STEUBEN COUNTY DEPARTMENT OF PUBLIC WORKS SOLID WASTE DIVISION

Solid Waste Management Plan Modification

2018

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Steuben County Solid Waste Management Plan Update

Executive Summary

Section I – Overview of Steuben County's Current Solid Waste Management System

Steuben County (hereinafter referred to as "the County") has been involved in the disposal of solid waste since 1977 and completed its original Final Solid Waste Management Plan (SWMP) in 1991. In general, the County's original SWMP called for the continuation of its integrated solid waste management system consisting of a regional landfill and solid waste transfer stations with commercial and residential recycling drop offs located at each site. In accordance with the SWMP, these facilities continue to be in operation today.

Steuben County's integrated solid waste management system consists of one centrally located mixed municipal solid waste landfill located in the Town of Bath, three transfer stations located in the Towns of Erwin, Hornell and Wayland, and a centrally located leachate pretreatment plant located in the Town of Bath. It provides post-closure maintenance care for five closed landfills located in the Towns of Bath, Lindley, Prattsburgh and Wayland. At each of its locations the County recycles special wastes such as used electronics, residential motor oil and filters, used residential antifreeze, fluorescent and compact fluorescent light bulbs, residential propane cylinders, vehicle tires, white goods and other bulk metals. The County also continues to encourage its residents to properly dispose of their household hazardous wastes and latex paint through its annual collection events.

Steuben County Local Law #9 of 1991 and its amendments require all generators to source separate recyclables. Recyclables required to be source separated include newspaper, corrugated cardboard, clear glass, tin and #1 & #2 plastic containers. Recyclables collected and accepted at the County's facilities include newspaper, corrugated cardboard, junk mail, magazines, catalogs, white and colored paper, telephone directories, craft paper and bags, tin cans, clear and green glass containers, #1 & #2 plastic containers, scrap metal, white goods. Other recyclables accepted include electronics, motor oil and oil filters, antifreeze, tires, fluorescent bulbs and propane tanks and cylinders. All recyclables received are processed and

marketed to private processors through a contracted vendor. Funding for the program is derived from landfill tipping fees.

Yard waste is banned from the landfill. The County promotes backyard composting and 'Just Mow It' program encouraging grass clippings to be left on the lawn. Much of the County's service area is rural and residents tend to manage yard trimmings on their own property. There are several municipalities in the County (see appendix E) which have composting facilities where residents can drop off their yard waste for composting, that are exempt or registered due to their small size.

Education and outreach is provided through the distribution of educational sheets and brochures, advertisements in the newspaper, tours of the solid waste management facilities, presentations to schools and civic groups, the County's website and Facebook page.

Steuben County has met the milestones outlined in their original SWMP, which expired at the end of 2010. The milestones include the permitting and development of a landfill expansion to allow for continued landfilling of wastes, construction of a new transfer station in the Town of Erwin, recycling public education programs, installation of landfill gas collection system, sale of carbon credits and construction of a gas to energy facility. The County has also expanded its solid waste management system beyond the milestones outlined in its original plan, as described in the biennial compliance reports. Due to the fact that the County has met these milestones, and that there are no major changes needed in the County solid waste management system, the County is seeking to extend the planning period for another ten years until the year 2028. The County has, however, identified some enhancements to the system that it would like to complete during the extended planning period in order to further enhance its solid waste management system. These enhancements are described in this SWMP Modification document.

Chapter 1. Planning Unit Description

1.1.1 Physical Setting

Steuben County is located in the southern tier region of New York. The county has a total land area of approximately 1,390 square miles. It is bordered by Schuyler and Chemung Counties to the east, Allegany County to the West, Livingston, Ontario, and Yates Counties to the north and Pennsylvania to the south.

Steuben County has several unique watershed areas including the southern half of Keuka Lake, the Cohocton River that flows northeast through the county, as well as the Tioga River that flows into the Cohocton forming the Chemung River. Steuben County is also located within the Chesapeake Bay Watershed as well as the northern-most region of the Appalachian Mountains.

1.1.2 Demographics

As of the census^[15] of 2000, there were 98,726 people, 39,071 households, and 26,216 families residing in the county. The population density was 71 people per square mile (27/km²). There were 46,132 housing units at an average density of 33 per square mile (13/km²).

There were 39,071 households out of which 31.80% had children under the age of 18 living with them, 51.70% were married couples living together, 10.60% had a female householder with no husband present, and 32.90% were non-families. 27.20% of all households were made up of individuals and 11.90% had someone living alone who was 65 years of age or older. The average household size was 2.49 and the average family size was 3.01.

In the county, the population was spread out with 26.00% under the age of 18, 7.40% from 18 to 24, 27.20% from 25 to 44, 24.20% from 45 to 64, and 15.20% who were 65 years of age or older. The median age was 38 years. For every 100 females there were 96.00 males. For every 100 females age 18 and over, there were 93.20 males.

The median income for a household in the county was \$35,479, and the median income for a family was \$41,940. Males had a median income of \$32,155 versus \$24,163 for females. The per capita income for the county was \$18,197. About 9.90% of families and

13.20% of the population were below the poverty line, including 18.70% of those under age 18 and 5.80% of those age 65 or over.

The population of Steuben County according to the 2015 American Community Survey is 98,665. 23.3 Square miles are urban/suburban area with a population of 47,487 and 1,366.7 square miles are considered rural with a population of 51,178.

1.1.3 Adjacent Planning Units/ Counties

Steuben County is bordered by several Planning Units, some of which run their own significant solid waste management systems, some of which do not. Major components of the adjacent units systems are listed, as well as their location relative to Steuben County.

- Ontario County north Landfill / Transfer Stations / Recycling
- Yates County northeast NA
- Schuyler County east NA
- Chemung County east Landfill / Transfer Stations / Recycling
- Tioga County, Pennsylvania south NTSWA Landfill / Transfer Stations / Recycling
- Potter County, Pennsylvania southwest NA
- Allegany County west Landfill / Transfer Stations / Recycling
- Livingston County northwest NA

There is some overlap with services, as members of adjacent planning units will use Steuben County's system, and vice versa. The prominent effect we see from these adjacent units is the Casella owned landfills in Allegany and Chemung Counties. Both collect significant wastes and recyclables from Steuben. Ontario County offers a relatively close MRF for a single stream recycler to use.

1.2 Planning Unit Members

The position of County Manager was created in 2013 with the adoption of the Steuben County Charter. The County Manager position replaced the County Administrator, which was created in 1984 to assist in the day-to-day administration of County Government. The Manager, who is

appointed by the County Legislature, serves as Chief Executive Officer of the County and acts on behalf of the Legislature for the administration of daily activities. These tasks include implementing County policy, overseeing the operations of all County Departments, and acting as the official and sole liaison between the County department heads and the County Legislature. The Manager works with all Standing Committees of the Legislature to coordinate and oversee the implementation of all Committee directives, works in conjunction with the Clerk of the Legislature and the County Attorney to develop the monthly Legislative agenda, and serves as Budget Officer for the County.

The County Manager performs research tasks as assigned by the Legislature and submits recommendations regarding any modifications needed for more efficient governmental operations and serves as chief advisor to the Legislature in the development, implementation and ongoing modification of policies and procedures.

Enforcement and implementation of all local laws, legalizing acts, ordinances and resolutions adopted by the Legislature, as well as all general and special laws which affect the operation of County Government, is also carried out by the County Manager.

In conjunction with the <u>Chairman of the County Legislature</u>, the County Manager represents the Legislature in contacts with political subdivisions, State and Federal officials, and other agencies.

Addison Village

Implementation of the approved LSWMP will be handled accordingly.

