.
 - 2. Flyers. Flyers should be used to explain what items are accepted at recycling centers and special events and how to prepare the items for collection. These need to include information on why it is important to recycle, compost, and dispose of items properly in addition to information on when and where the events will be held.
 - 3. Newspaper. In addition to announcing upcoming events, press releases can be used to educate the public on the importance of recycling, composting, and proper disposal.
 - 4. Website. Promote reduce, reuse, recycle, composting and proper disposal and provide the public with information on these topics and collection events on our website.
 - 5. Social media. Stepping up social marketing efforts to reach and engage more county residents
 - 6. Promotional material. Promote reduce, reuse, recycle, composting and proper disposal through promotional items such as pens, pencils, and rulers made from recycled material.
 - 7. Public outreach. Staff should promote programs and services at public meetings, through educational programs, and outreach booths at events.
 - iii. As new programs arise, develop corresponding educational material to educate the public before implementing the new program.
 - iv. Coordinate educational efforts with other municipal, nonprofit, or private sector recycling educators within the county.
- c. Training
 - i. Offer recycling center open houses and provide training on how to recycle better.
- d. Incentives
 - i. Offer rewards for recycling more or better.
- e. Intended audiences
 - i. Businesses
 - 1. Provide educational resources to businesses on how they can increase their recycling and proper disposal efforts.
 - a. Develop a resource guide tailored for use by businesses.
 - 2. Educate businesses on using recyclable or compostable products.
 - 3. Encourage businesses to offer recycling options such as take-back programs for the hard-to-recycle products that they sell.
 - a. Appliance vendors
 - i. Encourage vendors to offer take-back programs when residents purchase new appliance.

- ii. Sales advantage
 - ii. Individuals and families
 - 1. Encourage residents to increase their recycling and proper disposal efforts through a voluntary basis
 - a. Mobile applications
 - i. Show locations and hours of recycling centers, event schedules, accepted materials, and other community recycling/composting opportunities.
 - b. Social media
 - i. Post information about events, new recycling and disposal opportunities, and educational messages.
 - c. Events
 - i. Participate with outreach table and offer educational programs.
 - d. Schools
 - i. Outreach programs
 - ii. Incentives / awards to encourage classroom recycling
 - iii. Food waste collection at cafeteria or school garden
 - 1. Assist interested school districts in developing food waste composting pilot projects and providing educational programs and resources to area schools.
 - 2. Provide education materials on recycling to multifamily unit housing
 - iii. Stakeholders
 - 1. Obtain stakeholder baseline data and develop the most effective strategies for communication and outreach.
 - f. Develop a plan and process listing all of the communication and education strategies that will be used by the Solid Waste Program to increase recycling and composting rates and decrease the contamination level of recyclable/compostable material collected in Calhoun County.
2. Key educational messages identified by Solid Waste Management Planning Advisory Committee and Solid Waste Program staff
 - a. What/Where/How to recycle properly
 - b. How to recycle items that are not accepted at drop-offs or curbside programs
 - i. Electronics recycling – how and why
 - ii. Battery recycling – how and why
 - iii. CFL and fluorescent tube recycling - how and why
 - iv. Polystyrene recycling – how and why
 - c. Household composting – how/why/where
 - d. Why recycling is different today
 - e. Why people should recycle
 - i. How plastics impact landfills

- ii. Sustainability
 - iii. Environmental issues
- f. How to dispose of tires properly with a focus on turning-in old tires at the business where you purchase new tires
- g. Household Hazardous Waste Collections – what can be disposed through them and why
 - i. Oil-based paint vs latex paint
 - ii. Sharps
 - iii. Medications
 - iv. Pesticides
 - v. Mercury
 - vi. Solvents
 - vii. Acids
 - viii. Bases
 - ix. Chemicals
 - x. Gasoline and oil

Appendix A

Calhoun County Map with Solid Waste and Recycling Locations



Recycling Location

-  Solid Waste Office
-  One Weekend Recycling Center
-  Staffed Recycling Center

Curbside Recycling

-  Communities with Single Hauler Contracts
-  Subscription Based Cities, Villages, and Townships
-  Interstate
-  State Highway
-  Roads

