

Solid Waste Management Plan



October 31, 2021

Benton County 2021 Solid Waste management Plan

Table of Contents:

Resolution of Adoption

Section 1	Executive Summary	3
Section 2	Benton County demographics	5
Section 3	Solid Waste Collection and Generation Information	5
Section 4	Review of Planning History and Alternative Analysis	9
Section 5	Solid Waste Reduction	13
Section 6	Solid Waste Education Programs	14
Section 7	Recycling Programs	15
Section 8	Yard Waste Management Programs	17
Section 9	Source-Separated Organic Material Composting	18
Section 10	Solid Waste Incineration and Energy Recovery	20
Section 11	MSW Land Disposal Facilities	21
Section 12	Special Wastes	22
Section 13	Tires	22
Section 14	Major Appliance Management	23
Section 15	Used Oil and Lead Acid Batteries	23
Section 16	Household Hazardous Waste Programs (HHW)	24
Section 17	Mercury Abatement Programs	25
Section 18	Electronics Management	25
Section 19	Agricultural Plastics Management	26
Section 20	Demolition Debris Management	26
Section 21	Solid Waste Ordinance and Licensing	27
Section 22	Solid Waste Staffing	27
Section 23	Solid Waste Funding/Projected Ten Year Budget	27
Section 24	Goal Volume Table	28
Section 25	Alternatives to Proposed System	28
Section 26	Mitigation of Environmental Risk	29
Section 27	Public Participation Program	30
Section 28	Implementation	30
Section 29	Plan Review Ten Year Plan	30

Appendices

Appendix A:	Goal-volume Table
Appendix B:	Solid Waste Management Estimated Budget
Appendix C:	Demographic Information
Appendix D:	Land use Map
Appendix E:	Tri-County Solid Waste Management History 1971-2020
Appendix F:	Executive Summary Feasibility Waste to Energy
Appendix G:	Executive Summary Critical Issues Waste to Energy
Appendix H:	Benton County Solid Waste Ordinance #471
Appendix I:	Benton County Solid Waste Designation Ordinance #187
Appendix J:	Recycling Directory
Appendix K:	Tri-County Staffing
Appendix L:	Amnesty Day Collections 2015-2020

2021 Benton County Solid Waste Management Plan

1. Executive Summary

Benton County, located in central Minnesota, has prepared a comprehensive solid waste management plan intended to meet the requirements of Minnesota Statute 115A.46. This document contains the 2021 Benton County Solid Waste Management Plan along with Benton County's solid waste abatement programs and other programs which will be developed.

Stearns County has had long-term cooperation in solid waste planning with Benton and Sherburne Counties. This stems from the formal agreement in 1983 forming the Tri-County Solid Waste Management Commission; (The Commission). The Commission meets quarterly and is made up of four Stearns County Commissioners and two Commissioners each from Benton and Sherburne Counties. Solid Waste Staff from each of the counties generally plan to meet monthly but may meet less frequently because of scheduling or lack of pressing issues. After the retirements of the long-term Commission staff, the hiring of a new coordinator, and the desire of Sherburne County to reduce its obligation to waste delivers (starting 2022) the Commission undertook strategic planning to establish a new mission statement and four guiding platforms to guide its function for beyond 2021. New for this planning period was Pope Douglas Solid Waste Management. Given the long-term contract being in place and the need for the Agency to shift county planning dates, it made sense for Pope Douglas to participate with the Commission in its long-range planning efforts.

The goals of the Commission and its member counties mirror the goals of the State of Minnesota, established in Minnesota State Statute 115A.02,

It is the goal of this chapter to protect the state's land, air, water and other natural resources and the public health by improving waste management in the state to serve the following purposes: (1) reduction in the amount and toxicity of waste generated; (2) separation and recovery of materials and energy from waste; (3) reduction in indiscriminate dependence on disposal of waste; (4) coordination of the solid waste management among political subdivisions; and (5) orderly and deliberate development and financial security of waste facilities, including disposal facilities.

The Commission, Stearns, Benton, and Sherburne Counties adopted a Vision Statement in 2001 stating,

Stable, reliable, environmentally safe, and economically feasible methods for managing our MSW" (Municipal Solid Waste) "that also helps meet the growing demands for generating energy.

And in 2021 the Commission adopted the mission statement,

A collaborative group of Stearns, Benton, and Sherburne counties engaged in fostering, developing, and maintaining community relationships to identify issues, facilitate waste reduction, and maximize landfill abatement solutions.

Planning, communication, outreach, education, and initiatives are the foundation to achieving the directives set forth by the members and driven by community need according to the Minnesota Waste Management Hierarchy.

This plan reviews the past and present solid waste management system, abatement programs and policies, and anticipated management activities. This plan proposes continuation of Benton County's current solid waste programs, expanding and improving certain programs, with an emphasis on waste abatement.

Benton County has an integrated solid waste system. One of the goals of the Commission is to spread solid waste "liabilities" out between (waste to energy) WTE facilities and landfills. Approximately 48% of Benton County's Mixed Municipal Solid Waste (MMSW) is directed to WTE facilities for disposal, with the remaining waste being disposed of at regional landfills. The other components of this system are curbside recycling collection; recycling redemption and drop-off facilities, yard waste composting facilities, waste food recycling, HHW mobile/permanent collection facilities, and problem materials management. Most of the components of this system are done by the private sector with assistance from Benton County and Tri-County Solid Waste Management staff. The Solid Waste Budget (Appendix B) and Goal Volume Table (Appendix A) can be found on the pages following the Solid Waste Management Plan.

The future of solid waste management in Benton County will be to maintain the existing successful programs/practices while investigating ways to promote and implement programs which reduce the production of waste. Over the next 10 year planning period, Benton County in cooperation with MPCA and Tri-County will participate with the member counties to develop institutional/commercial/industrial programs to develop a comprehensive assessment of their MSW volumes and programs with the intent of developing best management practices to reduce/reuse recycle materials, with special emphasis on source reduction and organic waste. The hope of this type of program is to develop "pilot projects" which can be used to promote the above-mentioned practices. Also, Benton County in cooperation with MPCA and Tri-County will continue to have discussion about siting and constructing its own Waste to Energy Facility and expanding the existing Household Hazardous Waste Program.

2. Benton County Demographics

The State demographer's Office estimates that the 2019 population of Benton County is 40,889 which reflect an increase of approximately 6.3% since the 2010 census. It is estimated that the population of Benton County will increase to 56,970 by 2030. Most of the growth and anticipated growth will occur in the greater metropolitan area of St. Cloud and near Benton County seat of Foley along the MN Highway 23 corridor. Population growth in these areas reflects a shift from a more agrarian type of economy to more urbanization. There are a total of 7 organized cities with 3 sharing partial jurisdiction with other neighboring Counties (St. Cloud (Stearns), Royalton (Morrison), and Sartell (Stearns)) , Sixteen unincorporated Communities, and 12 Townships. The working population of Benton County is employed primarily in retail trade and manufacturing followed by service industry, government, and construction. In 2019 the State demographer's office estimated that the average annual unemployment rate to be 3.9%. Most recent data indicate that the median household income in Benton County is \$56,357.

Benton County benefits from its geographical orientation of proximity and ease of access to the Interstate 94 and Highway 23 transportation corridors. This provides access to commerce and disposal facilities outside its boundaries. However, current waste processing at the Pope/Douglas waste to energy facility is a significant distance from the metropolitan areas of Benton County and should a dramatic rise in transportation costs occur, waste delivery to the facility would become overtly costly. The aging and declining populations of rural portions of Benton County may affect collection availability and/or costs. See Appendix C for more complete demographic information on Benton County.

3. Solid Waste Collection and Generation Information

According to the 2019 SCORE report data, 17,432.8 tons of municipal solid waste (MSW) was collected in Benton County. There was an estimated 1,469.13 tons or 8.42% of total MSW disposed of on site. In addition, 16,981.9 tons of recyclables and organics were collected and about 399.47 tons of problem materials managed. Solid waste collection service is available in all seven incorporated cities in Benton County. There are currently sixteen licensed solid waste haulers in operation in Benton County. Of the sixteen, six collect demolition and construction materials and ten collect and dispose of Municipal Solid Waste (MSW). The MSW hauler sets rate structures. All rates for residential and non-residential are either volume or weight based as per Minnesota Statute. Typical rates for residential collection range from \$10 to over \$60 on a monthly basis and include curbside collection of recyclables. Garbage collection is generally on a weekly basis and recyclables are typically collected every other week by private haulers. The most prevalent system for collection of residential recycling is single stream by the major haulers and they haul the collected recyclables to Materials Recycling Facilities (MRF's) in the Twin Cities metropolitan area.

An exception to that most common system is the City of St. Cloud. Their municipally run

system services all single family residences in the city as well as duplexes and triplexes. Their rate system consists of a monthly 'drive-by fee' of \$7.30 which is collected with residents' utility bills. Residents can sign up for weekly 95-gallon cart service for a charge of 26.50 per month (53.00 per bill every 2 months), plus a recycling/pass-by-fee. The fee for this service is included on the resident's bi-monthly City utility bill. The City provided the 95-gallon cart at no additional charge; however, the customer is responsible for the replacement cost of the cart should it become damaged, lost, or stolen. Cart service customers must use City refuse bags for disposal of any refuse which exceeds cart capacity. Customers must also use clear City bags or self-haul options for yard-waste disposal, as yard waste cannot be placed in the cart. You must be owner of the property where service is requested in order to sign up for the cart service. *Per City Ordinance 244:15.*

Two other exceptions are the Cities of Foley and Sauk Rapids Minnesota, both of which utilize Organized Collection Services by contracting with private haulers to provide MSW and recycling services.

Collection and recycling services for the commercial, industrial, and institutional sectors are conducted entirely by private sector haulers. An attempt was made by Tri-County to survey local haulers for their rates. However, responses were largely incomplete and cited proprietary information. The range of prices for commercial/ industrial collection isn't made available to the Commission, haulers are free to make those bids for services directly to their potential customers.

Various private sector collection events are held each year throughout Benton County. Additionally, each year Benton County holds two collection events "Amnesty Days," in which Benton County contracts with a local hauler to enable county residents to dispose of problem materials, as well as recycle items such as metal, tires, electronics, appliances etcetera. Also, appliances and electronics are sometimes collected at city and township clean-up days; these events are partially supported by County grants. Summary of amounts collected are included in Appendix L and 2015-2019 SCORE reports.

Benton County has a long history of solid waste incineration and energy recovery. It the goal of Benton County to continue to support solid waste incineration and energy recovery. Benton County, through the Commission has ten years remaining on a commitment to deliver approximately 50,000 tons per year. Over the past planning period Benton County averaged 52.5% of its solid waste was disposed at the Pope Douglas waste-to-energy facility. The Stearns County survey indicated significant support for waste-to-energy with 92% respondents indicated support or strong support.

The Pope Douglas facility with which the Commission has reached an agreement is owned and operated by a Joint Powers Board made up of two Pope County Commissioners and

two Douglas County Commissioners and one outstanding member of the community. The facility is located at 2115 Jefferson Street in Alexandria, MN near the 3M Manufacturing Plant, the Douglas County Hospital, and the Alexandria Technical College.

The Pope Douglas waste-to-energy facility began operations in 1987. The current plant capacity is 240 tons per day. During 2019, approximately 415,000 million pounds of steam were produced and sold. Pope Douglas also generated 4,905.82 megawatt-hour of electricity used in-house. A Materials Recovery Facility (MRF) was constructed in 2003 and recovers approximately 3 to 5.5% (by weight) of the waste passing through the MRF. The MRF also serves to remove problem wastes prior to combustion (Pope Douglas, 2021).

Pope Douglas also operates its own ash landfill located in Solem Township of Douglas County. This landfill received 17,475 tons of ash in 2019. In 2020, Pope Douglas began mining the landfill to recover metals (Pope Douglas, 2021).

Efforts found in the sections covering reduction, reuse, recycling, and education all contribute to reducing ash toxicity and quantity and the quantity of processing residuals.

In 2019, an Amendment was signed by the Commission to continue to provide waste at current rates through the contract term (2031). A copy of the 2019 Amendment is on file at the Commission office. At present, all of the larger licensed haulers have signed contracts with Tri-County to deliver waste to Pope/Douglas facility in Alexandria Minnesota. To assure deliverance to the Pope Douglas Facility Benton County is considering a designation ordinance (a copy of the dormant ordinance, Ordinance 187 can be found in Appendix I).

In 2020, it was estimated that 99% of city residents and 95% of rural residents had MSW collection services. Based on conversations with haulers and complaints handled by Benton County the percentages remain relatively the same with an estimated increase to rural collection approaching 85%. On-site disposal of MSW is dealt with on a complaint basis. Benton County Department of Development staff work closely with the Benton County Sheriffs Department, MPCA, and DNR to resolve these complaints in a timely manner.

Benton County's most effective waste abatement program is SCORE, Benton County utilizes SCORE funds to educate Benton County residents on proper waste management, subsidize local City and Township events, as well as Benton County's Amnesty Day/Household Hazardous collection events.

A key component of Benton County's SCORE program are competitive grants, which Benton County offers 2-4 times per year. Grant applications are submitted to Benton County staff and presented to our Solid Waste Advisory Committee (SWAC) for funding recommendation(s), final funding is the decision of the full County Board.

Successful grants are reimbursement, upon submittal of proof of purchase and on actual costs, the maximum amount paid via the grant cannot exceed what Benton County Board approves. This Plan proposes continuation of Benton County's current score program, expanding and improving this program with an emphasis on funding grant applications which prioritized waste abatement, Refer to 2015-2019 SCORE REPORTS.

Other common incentives for solid waste abatement are volume-based pricing, curbside recycling, and a positive market for some recyclables. Market prices for recyclables vary and are established by economic conditions and redemption centers' discretion, as Benton County offers no price guarantee or subsidy.

No large-scale waste composition studies have been conducted in the Tri-County area including Benton County since the Minnesota Pollution Control Agency published a Statewide Waste Characterization Study in 2013. Recently Stearns County conducted a solid waste survey of county residents and a copy of said survey can be found at the Commission offices. Per Greater Minnesota Detailed Results, the two studies estimated the following types and percentages of waste:

Paper	24.5%	Glass	2.2%
Food Waste	14.5%	Adult & Infant Diapers	2.7%
Plastic	17.9%	Other Organics	0.7%
Wood Waste	3.1%	Hazardous Waste	1.0%
Metal	4.5%	Small Appliances	1.9%
Demolition/Construction	1.2%	Oil Filters	0.1%
Yard Waste	1.8%	Major Appliances	1.2%
Other Waste	18.3%	Textiles	3.4%

Estimates from haulers and transfer facilities describe the waste as 55% commercial/industrial and 45% residential. The percentage breakdown for recycling had a slightly higher bias towards commercial/industrial sources with haulers estimating as much as 70% coming from commercial/industrial and 30% from residences. It should be noted that those figures are only estimates. The estimates come from monthly hauler reports as well as discussions with haulers. The estimates cannot be verified through the above-mentioned Waste Composition Study. That study indicated that since there is such a large overlap of haulers hauling from both commercial/industrial and residential sites that an accurate breakdown could not be obtained, therefore; it should be noted that the goal volume table uses estimates of 64% for commercial/industrial and 38% for residential.

The following is a revised list of major solid waste generators found in Benton County:

Jack Frost/Golden Plump, Inc., Pouchtec Industries, LLC, Roma of Minnesota, X-Cell Optical, Inc., Coborns, Inc., McDonald's, Dollar General, and Woodcraft Industries, Inc.