1.2.1 Cities, Town and Villages

Cameron

TOWNS
Addison
Avoca
Bath

CITIES
Corning City
Hornell City

Bradford VILLAGES

<u>Campbell</u> Almond

CanisteoArkport VillageCatonAvoca VillageCohoctonBath Village

Corning

Dansville Town

<u>Erwin</u>

Fremont Greenwood

Hartsville

Hornby Hornellsville

Howard

Jasper

Lindley

Prattsburgh

Pulteney

Rathbone

Thurston

Troupsburg

Tuscarora

Urbana

Wayland

Wayne

West Union

Wheeler

Woodhull

Canisteo Village

Cohocton Village

Hammondsport

North Hornell

Painted Post

Riverside

Savona

South Corning

Wayland Village

Largely the towns and villages and large entities of Steuben County take advantage of the County run Solid Waste Management system. Residents in these areas have the following options when looking to dispose of waste or recycle:

- Self-haul to the County run Landfill or Transfer Stations (3)
- Self-haul to the Casella owned Transfer Station in Bath (Selleck Rd Transfer)
- Contract directly with a private waste hauler

Exceptions include:

• The City of Corning sells garbage bags as a means to finance garbage collection. With the City service, you will only pay for what you dispose of, making the cost of garbage disposal fair for everyone. Rising solid waste collection and disposal costs have made it necessary for the City to establish a means to meet these costs and provide a fair way to distribute the costs among the users of the City garbage collection service. The pay per bag service that the City currently utilizes was instituted on August 19, 1991. The City garbage bag is blue in color and has "City of Corning Garbage Department" printed on it. There are two sizes available: 15 Gallon - \$1.75/bag 30 Gallon - \$2.25/bag Bags are available for purchase at multiple locations.

The City of Hornell offers curbside pickup of garbage and zero-sort recyclables.
 Garbage is picked up weekly and recyclables monthly. Residents are also able to visit the County run Transfer Station in Hornell for bulky items or special recycling needs.

1.3 Seasonal Variations

Seasonal variations in the Solid Waste generation of Steuben County are on par with that of the average upstate NY planning unit.

- Waste volumes are generally low to begin the year, as colder temperatures prohibit much construction activity from taking place.
- Spring is a large cleanup time and influx of brush, downed trees, lawn debris, and scrap metal from residences. Construction activities commence.
- Summer brings the end of the school year, and brings with it cleanout wastes from lockers, equipment left behind, and wastes from any remodels or construction projects at schools and colleges, as well as agricultural clean ups.
- Fall brings the return of students to school and college. With this brings new
 electronics, books, etc. This also brings a larger amount of food wastes. All school
 and college wastes are managed by private haulers and little generation or recovery
 data is available.
- Yard wastes are banned from disposal at the County landfill, so the increase with this
 waste type is felt with the municipal run compost sites.

1.4 Overview of Generation Sources

Steuben County is populated by ~98,000 people, hosts a significant agricultural industry, and is home to one Fortune 500 company. Population is relatively consistent, and manufacturing is as well.

Significant generators include:

- **Farms**: At one time, the largest industry in the county was farming, the main portion of which was dairy farms. While still an important part of the economy, agriculture has given way to other major economic developments. *Materials generated include Ag plastics and Organics*.
- Schools: Local schools represent significant opportunities to implement and improve recycling efforts. Schools in the County include many elementary, middle and high schools, and Corning Community College. The college (CCC) has expanded to include residential dormitories in recent years, and represents a good opportunity for potential diversion. *Materials generated include MSW, food waste, and residential type recyclables*.
- Manufacturing: Manufacturing represents a large percentage of waste being disposed of in the County. Recently, some larger manufacturers have seen hard times and have left the area or downsized significantly. Philips Lighting in Bath, NY has closed. Alstom in Hornell, NY has downsized. Corning Inc. has expanded manufacturing though, with the construction of the Diesel Facility in Erwin, NY. The manufacturers generally pursue their own waste reduction initiatives to save cost and improve efficiencies. Materials generated include Industrial waste, bulk recycling, BUDS, etc.
- **Healthcare**: Healthcare facilities are expected to be in demand during the course of the planning period, due to the aging population of the County. There are several hospitals and other healthcare facilities within the County that represent significant amount of MSW. These facilities contract with local waste haulers for services and their volumes are only known through the annual recycling survey. *Materials generated include the MSW type waste and recycling and regulated/non-regulated medical wastes*.
- **Residential**: The significant generator of wastes in the County is the resident.

 Residential and small business waste generation produces over half the waste the landfill receives. *Material generated includes MSW and Recycling*.

- Construction: Construction & Demolition debris is generated at a fairly static rate, though the handling of this waste has changed much over the years. Large building demos usually result in a significant amount of material reclamation. A minimum amount of material goes to the landfill, as concrete, brick, steel are all processed to be recycled or reused. Smaller demo jobs, such as roofing jobs or home remodels produce the bulk of the material that go to the landfill.
- **Tourism**: The tourism industry has increased in the finger lakes region, of which Steuben County is a part. Major attractions include the Corning Museum of Glass and the expanding local wine and beer industry. *Materials generated include MSW and Recycling*.

Overall, the annual overall waste production in the County is very steady and predictable.

1.5 Description of Financial Structure of County Solid Waste System

The County Solid Waste system, which includes the central Bath Landfill, 3 Transfer Stations, Leachate Pre-Treatment Facility, and the closed landfills is funded by system users, primarily through tip fees. The County established an Enterprise fund to ensure that the system is sustainable financially and does not produce a tax burden on its residents.

Enterprise funds are used to report the same functions presented as business-type activities in the government-wide financial statements. The County uses enterprise funds to account for its landfill operations.

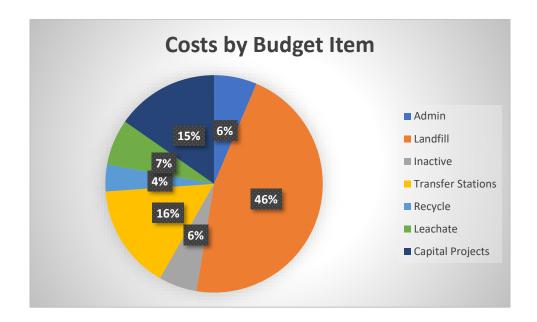
1.5.1 Costs

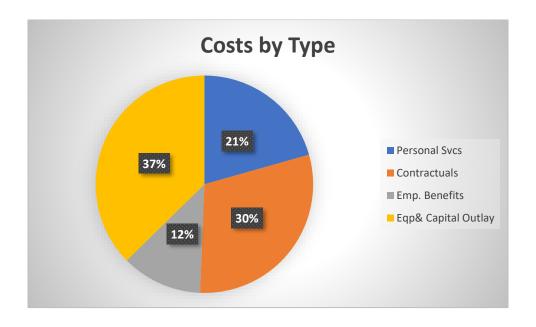
Costs to the system are comprised of the following elements.

• Capital Investments: The largest of these projects are usually Landfill cell constructions, which can reach \$6 million per cell. Additionally, large pieces of heavy equipment make up the next largest component. Annually, this can be in the area of \$1 million, depending on equipment replacement schedules.

- *Operations:* Operational costs are a significant percentage of the total costs the system incurs annually. This would include facility staffing, etc. and makes up the second largest cost to the system after Capital Investments.
- *Maintenance:* Facility maintenance costs are significant, especially with an aging infrastructure at some of the County Transfer Stations.
- *Closure / Post-Closure:* Closure / Post Closure costs are accounted for during the budgeting process. These costs are earmarked within the enterprise fund for their purpose, and that fund balance is maintained to ensure that the money is available for these costs when they arise.
- *Administration:* Administration costs are a relatively minor element in the cost structure. The Assistant Commissioner's salary, and a nominal amount of money for other County services (Legal, Finance, Purchasing, etc.) is paid for.
- *Financing:* The County generally avoids financing purchases whenever possible, and instead elects to pay for large capital projects from the fund balance. The Enterprise Fund balance has been sufficient to allow this practice.

A breakdown of costs to the Solid Waste Division





1.5.2 Revenue



Fees

The County Solid Waste system is largely funded by tip fees paid by users of the system. Tip fees for waste and BUDS together can account for 97% of the total revenue annually.

• Fines

• Revenue from fines is negligible. The County very rarely issues any fines that result in a monetary payment.

Recyclables

The County's Source Separated Recycling system usually provides a revenue that ranges from \$150 - \$200 K/year (3%). This revenue figure has been a significant reason that the County has continued to employ this basic system of recycling. The higher value materials we produce provide a reliable revenue and help to support the programs.

• Recovered Energy Revenue

 Recovered energy revenues had previously been somewhat promising, but power pricing and renewable energy credit market conditions have basically eliminated any revenues. In a best-case scenario, revenues could reach 1-2% of total revenues.

- General Fund Contributions
 - o The Solid Waste division does not receive any general fund contributions.
- Special District Charges
 - The Solid Waste division does not receive any Special District Charge revenues.

1.5.3 Funding Mechanisms

As stated earlier in this section, the County Solid Waste Division is funded by an Enterprise fund. The intention of this setup is to ensure the system itself if self-supporting and does not become a burden for the County taxpayers to bear.

Budgeting

In a basic sense, the County Solid Waste division budgets much like a business would. Revenues are predicted based largely on expected annual tonnages into the facilities. Periodically, tip fee changes are required to keep the revenues in balance with expenses. Unlike a private business which strives for profits, the County manages its budget so revenues cover expenses, and money is appropriated for closure and post-closure costs of the landfill.

Accurate prediction of future revenues is key to managing how expenses are managed. For instance, large equipment purchases, such as a landfill compactor, must be planned well in advance of the purchase. Landfill cell constructions must be anticipated and planned for to ensure expenses are relatively consistent and that funds are available.

Allotment of funding to different programs or events is planned for in the budget cycle. In addition to funding acquired through tip fees and sales of recyclables, the County seeks out and applies for any special funding available through grants from agencies such as the NYSDEC to improve the viability of these specific programs.

Chapter 2 - Solid Waste and Recyclables Quantities and Types

This chapter provides information on the waste streams generated in Steuben County.

2.1 Waste Types

Steuben County's solid waste stream has four (4) primary components: municipal solid waste (MSW), non-hazardous industrial waste, construction and demolition debris, municipal sewage treatment plant sludge/biosolids. For the purposes of this plan:

- MSW consists of waste generated in homes, businesses, institutions, and the commercial portion of waste discarded by industries. The residential component includes, but is not limited to, newspapers and magazines, glass, metal, plastic containers, food waste, household goods including bulky items like furniture and appliances, textiles, and yard trimmings. The commercial waste stream tends to contain higher percentages of office paper, corrugated cardboard, and scrap metals. Commercial waste is the non-hazardous waste generated by businesses such as restaurants, retail stores, schools and hospitals, professional offices, and manufacturing facilities. Steuben County handles a significant amount of the MSW generated in-county at the landfill or transfer stations. As such, we have accurate data regarding volumes of waste. The significant remainder of this material is collected and landfilled by either Casella or any of a few smaller transfer stations in neighboring counties. The data reported to the NYSDEC in annual reports has been compiled and used to help quantify this waste stream in this plan.
- Non-hazardous industrial waste is typically generated by manufacturing facilities
 as a result of an industrial process and is made up of materials such as sludge,
 ceramic and dust. Data is available on the quantities of this material to the extent
 that it is delivered to the County landfill. Manufacturers may well have
 developed plans to reutilize much of their wastes, but much of this is unknown to
 the planning unit.
- Construction and demolition (C&D) debris is generated by the residential, commercial, industrial, and institutional sectors and typically consists of wood, masonry, soil, and other construction related items. For this specific analysis,

- asbestos debris is also included in the C&D debris category. Much of this material can be recycled and reused (e.g., clean fill material, scrap metal, or recycled aggregate). Data from these types of operations and uses is difficult to obtain.
- Municipal treatment plants generate sludge/biosolids that require special handling and management. Much of this material is either landfilled or land applied and the data is readily available from the annual reports to NYSDEC.

2.2 Availability of Generation and Recovery Estimates

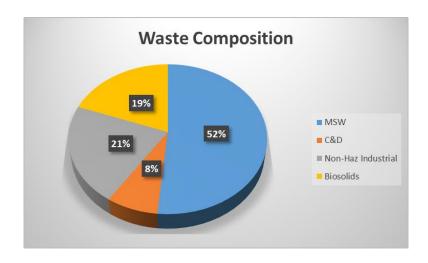
2.2.1 Data Sources and Methodology

Much of the following waste generation estimates were derived from available reports provided to the NYSDEC by permitted landfills, recycling centers, and through voluntary annual recycling survey data responses. Limitations associated with the data are as follows and are considered when evaluating and implementing new or improved data collection efforts.

- Incomplete data: Data on the public sector solid waste management is often incomplete.
- Inconsistent data: Where data exists, different methods have been used from year to year and facility to facility to collect and categorize it.
- Unavailable data: Data on privately managed waste is generally unavailable.

2.2.2 Estimate of Total Waste Generation

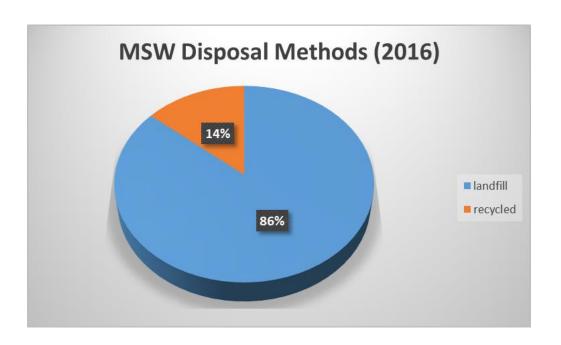
Based on annual reports submitted to the NYSDEC for 2016, County facility data, and Recycling Survey data, Steuben County residents and businesses generated approximately 118,378 tons of waste (including potentially recyclable materials) based on available data. The figure below shows the composition of the waste. The fraction for each waste type was determined by compiling waste totals as reported to the NYSDEC for registered facilities, adding in data from annual recycling survey, and utilizing waste composition calculators made available by the Department.



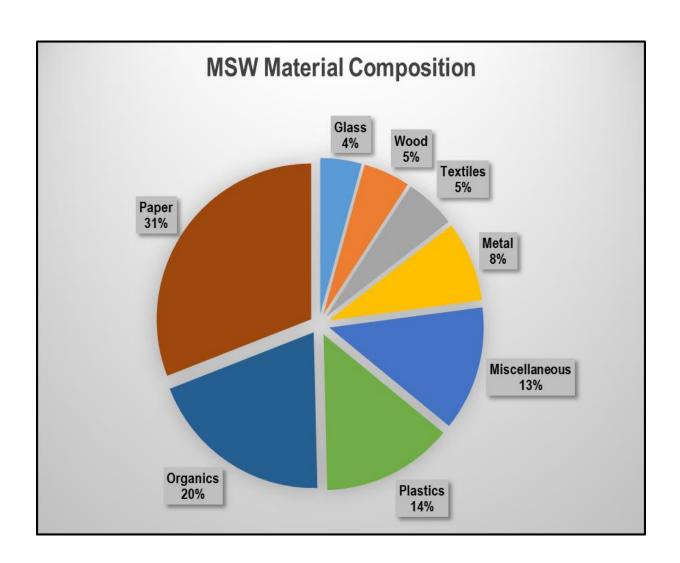
2.2.3 Estimation of Potential MSW Recovery

As previously discussed, an incomplete set of disposal and recovery data is available for the County to compile and review; therefore, with the assistance of the NYSDEC's waste composition and recovery projection tool, the following section provides Steuben County with an estimated MSW waste composition for future planning purposes. The complete tables are provided in the Appendix. MSW composition includes residential, commercial and institutional waste generators only; and for the purposes of this analysis we have excluded the following from the MSW composition estimates: separately managed C&D debris, several organics streams (biosolids, septage, agricultural materials, etc.), and industrial waste. Additionally, the quantities of containers (i.e., aluminum, glass and PET) collected as part of the Recoverable Container Act (RCA) are typically not reported to databases that are available to individual counties and will not be discussed.