Benton County has a single privately owned Demolition Landfill, Henkemeyer Landfill, Permit# SW-188. In 2008 the landfill applied for a renewal of this permit. In December of 2014 The Minnesota Pollution Control Agency (MPCA) granted the renewal for the permit running from 12/30/2014 to 12/30/2024 a period of ten years, additionally Benton County annually licenses and inspects this landfill. In calendar year 2020 the waste disposed in the landfill was approximately 16,716 cubic yards; with 60 percent of the volume estimated to originate in Benton County.

4. Review of Planning History and Alternative Analysis

Benton, Stearns, and Sherburne Counties last updated their Solid Waste Plans in 2011. The counties have a history of cooperation regarding solid waste issues preceding even the formal action creating the Commission in 1983. The Commission is made up of four commissioners from Stearns County and two commissioners each from Benton and Sherburne Counties. They meet on a regular monthly basis. The meetings are typically attended by staff from the respective Counties. Commission staff has weekly contact with the Solid Waste Administrators in each County and typically meet on a quarterly basis or informally as needed. The regular meetings help encourage regional cooperation and resolve conflicting, duplicative, or overlapping efforts.

The Commission and Benton County have annually cooperated on coordination of their respective grant programs, education programs, a feasibility study conducted regarding a waste-to-energy facility, household hazardous waste programs, as well as this planning document.

Cooperation between the counties rarely encounters conflicts that defy resolution or serious impediments to the development of projects on a regional basis.

Complete planning history up to 2019-20 can be found in the Update and in a Summary provided by Tri-County "Solid Waste Planning History," Appendix E; since 2011, the major components of the system are intact. Ownership of some transfer stations, recycling facilities and haulers has changed, however.

In the last five years:

- The mobile HHW program has been ongoing;
- Amnesty Days program has been ongoing;
- Grants have been awarded to recycling facilities, processors, computer drop-off programs and businesses;
- Climb Theatre has put on Reduce, Reuse, Recycle plays to 4th, 5th, and 6th grade classes within Benton County Schools.
- An annual newsletter, entitled "Rubbish Review" has been distributed county wide.
- Videos from both State and local perspectives have been created and

distributed.

- County has contracts with ReCollect Web/App Solid Waste Recycling Communications Tool.

The Commission investigated the possibility of constructing an MSW incinerator in the Tri-County (the Feasibility Study and associated documents are available at the Tri-County offices). In 2011 the opportunity arose to deliver waste to the existing mass burn incinerator operated by Pope/Douglas in Alexandria. Due to their expansion, capacity had become available. A more thorough discussion of that decision and details of arrangements with that facility are found in Section 10 of this document.

The new agreement with Pope/Douglas lowered tipping fees in comparison to a past agreement with the WTE facility previously located in Elk River MN; however, costs of disposal will still be relatively high for disposal at Pope Douglas compared to landfill disposal. Tri-County staff carefully monitor weekly and monthly waste deliveries to Pope/Douglas. When tonnage goals are met, haulers may divert waste to other disposal facilities of their choice. The most common diversion disposal sites are the Pine Bend Landfill, Elk River Sanitary Landfill, The Lakes Area Landfill in Sarona, Wisconsin and the Morrison County MN Landfill. All are licensed and regulated by their respective States and local agencies. Further information on the MSW landfills can be found in Section 11 of this report and 2015-2019 SCORE REPORTS.

It is important to remember that Benton County recycles about 49% of MSW, as documented in the 2019 SCORE report, off the top. Benton County's goal then becomes managing the remaining MSW, of which 50% is to be sent to waste-to-energy (WTE) facilities with the remaining 50% being landfilled. Landfilled material includes unacceptable waste and ash. At this point recycling has leveled off but is still Benton County's best "pre-processing" waste abatement strategy; however, throughout the ten-year planning period and beyond, it will be Benton County Policy to work to develop strategies/programs which focus on the reduce/reuse source reduction options.

Past waste reduction efforts as identified in previous plan:

- Require haulers to use some form of volume-based pricing.
- Promotion of material exchange programs for businesses.
- Site visits to businesses and institutions.
- Promote membership in the Recycling Association of Minnesota.
- Promote membership in Waste Wise (a Minnesota Chamber of Commerce program).
- Speaking engagements at schools, businesses, service clubs, and the Chambers of Commerce.
- Make SCORE grant money available for waste reduction projects (as available).
- Participation in Cities and Counties involved in Source Reduction and Recycling Programs.

If future work and feedback present a new approach or method to enhance the Reduce

Your Waste campaign, it may be supplemented or possibly replaced if greater concepts are realized.

Reuse is widely occurring in Benton County, thrift stores, consignment stores, garage sales, and various online platforms. Research by Anders Fremstad (2017) estimated a daily waste reduction of just over one-third of a pound per capita in communities where Craigslist was accessible.

Like reduction, measures of reuse are problematic as much of this activity occurs within an industry, retail, non-retail, and private exchanges without entering the solid waste stream. Additionally, thrift stores and similar donation centers are protective of their market share and will not disclose volumes in those retail locations.

Over the next planning period it is anticipated Benton County (through the Commission) will continue the promotion of material exchange programs for businesses; conduct speaking engagements at schools, businesses, and service clubs; conduct site visits to businesses and institutions and offer SCORE grants for waste reduction projects, as funds are available.

Throughout the planning period it is apparent that land disposal will to some extent be necessary. That portion of the MSW stream that is not recycled, incinerated, or managed in some other way will continue to be landfilled. Although in the past composting has had limited success Benton County working with MPCA and Tri-County will actively promote programs to encourage composting of MSW especially in the commercial and institutional sectors. The landfills used by Tri-County haulers are typically the Morrison County Landfill, Elk River Landfill, Pine Bend Landfill and a seldom used landfill in Sarona, Wisconsin.

Ash from the Pope/Douglas incinerator will be landfilled at the Ash Monofill located in Section 6, Solem Township, Douglas County.

Benton County will continue to address on-site disposal with educational campaigns. Benton County aggressively promotes proper management and disposal of MSW generated in Benton County.

Results from a Stearns County solid waste survey revealed a greater need for solid waste education as indicated by 58% of the respondents saying there is not enough information received about solid waste management. In addition to that specific question, other questions in the survey had numerous additional comments that included an education or communication component.

As stated in waste reduction strategy above the plan of using the waste hierarchy model, and targeted goals of reduce and reuse; this approach will steer the development of education material through-out the next planning period.

Tentatively, education priorities would be:

- 2022 – Recycling
- 2023-4 – Source Separated Organics (Food Waste and Yard Waste)
- 2024 – Waste-to-Energy

The targeted efforts in 2022 for recycling is to adopt work completed by the Minnesota Recycling Education Committee to improve the quality of the materials collected as recycling.

During 2024, a review of current trends in solid waste is to be conducted to establish the next three-year priorities and again in 2027. The timeline above refers to focused efforts, general efforts in reduce, reuse, and household hazardous waste will continue throughout the planning period. It is also anticipated that the use of Waste Wizard will continue as well.

5. Solid Waste Reduction

Integrated Solid Waste Management System, the Commission, and Benton County plan to continue existing programs and implement additional source reduction activities consistent with the MPCA's definition of "Source Reduction." Benton County hopes to achieve a 3% waste reduction rate from the inception date of this Plan through the ten-year planning period. Measurement of waste reduction has some inherent problems. Like reduction, measures of reuse are problematic as much of this activity occurs within an industry, retail, non-retail, and private exchanges without entering the solid waste stream. Additionally, thrift stores and similar donation centers are protective of their market share and will not disclose volumes in those retail locations. In addition, the mere fact of reduced waste volumes is often explained by the closing of particular businesses or an economic downturn rather than the actions of a government program or policy. Despite these constraints, Benton County still feels waste reduction programs are important and will maintain their existing programs listed below.

If future work and feedback present a new approach or method to enhance the Reduce Your Waste campaign, it may be supplemented or possibly replaced if greater concepts are realized.

Reuse is widely occurring in Benton County, thrift stores, consignment stores, garage sales, and various online platforms. Research by Anders Fremstad (2017) estimated a daily waste reduction of just over one-third of a pound per capita in communities where Craigslist was accessible.

Over the next planning period it is anticipated Benton County (through the Commission) will continue the promotion of material exchange programs for businesses; conduct speaking engagements at schools, businesses, and service clubs; conduct site visits to

businesses and institutions and offer SCORE grants for waste reduction projects, as funds are available.

Benton County proposes to maintain waste reduction programs, which include:

- Requiring that solid waste haulers use some form of volume-based pricing;
- Promotion of materials exchange and reuse programs for various evolving platforms;
- Site visits to businesses and institutions;
- Annual Advertisement campaign for Reduceyourwaste.org with Stearns, Sherburne Counties.
- Develop reduce/reuse programs through county SCORE grant program;
- Promote environmentally responsible purchasing, including at Benton County level;
- Work with MPCA/Tri-County to develop, promote recycling markets
- Advertise waste reduction programs to reduce HHW;
- Promote waste reduction in schools through newsletters, Waste Wizard App., Climb Theatre, and videos;
- Participate with cities and other counties regarding source reduction programs;
- Promote Minnesota Waste Wise;
- Promote membership in Recycling Association of Minnesota (RAM)
- Communicate waste reduction activities to CCISRR.

Benton County proposes to continue existing programs and implement additional source reduction activities consistent with the MPCA's goals for the Source Reduction, throughout the planning period.

Besides maintaining the existing practices described above Benton County in cooperation with MPCA and Tri-County will participate with the member counties with a pilot school or schools for a comprehensive assessment of its MSW volumes and programs with the intent of developing best management practices to reduce/reuse recycle materials, with special emphasis on organic waste.

Additionally, the Commission and Benton County will investigate the possibility of fix-it clinics. The Commission and Benton County will also put more educational programs out to the public emphasizing waste reduction re-use.

Also, Benton County plans to Participate with St. Cloud Area Joint Planning Sustainability Committee, a Committee focusing on sustainability in all areas of natural resource planning, from land use to solid waste; and work with Sustainability Committee to create educational information detailing the benefits of product stewardship, to develop a "think before you buy" promotional campaign and to offer tours demonstrating zero waste as a full life cycle model; Promote environmentally responsible purchasing; Refer to Appendix

B for Solid Waste Reduction, program budgeting.

6. Solid Waste Education Programs

Results from a Stearns County solid waste survey revealed a greater need for solid waste education as indicated by 58% of the respondents saying there is not enough information received about solid waste management. In addition to that specific question, other questions in the survey had numerous additional comments that included an education or communication component.

Benton County proposes to maintain for the ten year planning period the current programs in waste education which include:

- The activities listed in the previous section (Section 4);
- Utilize "Waste Wizard" tool to inform County residents about proper disposal of all types of solid/hazardous waste items.
- Publication of Benton County's annual newspaper "Rubbish Review"
- Arranging speakers for schools and service clubs;
- Promotion of the MPCA's Waste Education Clearinghouse;
- County SCORE grants for educational activities;
- Arrange for performances of CLIMB Theatre Company at local schools;
- Provide handouts at local "clean-up" days regarding HHW;
- Research opportunities with the Commission for tours/field trips to SW facilities;
- Provide recycling directory on Benton County's web-site,

7. Recycling Programs

The private sector provides collection, transportation, and marketing of recyclable materials in Benton County. The one exception is the City of St. Cloud which provides recycling to its residents. By ordinance, Benton County require that all solid waste haulers, including construction & demolition haulers, at a minimum offer recycling to customers. Contractually, mixed municipal solid waste haulers are required to provide recycling to residential and non-residential customers.

During the previous planning, changes in Benton County website provided an opportunity to move the online recycling guide to a separate web location and include a mobile app to improve public access and availability of information to individual residents.

A visible effect on reported recycling rates occurred after 2015 when estimates and 'double counting' of recycling were corrected. Further correction in estimates from aggregate scrap metal reports contributed to a significant decline in the 2019 report. Part of the SCORE reporting relief included the Agency collecting solid waste collection and destination data from haulers, along with recycling reports from statewide retailers.

However, the Agency continues to request hauler information from counties, as well as finding the same challenges faced by counties in collecting retailer information with only four retailers reporting to the Agency.

Quality of data from willing commercial, industrial, and institutional sectors poses a challenge in establishing a trend from SCORE reported data. This data issue leads to the broad fluctuations in recycling and total waste generation. Efforts over the last planning period focused on firms with consistent reporting history. However, these efforts to improve the data contributed to significant decline in reported recycling. It was also discovered a few firms had some or all their recycling collected by a local hauler, resulting in a double count of material in previous reports.

Benton County has not made any significant changes to its recycling goals since 2011. According to the 2019 SCORE report the recycling rate is 49.1%. The general goal is to promote and maintain the existing system. The private sector runs nearly all programs. Some are occasionally supported by County SCORE grants. It is Benton County's intent to continue to support private sector activities. A citizens committee will continue to review the grant program over the next years and recommendations will be made to Benton County Board. Market conditions continue to fluctuate. Local recycling sites are listed on Benton County and Waste Wizard App., website (Refer to Appendix J).

Curbside recycling services are provided in all incorporated cities and are generally available to individual households in the unincorporated areas of Benton County. Drop-off or redemptions are located in numerous area locations and listed on Benton County's ReCollect App., and website (Refer to Appendix J). Also, for more specific information on Benton County's recycling program Refer to Appendices B for Recycling Program budget and 2015-2019 SCORE Reports.

The single largest change in our recycling system is the sort line for delivered MSW at the Pope/Douglas facility where deliveries reached full volume in 2012. A CAP Grant received by Pope/Douglas in 2020 will allow for a further expansion of the sorting line at the facility in the near future. Staff will monitor volumes recycled from their process to assess the recovery rates of existing programs. The agreement with Pope/Douglas includes monthly summaries of recycling volumes recovered from their sort line. Any gains in the recovery of recyclables will be reported in Benton County's SCORE Report Form as "Mechanical or hand-sorted" and should be relatively easy to track.

Locally, Revolution Plastic, a subsidiary of Delta Plastics entered Benton County in 2016 to collect agricultural film plastic at no cost to generators. By 2018, siting quality & quantity concerns, Revolution Plastics discontinued management. To fill the sudden void, Benton County, through Tri-County contracted with local haulers for continued collection of Ag plastics with continued utilization of in-place Revolution Plastic dumpsters. Tri-County also paid for the baling of the film and Revolution Plastic provide transportation of the baled material. During a second collection contract round, Revolution Plastic

informed Tri-County that they will no longer provide dumpsters as replacements or for new accounts. Currently, plastic is being collected by private haulers (utilizing Revolution Plastic dumpster) and processed at a baling facility in Sauk Centre MN. The plastic material is baled in Sauk Centre and shipped to a Revolution Plastics facility in Arkansas for further processing.

8. Yard Waste Management Programs

Benton County recognizes that State Statute disallows the disposal of yard waste in landfills; therefore, in Benton County the predominant method of managing this type of waste is yard waste drop off programs, most of these have been assisted from time to time with grants from Benton County. Benton County doesn't operate these programs but does assist them with grants which are considered on an annual basis. It is the intent of Benton County to continue the current program into the future.

Yard waste composting sites are operated by municipalities at the following sites:

- City of Foley
- City of Rice
- City of Saint Cloud
- City of Sartell
- City of Sauk Rapids
- Tri-County Organics
- Henkemeyer Demo Landfill

More information can be found on the Benton County website under the Department of Development; tab on left side of page called yard waste. It can also be found at: <https://www.co.benton.mn.us/201/Department-of-Development>

The finished compost from these sites is available for use by the residents that use the sites at a small fee or no charge.

The City of St. Cloud operates the only curbside collection program for residential yard waste. They collect yard waste at a charge of \$2.25/per bag with weekly pickup on a seasonal basis. The City of St. Cloud allows for the utilization of the Plumb Creek Park composting site for its residents. Tri -County Organics of St. Cloud also accepts yard waste at their facility and markets its compost and other products to local companies and residents.