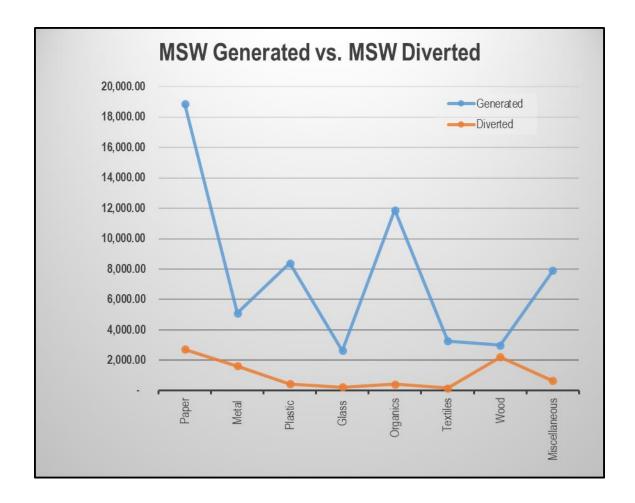
The following tables details the breakdown of the composition of the MSW generated in Steuben County. Based on the data compiled from the aforementioned sources, the total volume of MSW generated was 61,007 tons. 52,541 tons were landfilled, while 8,466 tons were recycled.



The following table provides an estimate of the composition of the Steuben County MSW, based on reported volumes and with the aid of the NYSDEC provided Population and Municipal Solid Waste Composition Calculator. The calculator factors in generation rates based on population distributions that are similar demographically to Steuben County. This composition analysis will allow us to target diversion programs more effectively.



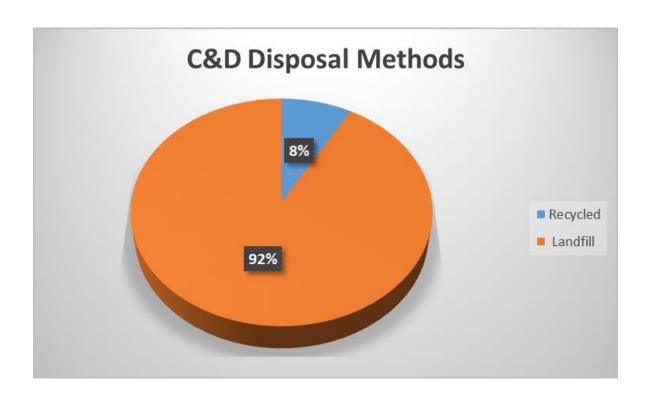
The following table shows the estimated tons of MSW generated vs MSW Diverted, by type.



2.2.4 Estimation of Potential C&D Recovery

The following tables details the breakdown of the best known composition of the C&D generated in Steuben County. This data is comprised of the known volumes collected at permitted landfills in and around Steuben County, plus the volumes reported through the annual recycling survey.

Data relating to larger scale facility demolitions is difficult to obtain, as private organizations embark on these projects without the requirement of tracking or reporting to the County. The volumes that may be missed due to this reality could be significant. This data gap should be a focus of improvement throughout the course of the planning period.

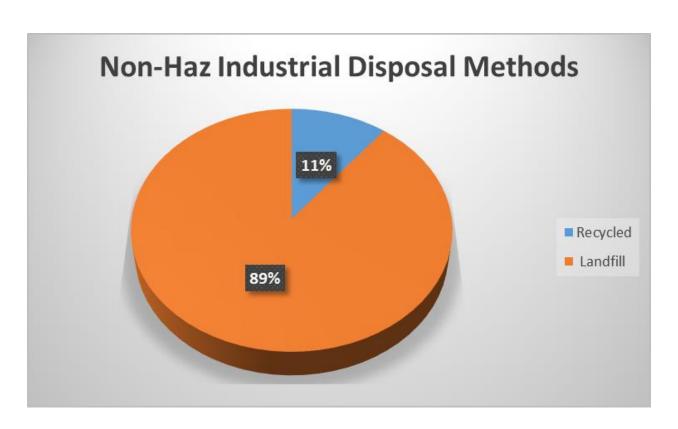


2.2.5 Estimation of Potential Industrial Waste Recovery

The following tables details the breakdown of the best-known composition of the Industrial Waste generated in Steuben County. This data is comprised of the known volumes collected at permitted landfills in and around Steuben County, plus the volumes reported through the annual recycling survey.

Data relating to the inner workings of large manufacturers may be difficult to obtain, if the planning unit is not presently working with these manufacturers. Fortunately, the largest of the County manufacturers and generator of the majority of Non-hazardous Industrial Waste uses the Steuben County Landfill and reports materials diverted on an annual basis. As a result, we get a good picture of what happens with regard to this waste stream.

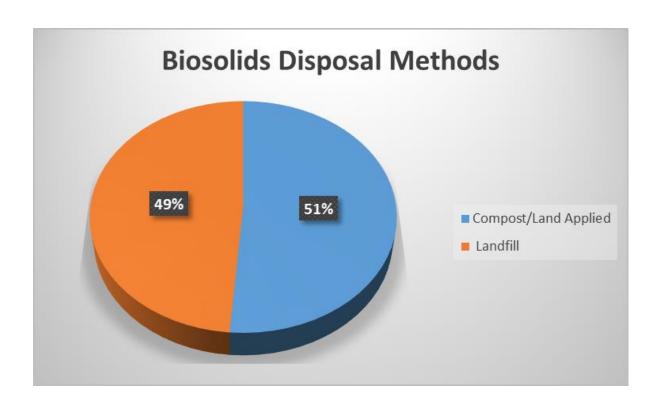
Much of the diversion that occurs with the Non-Hazardous Industrial generators can be broken out into categories that are generally included in MSW or C&D data. This introduces an element of risk for accounting these materials. For the purposes of this plan, only diversion reported by the largest manufacturer in the County is being reported here. The rest of the smaller businesses that reported have their totals included in the MSW, C&D, or Biosolids category.



2.2.6 Estimation of Potential Biosolids Recovery

The following tables details the breakdown of the best-known composition of the Biosolids generated in Steuben County. This data is comprised of the known volumes collected at permitted landfills in and around Steuben County, plus the volumes reported through the annual recycling survey.

Biosolids end up being handled in basically three ways in Steuben County. Either they are landfilled, composted or land applied. For land application and compost materials, the data is somewhat incomplete. A large operator who handles much of these biosolids, and the Department has access to the data. Data reported here will combine the compost/land application numbers and will be somewhat incomplete. The remainder are landfilled here in the County landfill and data is reliable.



Chapter 3 – Existing Program Description

3.1 Introduction

The County has a long-standing track record for environmental stewardship. As a basis of the decision-making process for environmental stewardship, the County evaluates the economic impacts of programs on citizens and the Division. The goal is to implement environmentally sound programs that are economically responsible. The County Solid Waste Division is not unlike any other municipal organization in that it faces tight budget constraints that impact staffing, capital improvements, maintenance of existing infrastructure and existing environmental programs.

Steuben County currently possesses the major elements of an integrated solid waste management system, with a centrally located landfill and leachate pretreatment plant as well as regional transfer stations and recycling facilities. Major re-permitting for the Bath Landfill will occur during the proposed extension of this planning period, so some significant changes may be considered.

The reasons for the proposed modification/update to the LSWMP are to examine our existing projects, evaluate enhancements to those projects, develop new projects that will enhance our existing solid waste management system, and to extend the expiration date of our DEC approved local solid waste management plan (LSWMP) until December 31, 2028. Our projects have been, and will continue to be directed at responsibly diverting waste away from the landfill in ways that seek to reduce, reuse or recycle those diverted materials while managing an environmentally sound landfill operation.

It should be noted that on November 29, 2009, the County's Recycling Manager position was vacated (due to a retirement) and has not yet been filled. The ability of the County to implement or continue many of the programs described herein will depend on whether this position gets filled. Since the request to fill this position is currently pending, this draft SWMP continues to make reference to the Recycling Manager.

3.2 Recycling Survey Data

Steuben County has developed a comprehensive recycling program, one which offers its residents an outlet for the majority of their potentially recyclable materials. While the County's

tracking system accounts for all of the solid waste and recyclables that pass through our system, there are other unreported outlets in the county for both solid waste and recyclables. A privately owned company operates a transfer station within the County limits and handles both solid waste and recyclables. In addition, large recyclables producers such as big box stores, and even private recyclables collection companies, may ship recyclable products directly to the end user for a profit, bypassing the county recycling facilities. As a result, these materials are not being accounted for in the County's recycling reports.