It is estimated that less than 1% of Benton County residents utilize "at home" composting; consequently, Benton County will continue to work with Benton County Extension Service and the Commission to provide educational opportunities and technical assistance to residents and businesses. These efforts may consist of SCORE funds, speaking engagements, and/or public display booths at public events. This program is independent of solid waste programs; Refer to Appendix B for Yard Waste Budget.

9. Source-separated Organic Material Composting

Currently there are no existing collection systems for these types of materials, therefore, in Benton County the predominant method of managing this type of waste is private sector waste drop off site. Benton County residence self haul material to these private entities where the materials are then processed. These businesses have been assisted from time to time with grants from Benton County. Benton County doesn't operate these programs but does assist them by directing residents to these sites as well as providing SCORE grant dollars, which are considered on an annual basis. It is the intent of Benton County to continue the current program into the future.

The predominant location for organic composting is Tri-County Organics, located at: 40 35th Ave NE, St. Cloud MN 56304. The company can be contacted at 320-493-3270 or www.tri-countyorganics.com.

The largest organic materials composter in the Tri-County area is Mississippi Topsoils in Cold Spring, Stearns County. They compost biosolids from a nearby poultry plant together with yard waste. At its inception Mississippi Topsoils received some grant funds from the counties, but currently they receive no ongoing financial support from the public sector. They have successfully marketed the resulting compost at greenhouses, nurseries, and retail outlets.

In March of 2013 private company Tri-County Organics LLC. was granted a Conditional Use Permit CUP-2013-01 from the Orderly Annexation Board (St. Cloud) to operate a combined compost/organics recycling facility, in October 2013 the facility was issued a permit to proceed with Source Separated Compostable Materials Demonstration Project and began accepting organic material upon obtaining a facility license from Benton County. Tri-County Organics places material in windrows over an air line to aerate the material, they turn and grind the product with a carbon source (chipped wood leaves, etc). They end up with a very nice soil product which is sold to private individuals, Minnesota Department of Transportation, and landscaping businesses.

In 2017 Tri-County obtained a Solid Waste Facility Permit SW-671-001 from MPCA to continue SSO program operations. According to SCORE report in 2019 Tri-County Organics processed 1826.57 tons of material. The Commission and Benton County are monitoring this program to evaluate its effectiveness.

At the end of the past planning period, the Commission began discussion with the City of St. Cloud wastewater treatment plant regarding the possibility of processing food waste through existing anaerobic digesters and generating power from captured biogas. The Commission received an environmental assistance grant from the Agency to cover collection and pre-processing of food waste for this demonstration project. *This one-year project is scheduled for 2022.* A feasibility study is on file with the Commission.

The Salvation Army and local food shelves receive donations from restaurants and grocery stores through food rescue programs. This is a private effort between suppliers and the charitable organizations.

Food to livestock programs is used by several local restaurants as well as the Sartell/St. Stephen School District. This is a private effort between private Farmers and their customers.

Other considerations in cooperation with Tri-County Pope Douglas Solid Waste Commission, Benton County will study the feasibility and reasonableness of instituting programs of source-separated organics in the commercial and institutional sectors in conjunction with existing private sector operators and developers of composting facilities in the area. In 2019, The Commission authored a letter of support for the Pope/Douglas facility in support of their CAP Grant submittal. Included in the submittal was plans for the development of a roughly 50-acre enclosed compost facility.

Benton County, through Commission staff, will assist, encourage, and promote organics diversion programs with events, schools, institutions, and businesses.

Benton County, through Commission staff, will annually monitor the diversion rate of source-separated organics in meeting its goals throughout the plans life. This monitoring will evaluate the progress of the initiatives towards meeting the goals and adjust county and the Commission's work plans accordingly. This work could include: identify missed opportunities for increased composting, contracts, mandates, ordinances, organized collections.

Benton County and Commission will support and encourage local markets for compost material. Utilizing Benton County's SCORE grant program, Benton County will encourage both local public works departments as well as Benton County Highway Department to use Suitable Plant Growth Materials (SPGM) derived from compost.

Benton County and Commission will search out grant dollars or other financial/policy/research type dollars. These opportunities may be in the form of State or Federal grants or programs that directly apply to current projects in Benton County.

Benton County, through Commission staff will provide technical assistance to generators and/or facility operators in establishing programs. Operators seeking assistance through Commission staff will be offered a variety of tools such as touring existing facilities, networking opportunities with individuals who may be able to assist, and guidance with the regulatory processes.

Benton County, through Commission staff will build awareness of organics recycling at and during community events through the use of an informational booth and educational handouts.

10. Solid Waste Incineration and Energy Recovery

Benton County has a long history of solid waste incineration and energy recovery. *It the goal of Benton County to continue to support solid waste incineration and energy recovery. Benton County, through the Commission has ten years remaining on a commitment to deliver approximately 50,000 tons per year.* Over the past planning period Benton County averaged 48.44% solid waste disposed was at the Pope Douglas waste-to-energy facility. A survey conducted by Stearns County indicated significant support for waste-to-energy with 92% respondents indicated support or strong support.

The Pope Douglas facility with which the Commission has reached an agreement is owned and operated by a Joint Powers Board made up of two Pope County Commissioners and two Douglas County Commissioners and one outstanding member of the community. The facility is located at 2115 Jefferson Street in Alexandria, MN near the 3M Manufacturing Plant, the Douglas County Hospital, and the Alexandria Technical College.

The Pope Douglas waste-to-energy facility began operations in 1987. The current plant capacity is 240 tons per day. During 2019, approximately 415,000 million pounds of steam were produced and sold. Pope Douglas also generated 4,905.82 megawatt-hour of electricity used in-house. A Materials Recovery Facility (MRF) was constructed in 2003 and recovers approximately 3 to 5.5% (by weight) of the waste passing through the MRF. The MRF also serves to remove problem wastes prior to combustion (Pope Douglas, 2021).

Pope Douglas also operates its own ash landfill located in Solem Township of Douglas County. This landfill received 17,475 tons of ash in 2019. In 2020, Pope Douglas began mining the landfill to recover metals (Pope Douglas, 2021). During 2019, approximately 415,000 million pounds of steam were produced and sold. Pope Douglas also generated 4,905.82 megawatt-hours of electricity used in-house. A Materials Recovery Facility (MRF) was constructed in 2003 and recovered approximately 3 to 5.5% (by weight) of the waste passing through the MRF. The MRF also serves as a check point to remove problem wastes before entering the combustion process (Pope Douglas, 2021).

Pope Douglas also operates its own ash landfill located in Solem Township of Douglas County. The landfill began receiving ash from the Waste to Energy Facility in 1994. The ash landfill was designed as a hazardous waste landfill even though the ash that is disposed of in the ash landfill is not considered a hazardous waste. This landfill received 17,475 tons of ash in 2019. In 2020, Pope Douglas began operating a Metal Recovery Facility on the site. Ash is delivered from the Waste to Energy Facility where it is combined with previously landfilled ash that is mined out of the ash landfill cells. Combined ash is processed through the Metal Recovery Facility to remove ferrous and non-ferrous metals. These efforts lead to recovering additional life and headspace in the landfill by removing metals for recycling (Pope Douglas, 2021).

Pope Douglas maintains a policy of taking actions that are economically feasible in accordance with best available technology to reduce the toxicity and quantity of ash from the facility, as well as reducing the quantity of residuals that require disposal. Efforts found in prior sections covering reduction, reuse, recycling, and education also all help add to the reduce ash toxicity and processing residuals.

Assurance of deliveries of MSW will be achieved through contracts with the MSW haulers. Haulers are required to deliver a prescribed tonnage per month based on their market share of waste collected. These prorated amounts are monitored monthly and adjusted as needed by Tri-County staff and Commission to ensure an equitable requirement between haulers. Hauler Contracts are negotiated through the Commission.

The Commission has a waste Designation Plan (October 2011) and is on file at the Commission office. It should be noted that the participant counties each have their own mechanisms to assure waste delivery; Stearns County has a system in place where they are the 'owners' of the waste and haulers are contracted vendors. Sherburne County offers financial incentives to guarantee delivery to more expensive, but environmentally preferable disposal options. Benton County has in place a dormant Designation Ordinance 187; which Benton County will consider updating if Hauler Contracts become problematic.

11. MSW Land Disposal Facilities

Benton County does not own or operate any MSW land disposal sites, but relies on privately owned land disposal sites, located outside of Benton County. Any mixed municipal solid waste generated in Benton County that is not allocated to the Pope Douglas waste-to-energy facility is left to the hauler for disposal and in nearly every instance the choice is landfill. Since much of the mixed municipal solid waste is first managed at transfer stations details of waste going to landfills can be difficult to track. The landfills that are used most frequently by Benton County haulers are the Elk River Landfill (owned and operated by Waste Management) and the Lakes Area Landfill in Sarona Wisconsin, the Pine Bend Landfill in Dakota County, and the Morrison County Landfill. Landfills receiving waste from Benton County have in the past requested information related to the requested Certificate of Need (CON), needed for future landfill expansion. It is anticipated Benton County will provide information on CON for several of the listed landfills in consideration of future expansion needs. It is not anticipated that any new Municipal Solid Waste Landfills will be developed in Benton County.

Benton County has a long history of processing mixed municipal solid waste while recognizing the continued need for land disposal. Benton County also values its partnership with private solid waste haulers who provide collection and transportation services to the residents of Benton County. *Benton County intends to continue its balanced efforts to divert mixed municipal solid waste from landfills while at the same*

time understanding some amount of waste is landfilled. There are no plans to develop a landfill site in Benton County.

12. Special Wastes

The private sector programs listed below generally manage special wastes. Benton County has from time to time supported many of these programs with SCORE funds. Unless otherwise noted, policies and goals will remain the same and Benton County intends to maintain the current level of service for the Special Waste programs over the next 10 years.

Pharmaceutical Dropoff, in 2015 Benton County in cooperation with the Benton County Soil and Water Conservation District, Human Services, and law enforcement officials utilized local funding and SCORE dollars to provide and promote proper use and proper disposal of unused prescription, illicit and over-the-counter medications. Benton County funded the installation of three disposal sites located in police stations/city halls of the cities of Foley, Sauk Rapids and Rice MN. Benton County continues to promote and provide funding for the proper disposal of unused pharmaceuticals.

Benton County manages some of its special waste, and hard to dispose of materials utilizing the county's Amnesty Days collection events. Benton County also assists the private sector in managing special waste by providing SCORE grant funding opportunities. Refer to Appendices A-B for Goal Volume Table Estimates, program budgeting.

13. Tires

Waste tires are managed by the private sector at this time, with no County assistance required. Illegal storage or disposal of waste tires is dealt with on a complaint basis as a violation of the solid waste ordinance. At this time there are no waste tire dumps located in Benton County. The only tire processor in the area is Liberty Tire in St. Martin Minnesota (320)-548-3496. Processed tires are marketed for use in road construction, crumb rubber applications, and as fuel in plants licensed to use tire-derived fuel.

Benton County holds semi-annual "clean-up" events called Amnesty Days, during these Events County residents may drop off up to four tires free of charge. Additional tires may be dropped off for a fee during these events. Refer to Appendices B-K-L and 2015-2019 SCORE REPORTS for funding support and tonnage of tires collected.

14. Major Appliance Management

Major Appliance collection is managed entirely by the private sector. Most appliance retailers in Benton County will accept used appliances with a new appliance purchase. In addition, Central Appliance Recyclers in St. Cloud offers drop-off or pick up services. Central Appliance also serves most public or private "clean-up" day programs. A single

day collection event is conducted annually by United Cerebral Palsy with the cooperation of the Crossroads Mall in St. Cloud. The Waste Management transfer station in east St. Cloud (Benton County) also collects appliances for recycling. Compliance with Benton County Ordinance #471, and federal and state regulations is the responsibility of the private sector. Benton County Amnesty Day events are contracted with a private hauler who are responsible for the proper disposal of the appliances. Refer to Appendices B-K-L & SCORE REPORTS 2015-2019 for program funding and amounts of appliances collected.

15. Used Oil, Automotive Mercury switches, Motor Vehicle Fluids and Filters, Dry Cell Batteries and Lead Acid Batteries

Used Oil collection and management is predominantly managed by the private sector. There are numerous opportunities for used oil drop-off at area service stations and retailers. Benton County provides information to the public on where to take used oil and oil filters for recycling. There are no publicly operated programs for used oil. Benton County will supplement opportunities for drop-off sites as needed with SCORE funds. Benton County provides private sector opportunities to apply for SCORE funding as an incentive to provide drop-off locations throughout the county.

Lead acid batteries, used oil, automotive mercury switches, motor vehicle fluids and filters, and dry cell batteries are recycled exclusively by the private sector without County involvement.

Benton County supports the continued proper disposal of used oil and lead acid batteries. Benton County maintains a list of dropoff sites on its website and Waste Wizard App., www.co.benton.mn.us/224/solid-waste-management. No changes are anticipated for this planning period.

Refer to Appendices B-L & SCORE REPORTS 2015-2019 for program funding and the amounts of used oil, used oil filters and lead acid batteries collected.

16. Household Hazardous Waste Programs (HHW)

In 2012 Stearns County opened a Facility and started offering HHW consolidation with Pope Douglas Solid Waste Management Commission and surrounding Counties. The Facility acts as both the base for continued mobile collection throughout Benton/Tri-County area, as well as a permanent year round drop off facility.

The HHW program objectives are:

- Protect the public from adverse impacts of improperly discarded household chemicals.
- Protect the environment by eliminating the potential for the release of toxic chemicals.

- Ensure proper management and disposal of unwanted hazardous wastes.
- Evaluate incoming materials to categorize and package wastes for proper disposal.
- Improve health and safety by providing education on how to purchase, use, and store household chemical products.
- Offer a free reuse alternative for useable products.

Benton County provides information to the public as how best to manage and dispose of special (problem) wastes. Benton County has an active program to address problem wastes. Benton County is a participant in the Household Hazardous Waste Facility operated by Stearns County located at 3601 5th St. S Waite Park MN 56387. Benton County is a contracted partner with Stearns County to provide funding for the operations of the HHW program.

Benton, Sherburne, and Stearns Counties cooperatively fund a permanent facility located at 3601 5th St. South Waite Park MN 56387, phone 320-257-8605. The facility is open Monday through Friday and offers Saturday dropoff hours once a month. Each county pays a prorated share based on usage. A summary of program cost and materials collected can be found at the Tri-County Solid Waste Commission offices.

In an attempt to better serve rural areas, Benton County contracts with Stearns County for the use of a mobile HHW collection unit. The mobile collection unit makes one day collection events relatively easy for Benton County to provide. Benton County hosts one to two collections throughout Benton County annually. These events are advertised via local media, Benton County website, Benton County's publication "Rubbish Review," Waste Wizard and individual post cards sent to each household within Benton County. In 2019 the mobile household hazardous waste program served 188 vehicles totaling 193 households. The collection events and a list of materials collected can be found at the Benton County Department of Development. Refer to Appendices B & SCORE REPORTS 2015-2019 for program funding and amounts of HHW collected.

It is anticipated that the permanent facility, as well as the mobile unit will be operated throughout the planning period

17. Mercury Abatement Programs

Mercury abatement programs already exist in the Tri-County area. Mercury and mercury containing products, including mercury switches are accepted at the HHW facility. Fluorescent tubes are accepted at area hardware stores, the HHW Facility and at collection events using the HHW mobile unit.

Education materials on the hazards of mercury are available through the HHW programs and County Solid Waste office, webpage, ReCollect application and Rubbish Review publications. Also, information is available at events such as employee health fairs, Earth Day events, County Fairs, etc. It is anticipated that these activities will continue at the

current level Refer to Appendix B for program funding.