The County mails out a recycling data survey annually, which is distributed to various sectors of the County in order to compile more complete recycling data. These surveys are used to help develop a better picture of the total amount of recyclables that are recovered. Survey recipients are asked to indicate volumes of recyclable material (metals, plastic, and paper) produced per year. However, since there is no requirement for these recipients to participate, we receive only a limited number of responses. This survey is helpful, but undoubtedly, we are missing a certain component of the actual materials that are recovered in the County each year.

To further enhance the effectiveness of this survey, the survey will be augmented by requesting organic material produced per year, C&D material produced per year, and current disposal/recycling methods. A periodic review of the businesses operating in the County will be conducted, to ensure that the maximum number of recyclers is included. Intermediate facilities such as confidential paper shredding services may also be contacted to determine how much material they receive from within Steuben County.

A listing of responders to the survey is kept and is used in the assembly of the mailing list for the upcoming year. It is anticipated that the mailing list will be refined on or before 2019, taking into account information from respondents in previous years, additions of new businesses to the County, etc. In 2009 an option was provided for residents to respond to the survey through email, which seems to have increased participation.

Efforts in the future will be directed at increasing the response rate to the survey.

Electronic correspondences will be pursued, as well as enhancements to the Solid Waste website, Also, a technique that we are considering is focusing on a different industry each year.

For example, wastewater treatment facilities will be targeted in 2018. Additional time will be spent researching the local businesses to be sure all are contacted, and follow up phone calls will be made to establish a connection with the proper individual. Two years later, another industry will be targeted in the same way, perhaps the energy industry or government buildings.

A copy of the 2017 Recycling Survey is included as Appendix C to this plan, and a listing of the recipients of the survey is included as Appendix D. The survey and recipients are representative of what happens today.

3.3 Mercury Collection Program

Mercury is used in some consumer products, examples include thermometers, thermostats, and automotive switches. Residents may dispose of these and other mercury containing materials for free at the county sponsored household hazardous waste days, which are usually held once a year.

Steuben County has been hosting multiple HHW collection events on an annual basis, with funding assistance from the NYSDEC. We attempt to rotate locations of the events throughout the County year to year. If residents cannot wait until our HHW day(s), those who contact the DPW office are provided other disposal options, i.e. referred to a private disposal company such as Safety-Kleen, or to a cooperating neighboring county program. Steuben County has a relationship with Monroe County where they will accept Household Hazardous Waste from out of county residents for a fee.

3.4 Management of Organics

Organics management is a topic of much interest in the County. The organic waste stream includes several different components, each of which must be considered separately:

 Yard waste: Steuben County encourages residents to start up their own backyard composting operations. The Recycling Manager will assist residents who intend on starting their own compost piles by providing information, including literature, guidance, and promoting communication with the Cornell Cooperative Extension and Steuben County Soil and Water Conservation District.

Additionally, we investigate whether training programs could be offered either by County forces or in conjunction with the other entities mentioned above. Whereas it is the desire of the County to offer these services, if staffing levels decline the feasibility of community outreach programs is diminished.

• **Food waste**: Food waste can be generated by either residents or small businesses, such as restaurants. Presently there are no curbside pickup programs available to residents or small businesses to manage their separated food waste. Certain items, such as Fats, Oils and Grease (FOG) are handled by vendors who operate in the County and will provide a small collection tank to local restaurants.

Residents are encouraged to include food scraps in their backyard composting as much as is possible. In many cases, due to the rural nature of the area, this is very practicable and helps produce a quality compost material.

 Biosolids: Biosolids, for the purposes of this plan, include sewage treatment plant sludge. There are many municipally owned and operated sewage treatment plants within the county, all of which handle their biosolids differently.

Several options exist for the handling of this material, including but not limited to:

- Landfill: Sludge is stabilized, dewatered to a minimum of 20% solids, and is trucked to the landfill. In Steuben County, the landfill collects landfill gas to power a LFGTE facility, where a renewable energy is produced.
- Compost: The biosolids are brought to a facility where they are bulked up, usually with woodchips. They are then mixed with other organic materials and allowed to decompose

- aerobically. The resultant material is a clean compost that can be used beneficially for soil amendments, etc.
- Land Application: Biosolids may be taken by tanker truck directly to a piece of farmland and injected into the subsurface soil. The result can be an effective means of fertilizing the soil if done properly.

Operators of these facilities often make the decision on how to manage their wastes based on the original facility design, costs, available staffing, and location. Each option carries with it benefits and downsides.

- Large-scale generators: Large scale generators of **organics**, such as food manufacturers and large grocery stores will be the focus of many organics diversion efforts. The discussion of this matter in Steuben County is a relatively simple one, as only a handful of these entities exist. Even better, the handful that exist largely do a good job of proactively managing their organics.
 - Large dairy food processors HP Hood in Arkport, NY and the former Kraft Foods facility in Campbell, NY utilize anaerobic digestion, composting and land application techniques to handle much of their waste.
 - Larger grocery stores, such as Wegmans and Walmart that operate within the County utilize food bank donations, animal feeding, and composting opportunities. The corporations are proactive and do not rely on municipal intervention but are willing to provide data on their activities when requested.

It is believed that the vast majority, if not all of the large-scale generators in the planning unit are voluntarily managing their organics responsibly.

3.5 Product Reuse Collection and Distribution Center

The County is investigating the feasibility of setting up a "Swap Shop", or Reuse facility, where residents can drop off reusable goods such as building materials, appliances, etc. which would be available to other residents at no cost, or sold for a nominal fee.

This "Swap Shop" idea could be used to handle reusable building materials from reuse demo programs, such as lumber, insulation, nails, etc. which would be available for reuse by the residents of the county.

At this point in early 2018, the County legislature has approved the development of an RFP which would allow us to contract with a third party for this type of service. Early discussions have taken place with the Habitat for Humanity ReStore, to collect and offer for resale materials that are diverted from the waste stream. Efforts will be made to attempt a partnership with a 3rd party who is established in the ReUse arena locally to get the project started.

3.6 E-waste Recycling Program

The County has made major strides with the improvement of its electronic waste recycling program. Originally a program that consisted of several 4 hr. long events per year, we now offer full-time recycling options at all four (4) County solid waste collection facilities. Last year (2016), over 250 tons of electronics were collected for recycling.

An RFP is released annually to contract with an e-waste recycling vendor. The County has utilized several different companies over the years and have noticed a trend of escalating prices to handle these electronics.

In 2017, Steuben County implemented a fee for televisions and monitors. Covered electronics remain free for residents to drop off. The fee was implemented as a measure to cover the escalating costs of the program, which is mainly driven by the volume of Cathode Ray Tube (CRT) televisions and monitors. By far (65-75% by weight) the highest volume component of the electronic waste stream, televisions are difficult and expensive to recycle.

The impacts of the product stewardship movement in New York State, in particular the E-Waste recycling legislation that was signed in to law by the Governor on May 25, 2010 as a new Title 26 (Electronic Equipment Recycling and Reuse) of the Environmental Conservation Law, drive the program. Originally intended as a manufacturer sponsored free recycling program opportunity, the cost has shifted to the collection sites, despite the best efforts of the NYSDEC to provide grant funding to offset costs.

Throughout the lifecycle of this recycling program, it will require constant monitoring for waste composition and costs. It is the County's intention to offer the residents of the County a reasonable option to manage their end of life electronics.

3.7. Adopt Product Stewardship Framework

The purpose of such a framework is to shift solid waste management from systems that focus solely on government funded, ratepayer financed waste diversion to ones that also require producer responsibility, reducing public costs and driving improvements in product design that promotes environmental sustainability.

The County is in support of legislation that will further product stewardship. In May of 2010, the Steuben County Legislature passed a Resolution supporting the adoption of Assembly Bill A.9049 and Senate Bill S.6047 in support of electronics recycling and extended producer responsibility legislation for electronics waste. See Appendix A for a copy of this Resolution.