18. Electronics Management

Management of CRT's and other electronics will continue to be handled by the private sector with occasional County assistance through grants.

Local vendors such as Central Appliance Recyclers St. Cloud, Republic Services, St. Cloud, Waste Management, St. Cloud currently provide drop-off service for a fee. In addition, the United Cerebral Palsy has managed a one-day drop-off event with County grant assistance.

Benton County and some cities and townships also provide drop-off opportunities at "clean-up events" through contracts with Central Appliance, Republic Services or Waste Management.

It is anticipated that Benton County will continue to support the private sector activities in this policy area. It is also anticipated that Benton County will assist expansion of these activities as needed through their competitive grant programs Refer to Appendices B & SCORE REPORTS 2015-2019 and L for program funding and tonnages collected.

19. Agricultural Plastics Management

Revolution Plastic, a subsidiary of Delta Plastics entered Tri-County in 2016 to collect agricultural film plastic at no cost to generators. By 2018, siting quality & quantity concerns, Revolution Plastics discontinued management. To fill the sudden void, Stearns County, through Tri-County contracted with local haulers for continued collection of Ag plastics with continued utilization of in-place Revolution Plastic dumpsters. Tri-County also paid for the baling of the film and Revolution Plastic provide transportation of the baled material. During a second collection contract round, Revolution Plastic informed Tri-County that they will no longer provide dumpsters as replacements or for new accounts. Currently, plastic is being collected by private haulers (utilizing Revolution Plastic dumpster) and processed at a baling facility in Sauk Centre MN. The plastic material is baled in Sauk Centre and shipped to a Revolution Plastics facility in Arkansas for further processing.

In 2020 Benton County continued to provide this service by contracting with Private haulers to provide disposal and collection of the materials. Refer to 2018-2019 SCORE REPORTS for funding and collection amounts.

20. Demolition Debris Management

Benton County manages demolition debris in Benton County by directing demolition debris to permitted demolition landfills. Benton County anticipates there will be no policy changes during this planning period.

Benton County has a single Demolition Landfill, Henkemeyer Landfill, Permit# SW-188. In 2014 the landfill applied for a renewal of this permit. In December of 2014 The Minnesota Pollution Control Agency (MPCA) granted the renewal for the permit running from 12/30/2014 to 12/30/2024 a period of ten years, additionally Benton County annually licenses and inspects this landfill. In calendar year 2019 the waste disposed of in the landfill was approximately 16,716 cubic yards. A copy of the permit and its conditions can be obtained at the Benton County offices.

Benton County does have several temporary private sector permit-by-rule recycling and storage facilities for the crushing and reuse of concrete and asphalt. These permit-by-rule sites typically occur within existing privately owned operated gravel mining sites and are used for local road upgrades and repairs. Benton County also requires residents to obtain a demolition permit which is inspected by Benton County's building inspector Refer to Appendix B for program funding.

21. Solid Waste Ordinance and Licensing

Benton County adopted Ordinance #471, entitled Benton County Solid Waste Ordinance, on March 5, 2019. Benton County has also adopted Ordinance #187, entitled Benton County Solid Waste Designation Ordinance, on April 18, 1989 as well as the Benton County Solid Waste Service Fee Ordinance #471 Section 8 March 5, 2019. The above-mentioned ordinances can be found at the Benton County Department of Development. These Ordinances can be found in Appendix H of this plan.

In 2011 the Commission developed an overall Designation Plan, to assure deliveries to Pope Douglas are being met, during 10-year planning period, 2021-2031. Benton County will make an independent decision whether to update/resurrect its existing Designation Ordinance #187.

22. Solid Waste Staffing

Benton County has 0.5 full time equivalent (FTE) staff working on solid waste issues, to include illegal disposal, source reduction, waste education, recycling collection, HHW and problem materials, and administration and support staff. Also, through the Tri-County 1.25 FTE staff works on these same issues, concentrating more on regional issues. At this time, no staffing changes are anticipated for the ten-year planning period Refer to Appendices B-J for program funding and Tri-County Staffing.

23. Solid Waste Funding/Projected Ten Year Budget

Throughout the planning period Benton County plans to continue or possibly increase its level of commitment to solid waste management. Benton County's overall solid waste management program is comprehensive, integrated, and proactive. Benton County will support its present programs and address new issues as they arise. Program funding is discussed below.

The Benton County budget assumes:

- increase in population as indicated on the Goal Volume Table.
- inflation rate as listed on the budget
- annual tipping fee increases
- continued Solid Waste Service fee
- continuation of the SCORE funding program
- minimal use of general revenue funds

The ten-year Benton County Solid Waste Budget is attached as Appendix B. It should be noted that the ten-year budget projection is based on a 5 year average of the actual yearly expenditures for our entire solid waste program, while SCORE income and expenditure reports are not comparable, the numbers Benton County reports to SCORE are just a portion of the full budget to document that Benton County spends its allocated SCORE funding.

24. Goal/Volume Table

See Appendix A, Benton County Goal Volume Table.

25. Alternatives to Proposed System

Alternatives to the existing system are examined in Section 3. In 2009 the opportunity arose to deliver waste to the existing mass burn incinerator operated by Pope/Douglas Solid Waste Management Commission in Alexandria. Due to their expansion, capacity had become available. A more thorough discussion of that decision and details of arrangements with that facility are found in Section 10 of this document. At present, many of the larger licensed haulers have signed contracts with Tri-County to deliver waste to Pope/Douglas facility in Alexandria Minnesota. To assure deliverance to the Pope Douglas Facility to Benton County is considering a designation ordinance (a copy of the dormant ordinance can be found in Appendix H).

The Tri-County Solid Waste Commission has investigated the feasibility of building a waste-to-energy facility and documents can be found at the Commission Office.

In the event that the proposed system is not developed nor has major operational difficulties, Tri-County staff, with the assistance of the Solid Waste Administrators in Benton, Sherburne and Stearns Counties will develop both short-term and long-range plans to be presented to the Tri-County Solid Waste Management Commission followed

by consideration by the individual County Boards. It is anticipated that if the Pope/Douglas Facility becomes inoperable for any reason, other nearby waste-to-energy facilities will be contacted regarding the possibility of MSW deliveries. Failing that option, licensed landfills in Sherburne, Dakota and Morrison counties would be contacted.

Annually during the duration of the Pope/Douglas agreement, the Tri-County will monitor available capacity in both the short term and long term. As that agreement anticipates decreasing Tri-County MSW deliveries throughout its term, it will be crucial that the delivered tons are monitored and alternative plans,

including the possibility of construction of more processing capacity, be developed.

The following are some additional opportunities Benton County will consider to improve our system during the planning period:

- Promote more backyard composting-could be done as public education project in cooperation with Commission Staff or by contracting with a particular system's distributor (i.e., Earth Machine).
- Promote the use of food waste as hog feed. There are several area restaurants using this program, further expansion of this program should be investigated.
- Benton County, in cooperation with the Tri-County Commission, will continue to support source-separated organic composting and will investigate the possibility of creating a program focusing on promotion of source-separated organic composting with an emphasis on the commercial and institutional sectors. The EA Grant received by the Commission will allow for a "pilot" test of SSO in relation to Anerobic Digestion. If this project is successful, the Commission will look to create a permanent program of SSO food waste anerobic digestion. There are no plans at this time to institute large scale residential collection programs in any other cities.

Investigate and Promote programs which focus on the upper echelon of the hierarchy of source reduction and reuse.

Although Benton County is part of a mature integrated solid waste management system, Benton County will promote, emphasize alternatives to the existing system that focus on source reduction and recycling, including investigating ways to promote the development markets for such materials.

26. Mitigation of Environmental Risks

MPCA permitting and compliance programs are relied upon for mitigation of environmental risks. Permits and their status are on file with the MPCA.

On site disposal and mitigation of risks is done on a complaint basis, by working with current ordinances, cooperation with local Sheriff's offices, other agencies, and Benton County Attorney's office.

27. Public Participation Program

The 2021 Solid Waste Plan largely encompasses the contents, directions, and goals of the Commission and Benton County Board of Commissioners. This Solid Waste Plan will be distributed to local municipalities and public libraries to solicit public comment on the final draft of the 2021 Plan. In addition, a public hearing will be scheduled in front the Benton County Board of Commissioners. A Copy of this Solid Waste Plan is available at the Benton County Solid Waste Office.

28. Implementation

Although we do not anticipate any major changes to the solid waste system, the following is a tentative schedule for minor program changes and/or updates and improvements.

2021	<ul style="list-style-type: none">-Maintain Source Reduction Credit-Promote backyard composting-Promote food waste reuse programs institutional/commercial-Solid Waste Ordinance Amendments-Maintain/improve Ag Plastic Recycling Program
2022	<ul style="list-style-type: none">-Promote programs focusing on waste reduction-Promote programs focusing on product purchasing (think before you buy)-Source Separated Organics program with St. Cloud WWTF
2023	<ul style="list-style-type: none">-Seek expansion of reduce, reuse, recycling, markets
2026	<ul style="list-style-type: none">-Consider planning for potential new WTE facility or alternative to Pope/Douglas-Possible change to market demand waste disposal system

29. PLAN REVIEW AND TEN YEAR PLAN

This plan will be reviewed in 2025-2026 with emphasis on developing a long-term plan to address waste disposal beyond the extent of the current contract with Pope/Douglas Solid Waste WTE Facility. At that time, a Plan containing overall Commission goals and

polices will be drafted by Commission staff with assistance of the respective Counties' Solid Waste Administrators.

Benton County will continue to improve its solid waste management system in the future. These improvements are an ongoing process. Review of this plan to develop Benton County's annual solid waste budget and will be available to the public at Benton County Administration Building. Benton County plans to begin work on an update to this plan nine years from the date of approval of this plan and will submit a draft update nine and one-half years from the approval of this plan. Benton County expects to complete the update with assistance of the Commission and the MPCA.

Appendix A: Goal Volume Table (below)

County goal volume table template for solid waste planning

Instructions: Please read "Overview and Instructions" tab prior to completing this form. Only fill out the yellow-highlighted fields.
Please email this completed form to your MPCA Solid Waste Planner.
If you have any questions please see the Contact information tab below for contact information.

Solid Waste	Year									
	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
Mangement Method										
Recycling	17,078	17,174	17,272	17,365	17,456	17,517	17,602	17,684	17,763	17,839
Organics	269	271	272	274	275	276	278	279	280	282
Combined Recycling Rate	50%	50%	50%	50%	50%	50%	50%	50%	50%	50%
Waste-to-Energy (minus recyclables and nonprocessibles)	6,399	6,495	6,565	6,570	6,570	5,913	5,913	5,913	5,913	5,913
Pope Douglas Solid Waste	8,801	8,897	8,994	9,000	9,000	8,100	8,100	8,100	8,100	8,100
Landfill	10,961	10,967	10,995	11,087	11,182	11,958	12,048	12,134	12,217	12,296
Elk River Landfill - SW-74	3,946	4,058	4,178	4,324	4,585	5,022	5,060	5,096	5,131	5,164
Pine Bend Landfill - SW-45	5,700	5,922	5,937	6,098	6,262	6,816	6,747	6,795	6,842	6,886
Morrison County Solid Waste	110	219	220	222	224	239	241	243	244	246
Kandiyohi County Sanitary Landfill -	219	219	220	222	112	0	0	0	0	0
Other facility	986	548	440	333	0	0	0	0	0	0
Capacity Used	11,538	11,544	11,574	11,787	11,771	12,713	12,682	12,773	12,860	12,943
On-site Disposal	1,469	1,217	965	798	714	714	714	714	714	714
Total MSW Generated	36,176	36,124	36,069	36,094	36,197	36,718	36,555	36,724	36,887	37,044

Recycling by sector (excluding WTE)	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
Residential	6,220	6,256	6,291	6,325	6,359	6,391	6,423	6,453	6,482	6,511
C/I/1	10,590	10,651	10,711	10,770	10,827	10,883	10,936	10,988	11,038	11,085

Organics by sector		2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
	Residential	100	100	101	101	102	102	103	103	104	104
	C/I/I	169	171	171	173	173	174	175	176	176	178

[illegible]

Landfilling

Select facility and enter **percentage** of landfilled material sent to the facility for each year

[illegible]

Waste-to-Energy

Select facility and enter **amount in tons** of material sent to the facility for each year

[illegible]

Appendix B: Budget

BENTON COUNTY SOLID WASTE MANAGEMENT BUDGET 2021-2031

	Number of households= 16,420										5 Year Total		10 Year Total	
	Inflation Rate= 1.10%										120,684		184,608	
	Total MSW Tonnage Projections: 17,433 20,060 21,918 23,949 26,167 28,590										31,239		34,132	
	(from Cost-Volume Table) 2019													
Expenditures	2021	2022	2023	2024	2025	2026	5 Year Total	2027	2028	2029	2030	2031	5 Year Total	10 Year Total
Administration:														
Advertising	\$ 889	\$ 899	\$ 909	\$ 919	\$ 929	\$ 939	\$ 4,594	\$ 949	\$ 960	\$ 970	\$ 981	\$ 992	\$ 4,652	\$ 9,446
Mileage	\$ 457	\$ 462	\$ 467	\$ 472	\$ 477	\$ 483	\$ 2,362	\$ 488	\$ 493	\$ 499	\$ 504	\$ 510	\$ 2,494	\$ 4,856
Supplies	\$ 5,404	\$ 5,463	\$ 5,524	\$ 5,584	\$ 5,646	\$ 5,708	\$ 27,925	\$ 5,771	\$ 5,834	\$ 5,898	\$ 5,963	\$ 6,029	\$ 29,495	\$ 57,420
Staff Payroll & Benefits	\$ 87,725	\$ 88,690	\$ 89,666	\$ 90,652	\$ 91,649	\$ 92,657	\$ 463,314	\$ 93,676	\$ 94,707	\$ 95,749	\$ 96,802	\$ 97,867	\$ 478,801	\$ 932,114
Administration Total	\$ 94,475	\$ 95,514	\$ 96,565	\$ 97,627	\$ 98,701	\$ 99,787	\$ 488,194	\$ 100,884	\$ 101,994	\$ 103,116	\$ 104,250	\$ 105,397	\$ 515,642	\$ 1,003,836
Special Wastes Amnesty Days														
Waste Tires	\$ 5,284	\$ 5,342	\$ 5,401	\$ 5,460	\$ 5,520	\$ 5,581	\$ 27,305	\$ 5,642	\$ 5,705	\$ 5,767	\$ 5,831	\$ 5,895	\$ 28,840	\$ 56,145
Trash	\$ 10,140	\$ 10,252	\$ 10,364	\$ 10,478	\$ 10,594	\$ 10,710	\$ 52,398	\$ 10,828	\$ 10,947	\$ 11,067	\$ 11,189	\$ 11,312	\$ 55,344	\$ 107,742
Demolition	\$ 1,887	\$ 1,888	\$ 1,908	\$ 1,929	\$ 1,951	\$ 1,972	\$ 9,648	\$ 1,994	\$ 2,016	\$ 2,038	\$ 2,060	\$ 2,083	\$ 10,190	\$ 19,838
Scrap Metal	\$ 1,314	\$ 1,328	\$ 1,343	\$ 1,358	\$ 1,373	\$ 1,388	\$ 6,790	\$ 1,403	\$ 1,419	\$ 1,434	\$ 1,450	\$ 1,466	\$ 7,172	\$ 13,962
Electronics	\$ 18,098	\$ 18,297	\$ 18,498	\$ 18,702	\$ 18,908	\$ 19,116	\$ 93,520	\$ 19,326	\$ 19,538	\$ 19,753	\$ 19,971	\$ 20,190	\$ 98,778	\$ 192,299
Appliances	\$ 4,635	\$ 4,686	\$ 4,738	\$ 4,790	\$ 4,842	\$ 4,896	\$ 23,951	\$ 4,949	\$ 5,004	\$ 5,059	\$ 5,115	\$ 5,171	\$ 25,298	\$ 49,249
Amnesty Days Total	\$ 41,340	\$ 41,795	\$ 42,254	\$ 42,719	\$ 43,189	\$ 43,664	\$ 213,612	\$ 44,142	\$ 44,628	\$ 45,119	\$ 45,615	\$ 46,117	\$ 225,622	\$ 439,233
Mobile Household Hazardous Waste:														
Disposal Paint, Etc.	\$ 386	\$ 390	\$ 395	\$ 399	\$ 403	\$ 408	\$ 1,995	\$ 412	\$ 417	\$ 421	\$ 426	\$ 431	\$ 2,107	\$ 4,101
Disposal Fluorescent Lamps	\$ 352	\$ 356	\$ 360	\$ 364	\$ 368	\$ 372	\$ 1,819	\$ 376	\$ 380	\$ 384	\$ 388	\$ 393	\$ 1,921	\$ 3,740
Supplies/Staff (Stearns)	\$ 1,252	\$ 1,266	\$ 1,280	\$ 1,294	\$ 1,308	\$ 1,322	\$ 6,470	\$ 1,337	\$ 1,352	\$ 1,367	\$ 1,382	\$ 1,397	\$ 6,833	\$ 13,303
Waste Disposal	\$ 646	\$ 653	\$ 660	\$ 668	\$ 675	\$ 682	\$ 3,338	\$ 680	\$ 697	\$ 705	\$ 713	\$ 721	\$ 3,526	\$ 6,864
Mobile HHW Total	\$ 2,637	\$ 2,666	\$ 2,695	\$ 2,725	\$ 2,755	\$ 2,785	\$ 13,621	\$ 2,816	\$ 2,847	\$ 2,878	\$ 2,910	\$ 2,942	\$ 14,387	\$ 28,009
Other Items														
Tri-County Solid Waste Commission	\$ 32,695	\$ 33,055	\$ 33,418	\$ 33,786	\$ 34,157	\$ 34,533	\$ 168,949	\$ 34,913	\$ 35,297	\$ 35,685	\$ 36,078	\$ 36,475	\$ 178,448	\$ 347,398
Pharmaceutical Disposal Program	\$ 873	\$ 883	\$ 892	\$ 902	\$ 912	\$ 922	\$ 4,511	\$ 932	\$ 942	\$ 953	\$ 963	\$ 974	\$ 4,765	\$ 9,276
SWAC PerDiem/Mileage	\$ 736	\$ 744	\$ 752	\$ 761	\$ 769	\$ 777	\$ 3,803	\$ 786	\$ 795	\$ 803	\$ 812	\$ 821	\$ 4,017	\$ 7,820
SCORE Grants	\$ 165,498	\$ 167,318	\$ 169,159	\$ 171,020	\$ 172,901	\$ 174,803	\$ 885,201	\$ 176,726	\$ 178,670	\$ 180,635	\$ 182,622	\$ 184,631	\$ 903,283	\$ 1,758,484
Recycling	\$ 3,047	\$ 3,081	\$ 3,114	\$ 3,149	\$ 3,183	\$ 3,218	\$ 15,745	\$ 3,254	\$ 3,290	\$ 3,326	\$ 3,362	\$ 3,399	\$ 16,530	\$ 32,376
Education	\$ 26,211	\$ 26,499	\$ 26,791	\$ 27,086	\$ 27,383	\$ 27,685	\$ 135,444	\$ 27,989	\$ 28,297	\$ 28,608	\$ 28,923	\$ 29,241	\$ 143,059	\$ 278,503
Total Program Cost:	\$ 367,512	\$ 371,555	\$ 376,642	\$ 379,774	\$ 383,951	\$ 388,175	\$ 1,899,081	\$ 392,445	\$ 396,762	\$ 401,126	\$ 405,538	\$ 409,999	\$ 2,005,653	\$ 3,904,934
Gross cost per HH per year:	\$ 22.38	\$ 22.69	\$ 22.89	\$ 23.18	\$ 23.47	\$ 23.75	\$ 113.34	\$ 23.67	\$ 23.95	\$ 24.25	\$ 24.53	\$ 24.81	\$ 123.16	\$ 241.50
Gross cost per ton MSW generated	\$ 21.08	\$ 21.52	\$ 21.94	\$ 22.35	\$ 22.76	\$ 23.16	\$ 109.77	\$ 22.56	\$ 22.97	\$ 23.38	\$ 23.79	\$ 24.19	\$ 118.85	\$ 233.62
Revenues														
SCORE Grant	\$ 116,065	\$ 116,065	\$ 116,065	\$ 116,065	\$ 116,065	\$ 116,065	\$ 580,325	\$ 116,065	\$ 116,065	\$ 116,065	\$ 116,065	\$ 116,065	\$ 580,325	\$ 1,160,650
HHW Slopand	\$ 7,591	\$ 7,675	\$ 7,759	\$ 7,844	\$ 7,931	\$ 8,018	\$ 39,226	\$ 8,106	\$ 8,195	\$ 8,285	\$ 8,376	\$ 8,469	\$ 41,431	\$ 80,657
Amnesty Days Revenue Citizens	\$ 3,691	\$ 3,732	\$ 3,773	\$ 3,814	\$ 3,856	\$ 3,899	\$ 19,073	\$ 3,941	\$ 3,985	\$ 4,029	\$ 4,073	\$ 4,118	\$ 20,145	\$ 39,218
Amnesty Days Scrap Revenue	\$ 516	\$ 522	\$ 527	\$ 533	\$ 539	\$ 545	\$ 2,666	\$ 551	\$ 557	\$ 563	\$ 569	\$ 576	\$ 2,816	\$ 5,483
Solid Waste Service Fee	\$ 371,692	\$ 371,692	\$ 371,692	\$ 371,692	\$ 371,692	\$ 371,692	\$ 1,858,460	\$ 371,692	\$ 371,692	\$ 371,692	\$ 371,692	\$ 371,692	\$ 1,858,460	\$ 3,716,920
License Fees (Haulers/Facilities)	\$ 10,250	\$ 10,250	\$ 10,250	\$ 10,250	\$ 10,250	\$ 10,250	\$ 51,250	\$ 11,275	\$ 11,275	\$ 11,275	\$ 11,275	\$ 11,275	\$ 56,375	\$ 107,625
Total Program Revenues	\$ 509,805	\$ 515,413	\$ 521,082	\$ 526,814	\$ 532,605	\$ 538,468	\$ 2,551,000	\$ 544,391	\$ 550,379	\$ 556,434	\$ 562,564	\$ 568,742	\$ 2,559,553	\$ 5,110,554
Net Budget	\$ 142,293	\$ 143,858	\$ 145,441	\$ 147,041	\$ 148,656	\$ 150,293	\$ 735,291	\$ 151,946	\$ 153,618	\$ 155,308	\$ 157,016	\$ 158,743	\$ 776,631	\$ 1,511,922

Appendix C: Demographic Information

EMPLOYMENT AND ECONOMIC DEVELOPMENT

COUNTY PROFILE

Benton Co.

Benton Co. is a part of Economic Development Region 7W, which is located in the Central Planning Region.



POPULATION CHARACTERISTICS

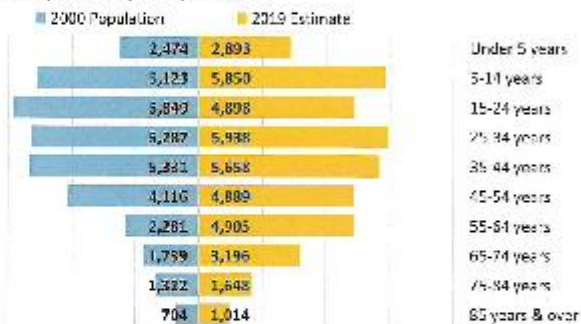
Benton Co.'s population has increased so far this decade, ranking as the 14th fastest growing of the 87 counties in the state from 2010 to 2019. It is now the 24th largest in the state. Benton Co.'s population has a younger median age than the state and a smaller percentage of people aged 65 years and older. The population is aging, especially as the Baby Boom generation moves through the population pyramid (see Figure 1).

Current population:	40,889 people	Median Age:	36.4 years
Population change, 2010-2019	2,438 people 6.3% increase	state:	38.3 years

	Number	Percent
Under 5 years	2,893	7.1%
5-14 years	5,850	14.3%
15-24 years	4,898	12.0%
25-34 years	5,938	14.5%
35-44 years	5,658	13.8%
45-54 years	4,889	12.0%
55-64 years	4,905	12.0%
65-74 years	3,106	7.8%
75-84 years	1,648	4.0%
85 years & over	1,014	2.5%
Total Population	40,889	100.0%

Source: U.S. Census Bureau, Population Estimates

Figure 1. Population Pyramid, 2000-2019



Benton Co. enjoyed a natural increase - more births than deaths from 2010 to 2019, but also experienced net in migration - meaning more people moved in than moved out. Despite suffering domestic out-migration, Benton Co. welcomed net international in migration - gaining new Minnesotans from foreign countries (see Table 2).

Table 2. Components of Population Change, 2010-2019

	Total Population Change	Natural Increase	April 1, 2010 to July 1, 2019				
			Vital Events		Net Migration		
			Births	Deaths	Total	International	Domestic
Benton Co.	2,438	2,099	5,242	3,143	353	368	-15
State of Minnesota	335,705	250,488	637,356	386,868	88,161	114,414	-26,253

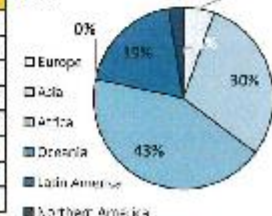
Source: U.S. Census Bureau, Population Estimates Program

Compared to the state, Benton Co. has a smaller percentage of foreign-born residents. From 2010 to 2018, Benton Co. saw an increase in the number of foreign-born residents, which was faster than the statewide increase.

Table 3. Place of Birth for the Foreign Born Population, 2018	Benton Co.		Change 2010-2018		Minnesota	
	Number	Percent	Number	Percent	Percent	Change
Foreign-born Population	1,587	4.0%	991	166.3%	8.4%	25.8%
Europe	87	5.5%	43	97.7%	10.2%	4.8%
Asia	471	29.7%	125	36.1%	37.7%	27.8%
Africa	685	43.2%	623	1004.8%	24.5%	61.1%
Oceania	0	0.0%	0	NONE/0%	0.5%	41.5%
Americas:	344	21.7%	200	138.9%	27.1%	9.8%
Latin America	301	19.0%	170	129.8%	24.6%	11.8%
Northern America	43	2.7%	30	230.8%	2.6%	-5.0%

Source: U.S. Census Bureau, 2014-2018 American Community Survey

Figure 2. Place of Birth for the Foreign Born Population, 2018



POPULATION PROJECTIONS

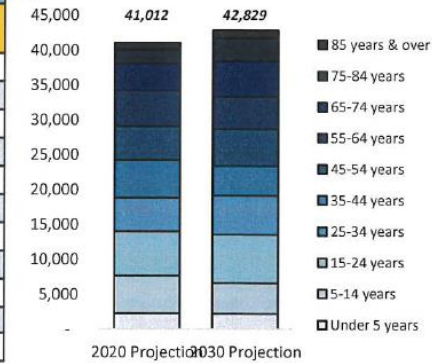
According to the Minnesota State Demographic Center, Benton Co.'s population is expected to grow from 2020 to 2030, with a rate of change that is slower than the projected statewide growth rate (5.0%). In addition to the overall growth, the number of people aged 65 years and older is expected to increase over the next decade (see Figure 4 and Table 5).

Table 5. Population Projections by Age Group, 2020-2030

Benton Co.	2020 Projection	2030 Projection	Numeric Change	Percent Change
Under 5 years	2,267	2,213	-54	-2.4%
5-14 years	5,422	4,381	-1,041	-19.2%
15-24 years	6,313	6,933	620	9.8%
25-34 years	4,872	5,605	733	15.0%
35-44 years	5,404	4,243	-1,161	-21.5%
45-54 years	4,820	5,288	468	9.7%
55-64 years	5,172	4,702	-470	-9.1%
65-74 years	3,825	5,070	1,245	32.5%
75-84 years	1,910	3,222	1,312	68.7%
85 years & over	1,007	1,172	165	16.4%
Total Population	41,012	42,829	1,817	4.4%

Source: Minnesota State Demographic Center

Figure 4. Projections by Age Group, 2020-2030



EDUCATIONAL ATTAINMENT

Benton Co. has a lower percentage of adults (18 years & over) with at least a high school diploma than the state (92.4%), and a lower percentage of people with at least some college experience. Benton Co. also has a higher percentage of people with an Associate's degree and a lower percentage of people with a Bachelor's degree or higher.

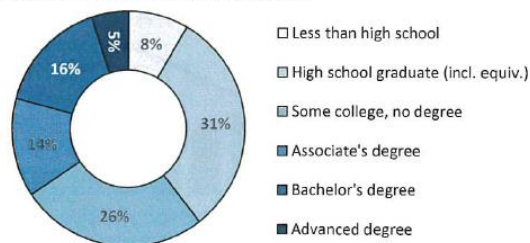
**Percentage of the adult population
(18 years & over) with at least a high
school diploma:**

91.6%

College-educated: 60.5%
state: 67.1%

Associate's Degree: 13.6%
Bachelor's Degree: 15.7%
Advanced Degree: 5.2%

Figure 5. Educational Attainment, 2018



Source: U.S. Census Bureau, 2014-2018 American Community Survey

COUNTY PROFILE

Benton Co.

Benton Co.'s population was becoming more racially diverse over time. Since 2000, the county's white population increased and the number of people of other races increased (see Table 4).

Figure 3. Population by Race, 2018

- White
- Black or African American
- American Indian
- Asian
- Some Other Race
- Two or More Races

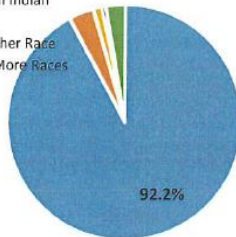


Table 4. Race and Hispanic Origin, 2018	Benton Co.			Minnesota	
	Number	Percent	Change from 2000-2018	Percent	Change from 2000-2018
Total	39,779	100.0%	16.2%	100.0%	12.4%
White	36,689	92.2%	11.4%	83.3%	4.7%
Black or African American	1,322	3.3%	397.0%	6.2%	99.3%
American Indian or Alaska Native	32	0.1%	-81.9%	1.1%	7.3%
Asian or Other Pac. Islanders	438	1.1%	7.4%	4.8%	83.8%
Some Other Race	221	0.6%	82.6%	1.8%	48.7%
Two or More Races	1,077	2.7%	235.5%	2.9%	90.7%
Hispanic or Latino origin	903	2.3%	194.1%	5.3%	104.2%

Source: U.S. Census Bureau, 2014-2018 American Community Survey

LABOR FORCE CHARACTERISTICS

Benton Co. had a higher labor force participation rate than the state. The labor force in Benton Co. is less racially diverse than the state (where 85.5% of workers are white alone), but is becoming more diverse over time.