Additionally, the Steuben County Solid Waste staff is regularly involved with NYSASWM conferences and discussions on this matter. We support the concept of Product Stewardship and actively seek out ways of supporting it.

3.8 Recycling at Schools, Public Facilities and Special Events

The Steuben County Solid Waste Division has worked closely with some major events in the area. The major NASCAR race that takes place in Watkins Glen each year is one example. We provide the disposal/recycling outlet for the event and the event coordinators promote Steuben County's environmental stewardship efforts.

Members of the Solid Waste Division regularly attend exhibits and events in the area centered on the Environment, promoting our recycling programs and educating the public about our capabilities.

In addition, the Environmental Project Coordinator visits schools to promote the idea of recycling to young school children, ensuring that future generations are aware of the importance.

Due to recent fluctuations with the economy, staffing levels within the Division of Solid Waste will be difficult to predict over the coming years. Whereas it is the desire of the County to continue with these programs, if staffing levels decline it is possible that a reduction in these programs could occur. Of course, with the possible advent of increased producer responsibility, resources could be shifted to bolster existing outreach efforts and recycling programs.

We have had great success with recycling being handled by Steuben County Solid Waste employees, who have hands-on experience with our system and programs. It is the intent of the County to hire a Recycling Manager, when financially feasible, to continue improvement of our recycling programs.

3.9 Solid Waste Division Staffing Levels

The County Department of Public Works has the responsibility of administering, planning and overseeing operations. A breakdown of Solid Waste staff and associated responsibilities, in relation to the LSWMP, are included below:

• Commissioner:

- Coordinating and developing policies, planning and programs related to the solid waste management of the County.
- Prescribing the practices and procedures for use of solid waste management facilities.
- Prescribing and recommending methods for the recovery, recycling and reuse of solid waste, or, where recycling and reuse are not possible, the disposal of solid wastes.

• Assistant Commissioner:

- o Administering policies and procedures as set forth by the Commissioner.
- Responsible for Administration of the Solid Waste Division, including budgeting, staffing, purchasing, etc.

• Landfill Supervisor:

- Day to day operations of the Landfill, and supervision of the operations at the Transfer Stations
- Equipment and maintenance management

• Environmental Project Coordinator:

- Ensuring environmental compliance at County Solid Waste Facilities
- Oversight of Recycling operations at Landfill / Transfer Stations / Treatment Plant
- o Facility solid waste data collection and management
- LSWMP updates

• Recycling Manager (vacant):

- Outreach and education for Reuse / Recycling initiatives
- New program research / implementation

• Wastewater Treatment Plant Operator Trainee:

o Day-to-day operations at Leachate Pre-Treatment facility

• 1 Building Maintenance – Treatment Plant:

 Facility maintenance at Solid Waste facilities, esp. Leachate Pre-Treatment facility

• 1 Auto Mechanic:

Heavy equipment maintenance and repair at all facilities

• 3 Transfer Station Operators:

 Operations of Transfer Stations, including enforcement of Solid Waste rules and regulations.

• 7 Heavy Motor Equipment Operator:

Operations of heavy equipment, including landfill compactor, loaders,
 dozers and road tractors used in the landfill /transfer station operations.

• 3 Motor Equipment Operators:

 Operations of equipment, including wheel loaders, skid steers and recycling trucks used in the landfill /transfer station operations.

• 1 Laborer:

o General facility maintenance

• 4 Entry Attendants:

- Assessing fees and directing customers to the proper areas for disposal / recycling.
- o Tracking and ensuring appropriate wastes enter facilities
- Interaction with customers

As in any program, solid waste staffing is not exempt from the impacts of the economy. Staffing is a key element in the evaluation of all programs that the County would consider undertaking. The Division will encounter labor loss through attrition during the life of this plan.

With the Recycling Manager position unfilled, the community outreach programs and special event coordination will experience a negative effect. Though staffing levels are low presently, staffing levels may be adjusted to better meet the goals of this SWMP modification in the future.

3.10 Recycling Programs for Special Wastes

Presently, Steuben County residents have access to the following recycling programs on an annual basis:

- **Household hazardous Waste collection** usually two (2) events are held during the spring summer months. No charge to residents.
- Book Recycling Week bring books or pick books up, this program dedicates a
 week during July to allow residents ample time to properly handle their old books.
- Latex Paint day this program gives residents a day during the summer to deliver their old latex based paints to the landfill. We stabilize the paints with sand and landfill them, while taking the time to educate residents on proper handling of paints and other special wastes.

- **Shredding events** The newest program, residents and small local businesses can bring confidential documents to an onsite mobile shredding truck. Usually one (1) event per site and held during the summer. No charge.
- Prescription drug drop-off Now located at the front entrance to the County
 office building, residents can take care of old prescription medications any time of
 the day. Sponsored by CVS and the Steuben County Sheriff office.



• Agricultural Plastics Management

The County is predominantly rural in character. Farmlands and woodlands dominate the landscape. Pursuant to this, there are a large number of farms that use agricultural plastics for their daily operations. Agricultural plastic is defined as low density polyethylene agricultural film, LDPE, or other synthetics or plastics utilized in agricultural production and consists of, but is not limited to bunker covers, silage bags, bale wrap, greenhouse covers, haylage covers, row covers and mulch film.

One major obstacle we have encountered is the lack of markets for this plastic. Due to its composition, it does not fit into our existing plastic recycling markets. After a great deal of research, it has become apparent that markets need to be encouraged to use this material. We have found that there is insufficient data to offer to potential end users regarding available volumes. Without this piece, potential end users cannot be expected to proceed with the development of products.

A pilot program began in 2010 that encourages local farmers to bring their agricultural Plastics to the Bath Landfill. During this pilot program, we will track the volume of the plastic to gain a better understanding of this waste stream. Through careful monitoring of the volumes, and a better understanding of the waste stream, we hope to encourage the development of a market for this material.

3.11 Safe Syringe Disposal Program

Sharps are not allowed at the Landfill or Transfer Stations, as they pose a serious health and safety risk to our employees who would come in contact with them. However, local pharmacies, healthcare facilities, etc. have programs in place that provide for the proper disposal of these sharps. Our role is to make sure that residents are aware that these programs are in place.

3.12 Pay as You Throw Program

Steuben County already has a Pay-As-You Throw program, where we have established tip fees for bagged and bulk MSW at the landfill and the transfer stations. This program has been quite successful and allows local residents to deliver their household trash directly to the landfill or transfer stations.

Additionally, there are several small local waste haulers who offer tiered plans for waste pickup. These plans offer residents a lower cost option if they generate a smaller amount of waste, incentivizing the diversion of waste. The County supports these local haulers and their efforts when possible.

The County's 2018 Legal Notice is provided as Appendix B to this plan, and contains the specifics of our Pay-As-You-Throw program, such as per bag fees and special pricing for items such as couches, mattresses, etc.

3.13 Future Landfill Expansion Areas Consistent w/ SWMP

We presently have the requisite land available for 100 years of disposal at our present tonnage rates. Future expansion of disposal capacity at the County's Bath Landfill site is an integral component of this SWMP. Such an expansion will likely be needed during this planning period, and work will begin on a permit application for such an expansion during this planning period. An applicable environmental review will be completed and required permits will be applied for.

Cell 3 has been completed and started receiving waste in 2015. The Department has permitted Cell 4, which is designed to have a footprint of 7.7 acres. This provides permitted capacity until 2024 at current rates. The County continuously monitors incoming tonnage rates and will apply for modifications if necessary.

3.14 Waste Importation Consistent w/ SWMP

Steuben County presently has a waste importation agreement with the City of Middletown. We intend on allowing for the importation of waste into Steuben County from other planning units that need disposal capacity. Per 360-1.9(f) and our landfill permit, importation of waste from Planning Units that have a DEC approved Comprehensive Recycling Analysis *is* allowed.

Privately operated solid waste facilities in the County, which have been in operation and importing wastes to the County previously, should be permitted to do so as long as their activities are consistent with the SWMP.