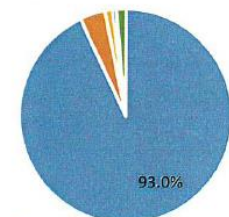
Table 7. Employment Characteristics, 2018

	Benton Co.			Minnesota		Benton Co.	
	In Labor Force (available workers)	Labor Force Partic. Rate	Unemp. Rate	Labor Force Partic. Rate	Unemp. Rate	Male	Female
Total Labor Force	21,626	70.6%	4.0%	69.7%	3.9%	11,540	10,079
16 to 19 years	994	62.3%	13.2%	52.9%	11.7%	480	513
20 to 24 years	2,186	86.6%	2.5%	84.4%	6.4%	1,025	1,161
25 to 44 years	10,012	87.1%	3.5%	88.6%	3.5%	5,381	4,629
45 to 54 years	4,468	89.8%	4.6%	87.3%	2.8%	2,414	2,052
55 to 64 years	3,211	68.6%	3.0%	72.6%	3.0%	1,823	1,388
65 to 74 years	640	22.3%	5.6%	27.6%	2.4%	332	308
75 years & over	112	4.5%	3.5%	6.3%	2.6%	85	28

Employment Characteristics by Race & Hispanic Origin					
White alone	20,111	70.3%	4.1%	69.5%	3.3%
Black or African American	803	84.3%	3.1%	70.7%	9.9%
American Indian & Alaska Native	20	66.7%	5.0%	58.5%	12.8%
Asian or Other Pac. Islanders	230	60.8%	0.0%	71.3%	4.7%
Some Other Race	132	67.0%	5.3%	77.2%	6.2%
Two or More Races	331	70.9%	4.8%	73.1%	7.6%
Hispanic or Latino	351	64.5%	6.8%	76.3%	6.5%
Employment Characteristics by Disability					
With Any Disability	1,323	50.0%	11.8%	52.5%	9.0%
Employment Characteristics by Educational Attainment					
Population, 25 to 64 years	17,680	83.6%	3.7%	84.2%	3.2%
Less than H.S. Diploma	988	74.6%	5.5%	65.4%	4.5%
H.S. Diploma or Equivalent	4,510	77.3%	2.6%	78.6%	2.6%
Some College or Assoc. Degree	7,455	84.8%	2.9%	85.2%	3.2%
Bachelor's Degree or Higher	4,731	91.0%	1.9%	89.8%	1.9%

Source: 2014-2018 American Community Survey, 5-Year Estimates

Figure 9. Labor Force by Race, 2018

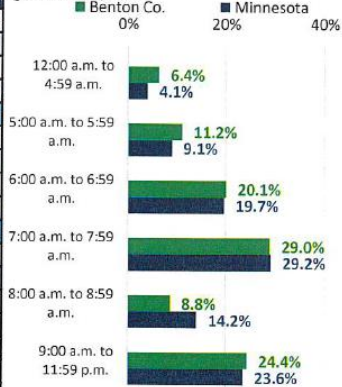


- White alone
- Black or African American
- American Indian & Alaska Native
- Asian or Other Pac. Islanders
- Some Other Race
- Two or More Races

A smaller percentage of workers in Benton Co. worked in the same county in which they live compared to the state. Benton Co. also had a shorter average commute time than the state.

Table 8. Commuting Characteristics, 2018	Benton Co.		Minnesota	
	Number	Percent	Number	Percent
Worked in state of residence	20,232	99.4%	2,807,811	97.5%
Worked in county of residence	7,022	34.5%	1,831,557	63.6%
Worked out of county of residence	13,210	64.9%	979,134	34.0%
Worked outside state of residence	122	0.6%	71,995	2.5%
MEANS OF TRANSPORTATION TO WORK				
Car, truck, or van	18,461	90.7%	2,488,152	86.4%
Public transportation (excl. taxicab)	326	1.6%	103,673	3.6%
Other method (walk, bike, taxi, etc.)	773	3.8%	126,711	4.4%
Worked at home	814	4.0%	164,149	5.7%
TRAVEL TIME TO WORK				
Less than 10 minutes	3,297	16.2%	455,009	15.8%
10 to 19 minutes	7,511	36.9%	869,701	30.2%
20 to 29 minutes	4,152	20.4%	639,317	22.2%
30 to 44 minutes	2,972	14.6%	564,442	19.6%
45 to 59 minutes	977	4.8%	192,947	6.7%
60 or more minutes	1,445	7.1%	158,389	5.5%
Mean travel time to work (minutes)	23.3 minutes		23.5 minutes	

Figure 10. Time Leaving Home to go to Work, 2018



Source: 2014-2018 American Community Survey, 5-Year Estimates

COUNTY PROFILE

Benton Co.

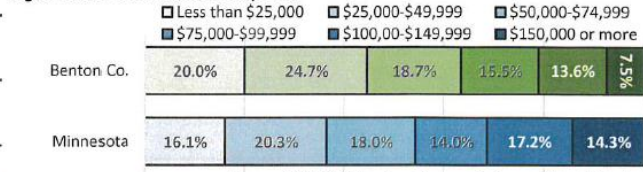
INCOMES, COST OF LIVING, & HOUSING

Benton Co. had a lower median household income than the state, and a higher percentage of households with incomes below \$50,000. Overall, Benton Co. had the 47th highest median household income of the 87 counties in the state.

Median Household Income	\$56,357
state	\$68,411
Median Family Income	\$69,056
state	\$86,204
Per Capita Income	\$28,566
state	\$36,245

Source: 2014-2018 American Community Survey

Figure 11. Household Incomes, 2018



Source: 2014-2018 American Community Survey 5-Year Estimates

Benton Co. also had a lower cost of living than the state, with a required hourly wage of \$14.46 for a single person living alone to meet a basic needs cost of living, and an hourly wage requirement of \$16.24 for a typical family with 2 adults and 1 child (see Table 9).

Table 9. Basic Needs Cost of Living Estimates, 2019									
Single Adult, 0 children	Single Yearly Cost of Living	Hourly Wage Required	Monthly Costs						
			Child Care	Food	Health Care	Housing	Transportation	Other	Taxes
Benton Co.	\$30,072	\$14.46	\$0	\$323	\$166	\$697	\$693	\$286	\$341
State of Minnesota	\$30,900	\$14.86	\$0	\$335	\$137	\$759	\$629	\$336	\$379
Typical Family: 2 Adults (1 working full-time, 1 part-time), 1 child	Family Yearly Cost of Living	Hourly Wage Required	Monthly Costs						
			Child Care	Food	Health Care	Housing	Transportation	Other	Taxes
Benton Co.	\$50,664	\$16.24	\$262	\$740	\$659	\$870	\$805	\$451	\$435
State of Minnesota	\$55,548	\$17.80	\$511	\$764	\$484	\$986	\$729	\$537	\$618

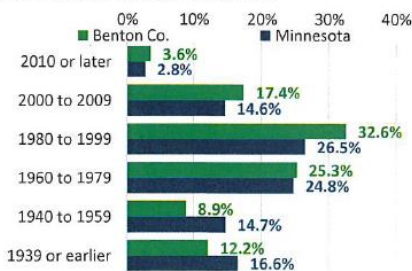
Source: DEED Cost of Living tool

Benton Co. had a lower median house value than the state, having the 33rd highest value of the 87 counties in 2018. Benton Co.'s housing stock was newer than the state's, with a higher percentage of units built since 2000 (see Figure 12).

Table 10. Estimated Value of Owner-occupied Housing Units, 2018	Benton Co.		Minnesota
	Total	Percent	Percent
Total	10,843	100.0%	100.0%
Less than \$50,000	719	6.6%	5.7%
\$50,000 to \$99,999	911	8.4%	9.4%
\$100,000 to \$149,999	2,626	24.2%	15.2%
\$150,000 to \$199,999	2,855	26.3%	19.8%
\$200,000 to \$299,999	2,384	22.0%	25.7%
\$300,000 to \$499,999	1,075	9.9%	17.6%
\$500,000 or more	273	2.5%	6.6%
Median (dollars)	\$166,700		\$199,700

Source: 2014-2018 American Community Survey, 5-Year Estimates

Figure 12. Year Structure Built, 2018



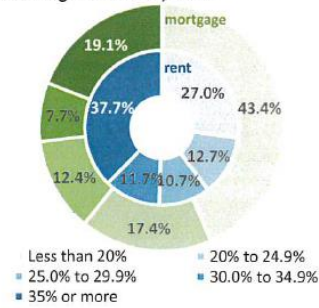
Occupational Group	Region 7W				State of Minnesota		
	Median Hourly Wage	Estimated Regional Jobs	Share of Total Jobs	Regional Location Quotient	Median Hourly Wage	State-wide Jobs	Share of Total Jobs
Total, All Occupations	\$19.46	182,890	100.0%	1.0	\$21.49	2,880,650	100.0%
Management	\$45.77	8,990	4.9%	0.8	\$24.38	165,310	5.7%
Business & Financial Operations	\$30.33	6,960	3.8%	0.6	\$12.43	244,300	8.5%
Computer & Mathematical	\$32.14	3,250	1.8%	0.5	\$17.72	4,060	0.1%
Architecture & Engineering	\$34.05	2,420	1.3%	0.7	\$20.03	363,800	12.6%
Life, Physical & Social Science	\$31.58	1,040	0.6%	0.6	\$24.31	100,060	3.5%
Community & Social Service	\$24.77	2,640	1.4%	0.7	\$13.65	70,290	2.4%
Legal	\$29.84	670	0.4%	0.5	\$18.06	216,890	7.5%
Education, Training & Library	\$25.40	15,000	8.2%	1.4	\$38.00	55,520	1.9%
Arts, Design, Entertainment & Media	\$21.20	2,030	1.1%	0.8	\$28.97	104,900	3.6%
Healthcare Practitioners & Technical	\$33.21	11,900	6.5%	1.0	\$37.35	20,050	0.7%
Healthcare Support	\$14.97	8,700	4.8%	0.8	\$24.52	38,540	1.3%
Protective Service	\$26.38	2,510	1.4%	0.9	\$15.37	277,000	9.6%
Food Preparation & Serving Related	\$12.04	7,390	4.0%	0.5	\$23.34	57,200	2.0%
Building, Grounds Cleaning & Maint.	\$15.18	5,290	2.9%	1.0	\$15.23	83,860	2.9%
Personal Care & Service	\$13.00	3,830	2.1%	0.9	\$36.07	190,800	6.6%
Sales & Related	\$14.36	19,130	10.5%	1.1	\$42.71	97,960	3.4%
Office & Administrative Support	\$19.19	22,580	12.3%	1.0	\$52.70	170,650	5.9%
Farming, Fishing & Forestry	\$17.69	160	0.1%	0.6	\$19.03	212,650	7.4%
Construction & Extraction	\$28.55	10,180	5.6%	1.5	\$22.45	45,030	1.6%
Installation, Maintenance & Repair	\$23.13	8,430	4.6%	1.3	\$14.81	163,160	5.7%
Production	\$18.54	19,960	10.9%	1.5	\$33.87	171,550	6.0%
Transportation & Material Moving	\$17.71	19,840	10.8%	1.4	\$34.35	27,070	0.9%

Source: DEED Occupational Employment Statistics, Qtr. 1 2020

Median monthly owner costs, owner-occupied units with a mortgage	\$1,381
state	\$1,547
Percentage of households with a mortgage spending 30% or more of their income on housing costs	26.8%
state	22.6%
Median monthly rent costs	\$738
state	\$944
Percentage of renters spending 30% or more of their household income on rent	49.4%
state	45.9%

Source: 2014-2018 American Community Survey, 5-Year Estimates

Figure 13. Housing Costs as a Percentage of Income, 2018

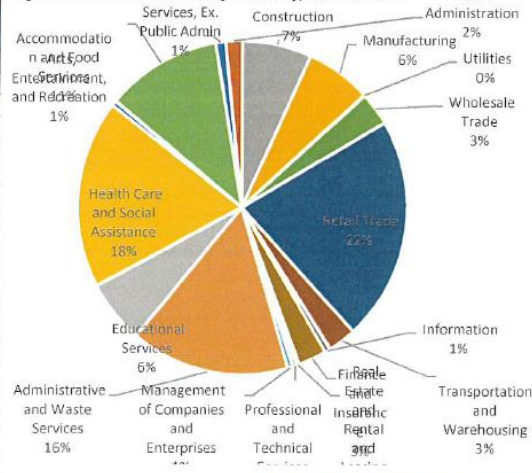


JOB VACANCY SURVEY

Benton Co. is a part of Region 7W, which includes Benton, Sherburne, Stearns, and Wright County. There were 9483 job vacancies posted by employers in the 4th Quarter of 2019, indicating extensive opportunity in the region, with openings across several occupations and industries (see Figure 14).

Occupational Group	Number of Vacancies	Wage Offer
Total, All Occupations	9,483	\$16.78
Management	145	\$29.45
Business & Financial Operations	271	\$28.68
Computer & Mathematical	121	\$43.28
Architecture & Engineering	43	\$30.09
Life, Physical & Social Sciences	25	\$30.15
Community & Social Service	127	\$17.24
Education, Training & Library	13	\$24.67
Healthcare Practitioners & Technical	284	\$16.16
Healthcare Support	69	\$17.44
Protective Service	499	\$21.27
Food Preparation & Serving Related	453	\$14.38
Building, Grounds Cleaning & Maint.	35	\$12.11
Personal Care & Service	1,265	\$13.43
Sales & Related	1,424	\$26.43
Office & Administrative Support	696	\$12.27
Construction & Extraction	1,365	\$14.60
Installation, Maintenance & Repair	617	\$15.92
Production	658	\$29.32
Transportation & Material Moving	333	\$16.77

Figure 14. Job Vacancies by Industry, Qtr. 4 2019



Source: DEED Job Vacancy Survey, Qtr. 4 2019

OCCUPATIONS IN DEMAND

Table 13. Central Occupations in Demand, 2019

Less than High School	High School or Equivalent	Some College or Assoc. Deg.	Bachelor's Degree or Higher
Retail Salespersons \$25,362	Heavy & Tractor-Trailer Truck Drivers \$48,425	Registered Nurses \$77,526	Elementary School Teachers \$57,806
Personal Care Aides \$26,819	First-Line Supervisors of Retail Sales Workers \$41,149	Nursing Assistants \$35,265	Secondary School Teachers \$58,086
Combined Food Preparation & Serving \$23,801	Teacher Assistants \$30,937	Licensed Practical & Licensed Vocational Nurses \$46,876	Software Developers, Applications \$85,496
Cashiers \$24,482	Carpenters \$50,024	Automotive Service Technicians & Mechanics \$39,870	Preschool Teachers, Except Special Education \$32,388
Stock Clerks & Order Fillers \$25,685	First-Line Supervisors of Food Prep & Serving Workers \$36,181	Heating, Air Cond. (HVAC) & Refrig. Mechanics \$51,059	Human Resources Specialists \$56,611
Janitors & Cleaners \$29,692	Welders, Cutters, Solderers, & Brazers \$46,676	Machinists \$49,847	Middle School Teachers \$60,055
Laborers & Freight, Stock & Material Movers, Hand \$34,830	Secretaries & Administrative Assistants \$41,947	Hairdressers, Hairstylists, & Cosmetologists \$30,265	Industrial Engineers \$82,415

Home Health Aides \$28,942	Office Clerks, General \$36,597	Police & Sheriff's Patrol Officers \$63,297	Market Research Analysts & Marketing Specialists \$52,743
Cooks, Restaurant \$27,711	Maintenance & Repair Workers, General \$43,720	Electricians \$68,811	Nurse Practitioners \$105,231
Maids & Housekeeping Cleaners \$26,215	Customer Service Representatives \$34,038	Radiologic Technologists \$62,286	Financial Managers \$93,620

Source: DEED Occupations in Demand

COUNTY PROFILE

Benton Co.

ECONOMIC CHARACTERISTICS

After gaining jobs over the past year, Benton Co. had the 24th largest economy of the 87 counties in the state. Benton Co. was the 20th fastest growing in the past year and the 49th fastest growing since 2014. From 2014 to 2019, employers in Benton Co. added jobs, but lagged the state's 6.3% growth rate.

996 business establishments	\$44,082 annual average wage
17,422 jobs	\$767,993,316 total industry payroll
Job change, 2014-2019	237 jobs 1.4% increase

Figure 16. Industry Employment Statistics, 2004-2019

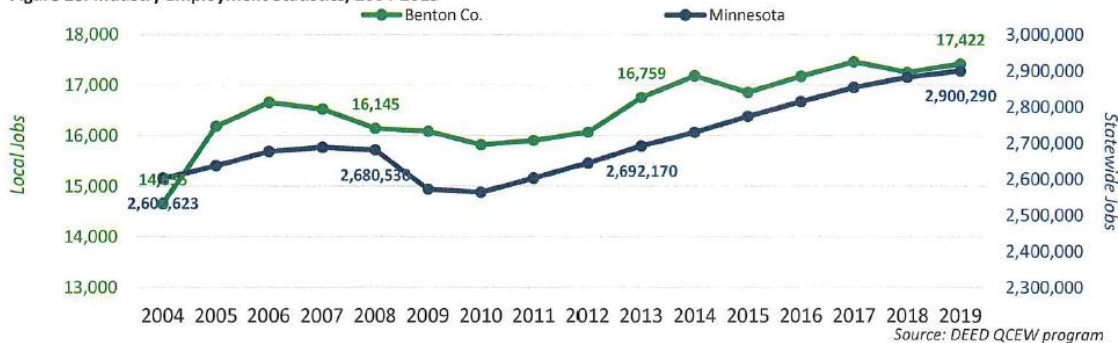
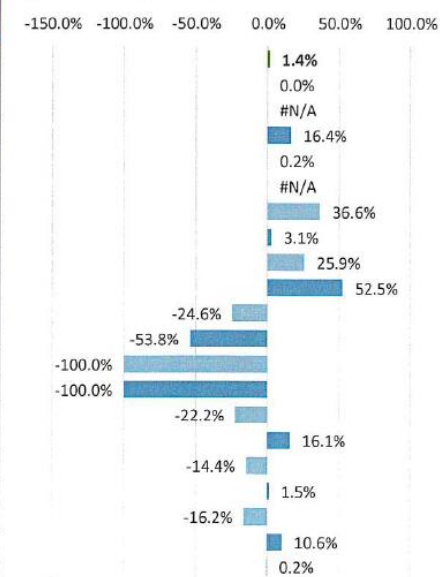


Table 15. Benton Co. Industry Employment Statistics, 2019	Number of Jobs	Percent of Total Jobs	Average Annual Wage
Total, All Industries	17,422	100.0%	\$44,082
Agriculture, Forestry, Fish & Hunt	268	1.5%	\$41,374
Mining	#N/A	#N/A	#N/A
Construction	1,990	11.4%	\$69,879
Manufacturing	3,690	21.2%	\$49,723
Utilities	#N/A	#N/A	#N/A
Wholesale Trade	1,310	7.5%	\$55,042
Retail Trade	1,765	10.1%	\$30,450
Transportation & Warehousing	808	4.6%	\$53,706
Information	122	0.7%	\$59,883
Finance & Insurance	172	1.0%	\$58,671
Real Estate & Rental & Leasing	102	0.6%	\$28,845
Professional & Technical Services	0	0.0%	#DIV/0!
Management of Companies	0	0.0%	#DIV/0!
Admin. Support & Waste Mgmt. Svcs.	881	5.1%	\$35,323
Educational Services	1,197	6.9%	\$41,956
Health Care & Social Assistance	2,350	13.5%	\$28,844
Arts, Entertainment, & Recreation	136	0.8%	\$20,554
Accommodation & Food Services	1,002	5.8%	\$15,787
Other Services	469	2.7%	\$25,380
Public Administration	458	2.6%	\$51,618

Figure 17. Change in Jobs, 2014-2019



Benton Co. is a part of the Central planning region, which is projected to see a 8.6% increase in employment levels over the next decade. In addition to new jobs created, there will be a much larger number of exit openings (see Figure 15).

Table 14. Regional Industry Employment Projections, 2016-2026

	Estimated Employment 2016	Projected Employ- ment 2026	Percent Change 2016-2026
Central Planning Region			
Total, All Industries	310,433	337,062	8.6%
Natural Resources & Mining	4,811	4,456	-7.4%
Utilities	2,234	2,342	4.8%
Construction	16,522	20,503	24.1%
Manufacturing	41,361	43,677	5.6%
Wholesale Trade	10,237	11,189	9.3%
Retail Trade	35,825	37,842	5.6%
Transportation & Warehousing	10,210	11,568	13.3%
Information	2,855	2,673	-6.4%
Finance & Insurance, Real Estate	9,306	9,502	2.1%
Professional Services & Mgmt. of Companies	8,642	10,135	17.3%
Administrative & Waste Services	9,834	10,892	10.8%
Educational Services	25,717	26,325	2.4%
Health Care & Social Assistance	47,461	56,807	19.7%
Leisure & Hospitality	27,130	28,141	3.7%
Other Services, Ex. Public Admin	11,569	12,024	3.9%
Public Administration	18,239	20,261	11.1%

Source: DEED 2016-2026 Employment Outlook

Figure 15. Regional Occupational Employment Projections, 2016-2026



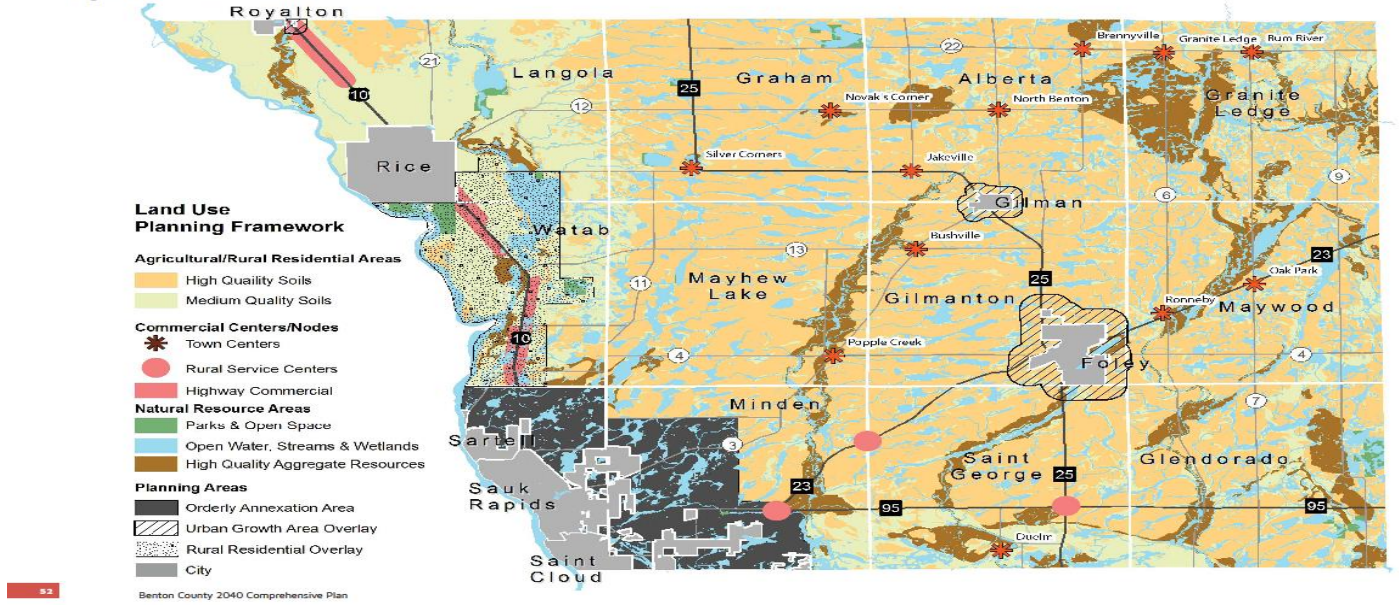
For more information on Benton Co.'s population, labor force, and economic trends, contact:

Luke Greiner | Regional Analyst, Central & Southwest
 CareerForce St. Cloud | 1542 Northway Dr. Door 2 | St. Cloud MN 56303
 Office: 320-308-5378 | E-mail: luke.greiner@state.mn.us
 web: www.mn.gov/deed/data/regional-lmi/

Data updated: July 31, 2020

Appendix D: Land Use

Figure 4.2. Planned Land Use (2040)



Appendix E: Solid Waste Management History

Solid Waste Management History

- 1971 MN Chapter 400, County Solid Waste Management Act passed. Counties are made responsible for solid waste planning and providing for disposal of waste.
- 1976 Federal Resource Conservation and Recovery Act. RCRA established solid waste management hierarchy
- reduce/reuse;
 - recycle;
 - incineration/composting;
 - landfill.
- 1980 Minnesota Waste Management Act, Chapter 115
- outlines county planning requirement;
 - provides for grants and loans;
 - authorizes county designation ordinances.
- 1983 Tri-County Solid Waste Management Commission is created.
- 1986 Tri-County passes resolution of intent to participate in Anoka County project.
- 1987 Twenty year put-or-pay service agreement is signed with NSP to deliver 150 tons per day to refuse-derived fuel plant in Elk River.
- 1989
- SCORE tax is passed; provides counties with funding for education, recycling, and HHW.
 - NSP Elk River plant opens.
 - Counties implement designation ordinances.
 - Tri-County purchases 120 acres in Benton County as potential landfill site.
 - Landfills in Sauk Centre, Melrose and Paynesville close. Elk River is the only remaining landfill in the three counties.
- 1992 Tri-County signs agreement with Otter Tail County to deliver waste from Western Stearns to Fergus Falls incinerator, a "last in - first out" basis.
- 1994 U.S. Supreme Court in *Carbone* decision rules that flow control violates the Commerce Clause of the U.S., Constitution.
- 1995 To keep waste from going to cheaper out-of-state landfills, a \$10 per ton rebate is paid to haulers for each ton delivered to NSP.

Appendix F: Economic Feasibility Waste to Energy

Executive Summary

The Tri-County Solid Waste Management Commission (Tri-County) contracted with Wenck Associates, Inc. and Alternative Resources, Inc. (the Wenck Team) to complete an initial assessment of the technical and economic feasibility of a new 500 ton-per-day (tpd) waste-to-energy facility to be located in the Tri-County region. Tri-County is interested in assessing the feasibility of a waste-to-energy facility as one part of its overall solid waste planning process for the area. The Tri-County service area includes Benton, Sherburne, and Stearns Counties.

This report summarizes the Wenck Team's feasibility evaluations and findings. As the first steps in the feasibility study, the Team identified the waste-to-energy technologies that are well-demonstrated in commercial operation, and then determined the attributes that characterize an advantageous project site location. Based on these evaluations, the Wenck Team recommended three, technology/site combinations for more detailed evaluation of the economic feasibility of a waste-to-energy facility to serve the Tri-County region. The Team then developed and applied an economic model to project the "tip fee" that would be required for a 500 tpd waste-to-energy facility located in the Tri-County region. Finally, the Team prepared an Implementation Plan to guide the Commission through the subsequent steps of developing a waste-to-energy project, should the Commission decide to further pursue that option.

Regarding technology, the Wenck Team surveyed the waste-to-energy technologies that are commercially demonstrated. These were found to be "Mass Burn" technology and Refuse-Derived-Fuel (RDF) technology. Mass burn technology combusts solid waste as received; RDF technology combusts waste that has been pre-processed.

The Team conducted a preliminary assessment of ten, nominal project sites identified by Tri-County staff. The objective of the preliminary site assessments was not to select project sites. Rather, it was to identify sites that exhibit the necessary attributes of a good, waste-to-energy

Executive Summary

Wenck Associates, Inc. and Alternative Resources, Inc. ("the Wenck Team") evaluated available information to determine whether there are critical environmental issues that could preclude or delay permitting of a 500 ton per day waste-to-energy facility within a proposed project area adjacent to the City of St. Cloud Wastewater Treatment Plant (WWTP). Critical environmental issues are those that could affect the project cost, configuration, or schedule, or those that may make it difficult or expensive to obtain environmental permits and approvals. The Wenck Team also evaluated the potential benefits associated with integrating operations of the WWTP with the proposed waste-to-energy plant.

The Wenck Team's findings are summarized as follows:

- Review of available information did not reveal any significant environmental issues that would preclude or delay permitting on the proposed site. The only environmental issue that was identified was the need to plan and conduct construction activities in a manner so as to avoid disrupting the population of Blanding's Turtles, which were identified by the Minnesota Department of Natural Resources as a rare species in the area.
- New road access may need to be developed to allay concerns about potential truck traffic within the St. Cloud I-94 Business Park during operation of the waste-to-energy facility.
- For the WWTP as configured today, co-combustion of sludge and municipal solid waste does not appear economically attractive considering the low cost for sludge disposal currently enjoyed by the WWTP for disposal by land application. With a

Appendix H: Solid Waste Ordinance 471

A copy of Solid Waste Ordinance 471 can be found on the Benton County Website under

“Ordinances.” It can also be found by clicking on the following link:

<https://www.co.benton.mn.us/Archive.aspx?AMID=45>

Appendix I: SW Designation Ordinance 187

A Copy of the Solid Waste Designation Ordinance 187 can be found on the Benton County Website under “ordinances.” It can also be found by following the link:

<https://www.co.benton.mn.us/Archive.aspx?AMID=45>

Appendix J: Recycling Directory

Benton County Recycling Directory

Note: Please call for hours of operation and a fee schedule

Recycling Facility	Address	City/Town	Phone	Materials Accepted
Batteries +Bulbs	2710 2nd Street S 27 N Benton Dr	St. Cloud Sauk Rapids	240-2332	Batteries: auto, button, rechargeable, also bulbs
Central Appliance Recycling	3107 Hwy 10 SE	St. Cloud	252-3221	Appliances, air conditioners, household batteries, electronics
Czarnetzki Hardware Hank	8 Benton Drive North	Sauk Rapids	251-5383	Fluorescent light bulbs
East Side Oil	625 Lincoln Ave SE	St. Cloud	252-9711	Used oil & filters, antifreeze
Foley Hardware Hank	190 Glen St	Foley	968-7262	Fluorescent bulbs
Henkemeyer Landfill	6045 Lark Rd NW	Sauk Rapids	252-6487	grass, leaves, garden waste, dirt, tree brush, non-treated wood, insulation, shingles, sheet rock, tile, ceramics, metal, drywall, concrete, asphalt, bricks, masonry
Integrated Recycling Technologies (IRT)	525 Progress Rd	Waite Park	251-7400	Electronics, computers, T.V.
Midway Iron	648 Lincoln Ave	St. Cloud	252-4002	Aluminum cans, various metals
Minden Transfer Station	3490 2nd St SE	St. Cloud	252-0711	Aluminum cans, various metals
Northern Metals Recycling*	119 6th Ave NE	St. Cloud	251-5980	Scrap metal
Pythons**	550 4 ½ Street NE	St. Cloud	253-2054	Aluminum cans, glass, plastic, paper, cardboard, magazines, newsprint, phone books, tin, paper milk cartons, drink boxes
Rice Hardware Hank	2333 125th Street	Rice	393-3117	Fluorescent bulbs
Tri-County Household Hazardous Waste Facility	3601 5th St S	Waite Park	800-450-6140	Fluorescent bulbs, <u>ballasts</u> , <u>paint</u> , solvents, pesticides, cleaning chemicals
Tri-County Organics	40 35th Ave NE	Sauk Rapids	493-3270	Organics/Food Waste
Prescription/Over-The-Counter Drug Drop-Off Sites				
Benton County Sheriff's Office	581 Hwy 23	Foley	968-7201	Pharmaceuticals (no liquids, syringes)
Sauk Rapids Police Dept.	250 Summit Ave N	Sauk Rapids	251-9451	Pharmaceuticals (no liquids, syringes)

* Unacceptable materials include: hay, straw, leaves, brush, trees, cardboard, paper, asbestos, carpet, fuel tanks, whole containers, tires, appliances, batteries and plastics.