As stated above, any local law that would enact Flow Control would need to allow for the continued importation of waste from other planning units through the negotiation of Inter Municipal Agreements.

3.15 Existing Recycling Facilities

Within Steuben County, there are both public and privately-operated recycling facilities. The County government operates the publicly owned component, which includes the centrally located Bath Landfill, Transfer Stations, etc. Outside of the County system exist the private operators who handle recyclables and other solid waste.

Each provide important solid waste and recycling options for residents of the planning unit.

3.15.1 Public Facilities

The Steuben County Solid Waste Division is responsible for operations of the following facilities:

Bath Landfill



11/16/2015

The Bath Landfill is the County's centrally located MSW landfill, handling in excess of 100,000 ton per year mixed MSW and up to 1,000 ton per year Recyclables. The facility is permitted to accept up to 500 ton/day.

Options offered at this site include:

- Residential drop-off area for household waste / recycling
- Residential and Commercial Waste disposal
- C&D Waste disposal
- Industrial Waste disposal
- Sewage Treatment Plant Sludge disposal
- Asbestos disposal
- Source Separated Recycling (both Residential and Small Commercial)
 - Separations: OCC, Mixed Paper, #1-#2 Plastic, Clear Glass, Colored Glass, Tin Cans)

- Propane Tank recycling
- Electronics Recycling (including CRTs)
- White Goods / Scrap Metal recycling
- Fluorescent Bulb recycling
- Used Oil Recycling

The site is centrally located in the County and is open 6 full days/week (Monday – Saturday). Other items of interest:

- The landfill provides Landfill gas to a 2 engine LFGTE facility.
- The adjacent closed Old Bath Landfill is the first landfill in the state to be permitted to graze sheep on the approved cap.
- Leachate generated by the landfill gravity flows to a dedicated leachate pretreatment facility (located across the road).

Erwin Transfer Station



The Erwin Transfer Station is the largest of the Steuben County operated transfer stations, handling in excess of 9,000 ton per year mixed MSW and up to 1,000 ton per year Recyclables.

Options offered at this site include:

• Residential drop-off area for household waste / recycling

- Residential and small commercial waste disposal
- Small loads of C&D waste disposal
- Source Separated Recycling (both Residential and Small Commercial)
 - Separations: OCC, Mixed Paper, #1-#2 Plastic, Clear Glass, Colored Glass, Tin Cans)
- Propane Tank recycling
- Electronics Recycling (including CRTs)
- White Goods / Scrap Metal recycling
- Fluorescent Bulb recycling
- Used Oil Recycling

The site is located in the southeast of Steuben County near one of the larger population centers (Corning).

Hornell Transfer Station



The Hornell Transfer Station serves western Steuben County, handling approximately 4,000 ton per year mixed MSW and up to 500 ton per year Recyclables.

Options offered at this site include:

- Residential and small commercial waste disposal
- Small loads of C&D waste disposal
- Source Separated Recycling

- Separations: OCC, Mixed Paper, #1-#2 Plastic, Clear Glass, Colored Glass, Tin Cans)
- Propane Tank recycling
- Electronics Recycling (including CRTs)
- White Goods / Scrap Metal recycling
- Fluorescent Bulb recycling
- Used Oil Recycling

Wayland Transfer Station



The Wayland Transfer Station serves northern Steuben County, handling approximately 4,000 ton per year mixed MSW and up to 500 ton per year Recyclables.

Options offered at this site include:

- Residential and small commercial waste disposal
- Small loads of C&D waste disposal
- Source Separated Recycling
 - Separations: OCC, Mixed Paper, #1-#2 Plastic, Clear Glass, Colored Glass, Tin Cans)
- Propane Tank recycling
- Electronics Recycling (including CRTs)

- White Goods / Scrap Metal recycling
- Fluorescent Bulb recycling
- Used Oil Recycling

Bath Leachate Pre-Treatment Facility

The Leachate Pre-Treatment Facility treats approximately 20,000,000 gallons of leachate annually from 10 landfills, many of which are located within Steuben County. The facility was designed specifically to handle leachate from the adjacent Old Bath landfill, which is presently a delisted haz waste site.



3.15.2 Private Facilities

The private facilities that operate within Steuben County are primarily run by Casella. The solid waste and/or recycling facilities operated by Casella include:

Selleck Road Transfer Station



The Selleck Road Transfer Station serves as a major transfer station for Casella's local waste hauling operation, as well as serving small local waste haulers. The facility handles approximately 20,000 ton per year mixed MSW and up to 2,000 ton per year single stream recyclables.

ACCEPTABLE MATERIALS (https://wastebits.com/locator/location/selleck-road-transfer-station, n.d.)

- Non-Friable Asbestos
- Construction & Demolition
- Contaminated Soil
- Dry Industrial
- Municipal Solid Waste
- Sludge

Hakes C&D Landfill





11/09/2015

The Hakes Landfill in Painted Post, NY is a C&D only landfill. It primarily serves out of County haulers. Hakes Landfill does not offer any recycling options.

Hakes accepts approximately 350,000 tons per year of C&D material. Less than 3,000 tons of that is generated in Steuben County.

(ftp://ftp.dec.state.ny.us/dshm/SWMF/Annual%20Reports_Solid%20Waste%20Management%2 0Facility/Annual%20Reports_by%20Activity%20Type/Landfill/Landfill%20Annual%20Reports %20-%202017/R8/51D03_Hakes_Landfill_C&D_R8_2017_2018-02-28_AR.pdf, n.d.)

ACCEPTABLE MATERIALS (https://wastebits.com/locator/location/hakes-construction-landfill, n.d.)

• Construction & Demolition

Other

In addition to these Casella run facilities, there are quite a few small recycling outlets that provide more specialized recycling services such as electronics recycling, battery recycling, Reuse options, etc. See the table below for a summary of some of these smaller facilities.

Steuben County Privately Operated Recycling Facilities

Facility Address Accepted Zenix Computers (607) 664-1040 Electronics 130 West Morris Street Bath, NY 14810 Eds Computers (888) 563-1340 Electronics 180 Main St Hornell, NY 14843 HEP Sales (877) 860-7866 Electronics 1080 West Main Street, Plaza 21 Plaza 21 Hornell, NY 14843 ReUse Center 3412 State Route 414 Electronics Corning, NY 14830 Electronics Twin Pines Technologies (585) 612-6608 Electronics 11461 State Route 21 Wayland, NY 14572 Southern Tier PC (607) 936-0032 Electronics 359 Park Avenue Corning, NY 14830 Home Depot (607) 936-1400 Batteries 3160 Silverback Lane Cellphones Painted Post, NY 14870 cfls			<u>Materials</u>
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Home Depot (607) 936-1400 Batteries 3160 Silverback Lane Cellphones		359 Park Avenue	
3160 Silverback Lane Cellphones		Corning, NY 14830	
,	Home Depot	(607) 936-1400	Batteries
Painted Post, NY 14870 cfls		3160 Silverback Lane	Cellphones
,		Painted Post, NY 14870	cfls

Chapter 4 Technology Assessment / Evaluation of Alternatives

This section will provide a summary of alternatives available to the County related to waste disposal and recycling technologies. Considerations throughout the planning period and the technologies summarized will be evaluated for feasibility and cost effectiveness.

4.1 MSW Options

4.1.1 Anaerobic Digestion

Anaerobic digestion is a process during which organic materials are processed in an airtight container by microorganisms that break down the material into biogas and digestate (NYSDEC). This process is used extensively to stabilize sewage sludge. More recently, however, anaerobic digestion has been under consideration as a method to process organic fraction of MSW. Biodegradable material is converted via a series of bacterial groups into methane and carbon dioxide. The primary step of this type of digestion is hydrolysis. The first group of bacteria breaks down large organic molecules into small units. During the acidification process another group of bacteria converts the resulting smaller molecules into volatile fatty acids. Then, a third group of bacteria produce a medium-Btu biogas consisting of 50-70% methane as well as carbon dioxide. This biogas can then be collected and used for a variety of purposes which can then be used for electricity production or converted to high BTU natural gas.