** Unacceptable materials include: dirty or wet/icy cans or tin, burnt cans, tin foil, scrap metal, light bulbs, mirrors, windows, dishes, glassware, ceramic, porcelain, clay, safety glasses, windshields, hard plastic, plastic bags, toys, hose, caps, pips, and food containers.

Appendix K: Tri-County Staffing

Tri-County Solid Waste Management Commission Staffing

Employee	Coordinator	Office Specialist
	FTE	1/4 FTE
Tasks		
Education	30%	0.083%
Legislation	10%	
Current Programs	30%	0.083%
R/D & Planning	30%	0.083%

The Commission has 1.25 full-time employees.

Appendix L: Amnesty Day Collections 2015-2020

2020											
Date	Location of Event	Amount Collected Per Waste Type								# of Drop-offs	\$ Collected
		Scrap Metal	*Trash	Appliances	Tires	Tires with rims	Demo. Debris	Batteries	E-waste		
		*Tons	*Tons	# Items	*Tons	# Items	*Tons	# Items (approx.)	*Tons		
6/27/2020	Sauk Rapids/Rice High School	18.00	52.2	162	8.32	0	66.00	0	10.03	554	\$0.00
9/12/2020	Benton County Public Works	13.50	32.07	129	18.64	0	33.30	0	7.27	502	\$0.00
	TOTALS:	31.50	84.27	291	26.96	0	99.30	0	17.3	1056	\$0.00
2019											
Date	Location of Event	Amount Collected Per Waste Type								# of Drop-offs	\$ Collected
		Scrap Metal	*Trash	Appliances	Tires	Tires with rims	Demo. Debris	Batteries	E-waste		
		*Tons	*Tons	# Items	*Tons	# Items	*Tons	# Items (approx.)	*Tons		
6/15/2019	Sauk Rapids/Rice High School	18.00	56.81	198	7.96	0	22.20	0	7.67	599	\$1,911.00
9/7/2019	Benton County Public Works	13.50	44.9	131	10.84	0	22.20	0	8.72	591	\$1,700.00
	TOTALS:	31.50	101.71	329	18.8	0	44.40	0	16.39	1190	\$3,611.00

Date	Location of Event	Amount Collected Per Waste Type							# of Drop-offs	\$ Collected
		Scrap Metal Tons	Trash Tons	Appliances # Items	Tires Tons	Tires w/in rims # Items	Demo Debris Tons	Batteries # Item (approx)		
6/16/2018	Sauk Rapids/Rice High School	13.50	53.3	176	8.69	0	20.00	0	636	\$1,311.00
9/8/2018	Benton County Public Works	4.50	33.54	149	11.82	0	10.00	0	486	\$1,376.00
	TOTALS:	18.00	86.84	325	20.51	0	30.00	0	1122	\$2,687.00

2017

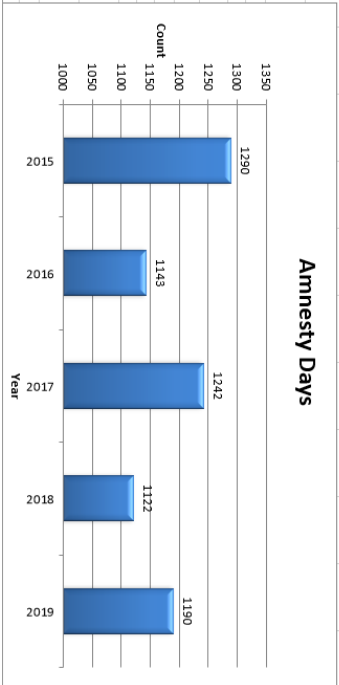
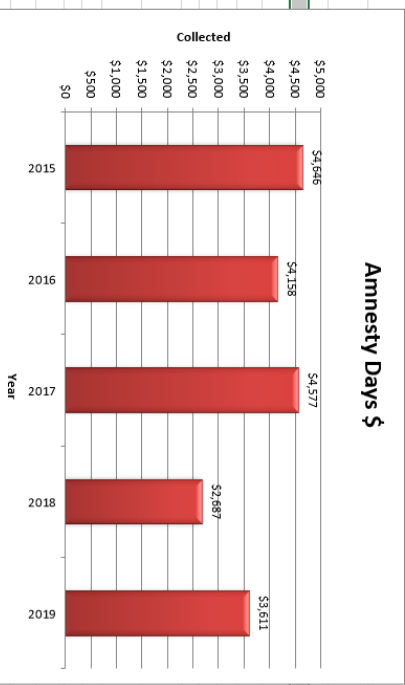
Date	Location of Event	Amount Collected Per Waste Type							# of Drop-offs	\$ Collected
		Scrap Metal Tons	Trash Tons	Appliances # Items	Tires Tons	Tires w/in rims # Items	Demo Debris Tons	Batteries # Item (approx)		
6/17/2017	Sauk Rapids/Rice High School	7.86	56.3	259	18.73	0	19.20	0	686	\$2,297.00
9/9/2017	Benton County Public Works	3.37	27.68	190	24.68	0	7.26	0	556	\$2,280.00
	TOTALS:	11.23	83.98	449	43.41	0	26.46	0	1242	\$4,577.00

2016

Date	Location of Event	Amount Collected Per Waste Type							# of Drop-offs	\$ Collected
		Scrap Metal Tons	Trash Tons	Appliances # Items	Tires Tons	Tires w/in rims # Items	Demo Debris Tons	Batteries # Item (approx)		
6/18/2016	Sauk Rapids/Rice High School	5.24	52.32	249	14.06	0	9.49	0	636	\$2,758.00
9/17/2016	Benton County Public Works	2.62	28.59	179	13.86	0	9.49	0	507	\$1,400.00
	TOTALS:	7.86	80.91	428	27.92	0	18.98	0	1143	\$4,158.00

2015

Date	Location of Event	Amount Collected Per Waste Type							# of Drop-offs	\$ Collected
		Scrap Metal Tons	Trash Tons	Appliances # Items	Tires Tons	Tires w/in rims # Items	Demo Debris Tons	Batteries # Item (approx)		
6/6/2015	Sauk Rapids/Rice High School	9.21	54.81	301	22.34	43	11.35	0	762	\$2,800.00
9/19/2015	Benton County Public Works	4.31	29.36	164	18.47	6	6.36	0	528	\$1,846.00
	TOTALS:	13.52	84.17	465	40.81	49	17.71	0	1290	\$4,646.00



Appendix M: Cities, Townships, Schools

GENERAL INFORMATION

Communities

Cities:

Foley, Gilman, Rice, Royalton (part), Saint Cloud (part), Sartell (part), Sauk Rapids

Townships:

Alberta, Gilmanton, Glendorado, Graham, Granite Ledge, Langola, Mayhew Lake, Maywood, Minden, Saint George, Sauk Rapids Township, Watab

City World Wide Web Sites:

City	Web Site	Phone
Foley	www.ci.foley.mn.us	320/968-6325
Rice	www.cityofrice.com	320/393-2280
Royalton	www.royaltonmn.com	320/584-5900
Saint Cloud	www.ci.stcloud.mn.us	320/255-7200
Sartell	www.sartellmn.com	320/253-2171
Sauk Rapids	www.ci.sauk-rapids.mn.us	320/258-5300

Education

School District	Phone	Web Site
Foley School District 51	320/968-7175	www.foley.k12.mn.us
Lincoln Elementary	320/370-6660	www.isd742.org
Milaca School District 912	320/982-7210	www.milaca.k12.mn.us
Petra Lutheran School	320/251-0158	www.petraschool.org
Pierz School District 484	320/468-6458	www.pierz.k12.mn.us
Princeton School District 477	763/389-2422	www.princeton.k12.mn.us
Royalton School District	320/584-4000	www.royalton.k12.mn.us
Sartell School District 748	320/656-3701	www.sartell.k12.mn.us
Sauk Rapids/Rice School District 47	320/253-4703	www.isd47.org
St Katharine Drexel School	320/251-2376	www.ourcatholicschool.org
St Cloud Area School District 742	320/370-8000	www.isd742.org
St Cloud Christian School	320/252-8182	www.stcloudchristian.org
Trinity Lutheran School	320/252-3670	www.trinitysr.org

Appendix N

Public Comments



NOBLES COUNTY LANDFILL, INC.

David Crowell
Resource Management and Assistance Division
Minnesota Pollution Control Agency
7678 College Road, Suite 105
Baxter, Minnesota 56425


RE: Comments on Public Notice of a preliminary decision to approve a SWMP – Benton County

Dear Mr. Crowell:

Nobles County Landfill, Inc. (NCL) owns and operates a Mixed Municipal Solid Waste (MMSW) landfill outside of Worthington, MN. NCL's interest in the Benton County's Solid Waste Management Plan (SWMP) is a result of accepting waste via West Central Sanitation's Transfer Station at its facility. The amount of waste delivered to NCL from Benton County is similar to the amount of delivered to Morrison County. The years and tonnages are: 2016 – 193 tons, 2017 – 173 tons, 2018 – 163 tons, 2019 – 194 tons, and 2020 – 176 tons. Through October of 2021, West Central Sanitation has delivered approximately 165 tons of Benton County MMSW to NCL.

Because NCL has been receiving MMSW from Benton County for several years and NCL's relationship with the West Central's Transfer Station will continue to exist, NCL is asking that the SWMP be revised to include NCL in the report and the goal volume table. Nobles County Landfill should be included in the SWMP in the same fashion as the Morrison County Landfill and be allotted tonnages for years 2022 – 2031 at rates that are similar to historic tonnages flowing to NCL via the West Central Sanitation Transfer Station.

Sincerely,


Geoffrey D. Strack
Region Engineer


Don Williamson
West Central Sanitation Inc.

Benton County Response

January 7, 2022

Nobles County Landfill, Inc.

27008 US HWY 59

PO Box 698

Worthington, MN 56187

RE: Comments on Public Notice of a preliminary decision to approve a SWMP- Benton County

To Whom it May Concern,

On May January 3rd, 2022 Benton County received your letter requesting to add Nobles County Landfill, Inc (NCL) to the Benton County Solid Waste Management Plan (SWMP). The letter stated that West Central Sanitation delivered Municipal Solid Waste (MSW) generated in Benton County to the NCL in quantities as follows:

2016- 193 tons

2017- 173 tons

2018- 163 tons

2019- 194 tons

2020- 176 tons

Per conversations within West Central Sanitation and Noble County Landfill, inc., MSW will continue to follow this route in the years to come.

Benton County has considered the comments and agrees with the importance of including Nobles County Landfill, Inc. in our SWMP. The plan will be amended before finalized to include the updates in section 11, page 22.

Sincerely,

Sierra Cotter

Benton County Department of Development

Wetland and Solid Waste Program Lead

Cc: David Crowell, MPCA

Don Williamson, West Central Sanitation

Tim Oswald, Tri-County

Enclosure(s)

Nobles County Landfill, Inc was included in the Benton County Solid Waste Management Plan on Section 11, page 22.



11. MSW Land Disposal Facilities

Benton County does not own or operate any MSW land disposal sites, but relies on privately owned land disposal sites, located outside of Benton County. Any mixed municipal solid waste generated in Benton County that is not allocated to the Pope Douglas waste-to-energy facility is left to the hauler for disposal and in nearly every instance the choice is landfill. Since much of the mixed municipal solid waste is first managed at transfer stations details of waste going to landfills can be difficult to track. The landfills that are used most frequently by Benton County haulers are the Elk River Landfill (owned and operated by Waste

21

Management) and the Lakes Area Landfill in Sarona Wisconsin, the Pine Bend Landfill in Dakota County, the Noble County Landfill, Inc, and the Morrison County Landfill. Landfills receiving waste from Benton County have in the past requested information related to the requested Certificate of Need (CON), needed for future landfill expansion. It is anticipated Benton County will provide information on CON for several of the listed landfills in consideration of future

Resolution

RESOLUTION #2021- 49

*A Resolution Requesting Review and Approval of
The Benton County Solid Waste Management Plan*

WHEREAS, the State of Minnesota requires Counties to develop and adopt a Solid Waste Management Plan in accordance with Minnesota Statutes §§115A.46, 115A.471, 115A.551, 115A.552, 115A.557, 115A.63, 115A.84, 115A.914, 115A.96, 115A.917, 115A.97: Minnesota Rule 9215; and other applicable statutes and rules; and

WHEREAS, the State of Minnesota requires Solid Waste Plans to be reviewed and submitted to the Commissioner of the Minnesota Pollution Control Agency for approval at least every ten years; and


WHEREAS, Benton County recognizes the need to plan for and implement various strategies and programs to promote the proper management and disposition of solid waste generated within the County, and encourage the reduction, reuse, recycling, composting and/or advanced processing of that solid waste as may be available based upon the type of solid waste materials and the integrated solid waste management system in place; and

WHEREAS, the Draft 2021 Benton County Solid Waste Plan describes the integrated solid waste management system currently in place to meet the needs of Benton County's citizens and the requirements of the State of Minnesota; and

WHEREAS, the Benton County Board of Commissioners have reviewed the Draft 2021 Benton County Solid Waste Plan and approve of its form,

NOW, THEREFORE, the Benton County Board of Commissioners hereby submits the 2021 Benton County Solid Waste Management Plan to the Commissioner of Minnesota Pollution Control Agency for the Commissioner's review and approval pursuant to applicable Minnesota statutes and rules.

Adopted this 7th day of September, 2021.



Edward D. Popp
Board Chair

Attest:



Montgomery Headley
County Administrator

RESOLUTION # 2022-13
A RESOLUTION TO APPROVE AND ADOPT THE BENTON COUNTY SOLID WASTE
MANAGEMENT PLAN

WHEREAS, the legislature of the State of Minnesota requires that Minnesota's counties develop a Solid Waste Management Plan Update (Update) in accordance with Minn. Stat. §§ 115A.46; 115A.417; 115A.551, subds. 6-7; 115A.552; 115A.557, subd. 2-3; 115A.63; 115A.84; 115A.914; 115.96, Subd.6-7; 115A.917; 115A.97; Minn. Rules 9215 and all other applicable statutes and rules; and

WHEREAS, Minnesota counties recognize the need to plan for and practice environmentally sound methods of managing their solid waste stream;

WHEREAS, the state of Minnesota requires Solid Waste Plans to be reviewed and submitted to the Commissioner of the Minnesota Pollution Control Agency for approval at least every ten years; and

WHEREAS, Benton County recognizes the need to plan for and implement waste reduction, recycling, yard waste composting, special waste management strategies, and processing of MSW;

NOW THEREFORE, BE IT RESOLVED, that the Benton County Board of Commissioners hereby approves and adopts the Benton County Solid Waste Management Plan and supporting documentation, dated October 31, 2021.

BE IT THEREFORE FURTHER RESOLVED that Benton County agrees to maintain and implement the Plan as required by Minn. Rules pt. 9215.0530, subp. 1 and 2.

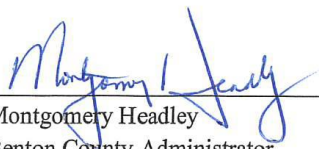
BE IT THEREFORE FURTHER RESOLVED that the Benton County Board of Commissioners submits this document to the Commissioner of the Minnesota Pollution Control Agency pursuant to applicable Minnesota laws and rules.

Approved this 19th day of MARCH, 2022


Steven J. Heinen, Chair

Benton County Board of Commissioners

ATTEST:


Montgomery Headley
Benton County Administrator