This process provides consistent power, reduces Greenhouse Gases and odor, improves water quality, is renewable, and produces valuable by-products. However, anaerobic digestion can be expensive can only be implemented in large farms and industries, is time consuming, and requires a large amount of land. There are currently 200 MSW anaerobic digestion facilities operating across Europe. Most are small-scale facilities.

The County has explored partnerships with large scale local farmers in the past, hoping to combine the farm wastes with the MSW based organics to improve the economy of scale. Utilization of the biogas would be simplified if a project were to be sited at the Bath Landfill, as a LFGTE facility is already in operation and has available capacity.

4.1.2 MSW Composting

Another alternative to disposing MSW in a landfill is composting. Because municipal solid waste that is buried in a landfill doesn't receive oxygen, it will produce methane. A compost pile, however, undergoes aerobic decomposition (which would decrease the gas amount within the landfill). Typically, an aerobic composting process breaks down all organic portions of the waste into a compost material, which has beneficial uses.

Waste is normally collected at the facility as a mixed stream. This process requires intense pre- and post-processing, treatment and sorting to remove inert materials such as plastic or glass, which diminish the quality of compost products. Facilities may also accept biosolids. These wastes are loaded into a rotating bioreactor drum for two to four days. Screening processes are used to separate unacceptable wastes, which are landfilled as process residue, from the raw composite which is stored in a maturation area for approximately one month to allow biological decomposition to occur. Facilities do not have a well-established track record in the United States. There are currently thirteen mixed MSW composting facilities in operation. Typical issues with regards to feasibility include quality of compost, retail/wholesale outlet for compost generated, disposal location for bypass material, and odors.

This process reduces the need for synthetic chemical fertilizers and increases the yield of crops, can remediate and revitalize soil that has been contaminated by hazardous waste, and can remove oil and heavy metals from storm water runoff.

4.1.3 Pyrolysis / Gasification

Pyrolysis is the thermal decomposition of the volatile components of an organic substance. The temperature range for this process is 400-1,400 *F (200-760*C) and in the absence of air or oxygen, pyrolysis forms syngas and/or liquids, and an indirect source of heat is used. According to the American Chemistry Council (ACC), although this technology is capable of processing a wide range of wastes, the study conducted looked at gasification technology that accepts all municipal solid waste.

Pyrolysis systems use a vessel which is heated to temperatures of 750°F to 1,650°F, in the absence or near absence of free oxygen. The temperature, pressure,

reaction rates, and internal heat transfer rates are used to control pyrolytic reactions in order to produce specific synthetic gas (syngas) products. These syngas products are composed primarily of hydrogen (H₂), carbon monoxide (CO), carbon dioxide (CO₂), and methane (CH₄). The syngas can be utilized in boilers, gas turbines, or internal combustion engines to generate electricity, or alternatively can be used in the production of chemicals. Some of the volatile components of MSW form tar and oil, and can be removed for reuse as a fuel. The balance of the organic materials that are not volatile, or liquid that is left as a char material, can be further processed or used for its adsorption properties (activated carbon). Inorganic materials form a bottom ash that requires disposal, although it is reported that some pyrolysis ash can be used for manufacturing brick materials. Under typical operations, the ash is landfilled.

Gasification is a similar process to pyrolysis, but which requires the partial oxidation of a feedstock to generate syngas. Oxygen must be provided for the reaction, but at a quantity less than is required for complete combustion. The primary syngas products are H₂ and CO with smaller quantities of CH₄ produced at lower temperatures. Similar to pyrolysis, the syngas product may be used for heating, electricity generation, fuel, fertilizers or chemical products, or in fuel cells. Byproduct residues such as slag and ash are produced and require disposal in a landfill.

Compared to other alternatives, the cost to process the waste via pyrolysis/gasification is high and is generally related to the cost of electricity and fuel required to run the process. The average United States costs for landfill disposal and recycling range from \$30 to \$75 per ton depending on the region.

Local benefits to a pyrolysis/ gasification system would be primarily a reduction in long-term care for the waste. Since the residual volume of a waste stream that processed this way is so small, very little landfill space would be required. Potential resalable byproducts could help offset the high energy costs as well.

4.1.4 Ethanol Production

Solid Waste facilities can turn waste into ethanol by using sulfuric acid to release the cellulose in the garbage and then adds enzymes and microbes to ferment it into fuel. It diminishes demand for landfills and cuts Greenhouse Gas emissions. Ethanol can be

produced from biogas which is produced from various biomass sources. The 468 million metric tons of trash produced in North America each year could provide 47 billion liters of ethanol. Ethanol production from a mixed MSW waste stream requires an intensive sorting process as the first processing step. Recyclables and inert materials must be removed to produce an organic waste stream for ethanol production. Material is then chopped, fluffed, and fed into a hydrolysis reactor. Effluent from this reactor is mostly a sugar solution and is prepared for fermentation. The solution is detoxified and introduced to a fermenter, in which microorganisms convert the sugar to ethanol and carbon dioxide. The solution is then introduced into an energy-intensive process that combines distillation and dehydration to bring the ethanol concentration up to fuel grade ethanol. The solid residue of unfermented solids and microbial biomass is recovered through the anaerobic digestion process. The marketability as a compost material depends on the purity of feedstock as well as its visual quality. Solid residues can be burned or gasified if alternative methods of reuse aren't feasible.

Several ethanol production facilities are in the United States but many have reverted to more homogeneous feedstocks such as wastewater treatment sludge and food processing wastes because obtaining a homogeneous input stream from mixed MSW has proven difficult.

This option would be worth monitoring for development in the years to come, but is too unproven a technology to handle all the needs of a municipal waste system.

4.1.5 Waste to Energy (Combustion/Incineration)

A Waste to Energy (WTE) facility is a solid waste management facility that combusts wastes to generate stream or electricity and reduces the volume of municipal solid waste (MSW) that would otherwise need to be disposed of by approximately 80 to 90 percent. Newer technology allows higher efficiency heat recovery from the combustors increasing energy production potential. Although these facilities result in a reduction in waste for disposal, a secondary disposal method, such as landfilling would still be required in conjunction with the facility. This, along with very high initial construction costs, high operations and maintenance costs, and the uncertainty of

revenues associated with energy sales make the disposal cost per ton for this method higher than that for landfilling.

There are currently 10 active WTEs in New York State, but none have been permitted or constructed in the state in the past 20 years.

Permitting difficulties aside, this technology could be worth revisiting if technological developments occur. Volume of waste to the landfill would be greatly reduced, reducing post closure care costs.

4.1.6 Recycling

Recycling has played an important role in Steuben County's solid waste management for many years.

Benefits of Recycling

- Reduces the amount of waste sent to landfills and combustion facilities
- Conserves natural resources such as timber, water, and minerals
- Prevents pollution by reducing the need to collect new raw materials
- Saves energy
- Reduces greenhouse gas emissions that contribute to global climate change
- Helps sustain the environment for future generations
- Helps create new well-paying jobs in the recycling and manufacturing industries in the United States

In the County, two recycling systems coexist for residents to choose from. The County run Source separated system and the Single Stream or Zero-Sort systems run by Casella. Both of these systems offer residents and businesses the option to return their used containers and packaging back to the mainstream.

Economic evaluations of Recycling vs Landfilling in the County are variable. Largely market dependent, and certainly material specific, year to year the economics of the County's program are closely watched. In a good market, it makes sense for us to direct as much material as possible into the recycling system. In a poor market, the handling and processing costs will exceed the revenues by several dollars per ton. In

a worst case, collected recyclables can be difficult to move to an end user and may eventually end up in the landfill anyway.

Recycling will always have a role in the management of waste in the County. We primarily service smaller quantity generators with our programs, such as residential customers and small businesses. Larger industrial and commercial operations tend to use a larger hauler who would likely utilize the single stream system, or in the case of larger merchants (Walmart, Wegmans) utilize a baler and market their own valuable materials. The planning unit will continue to gather data from local businesses and be available as a resource when called upon.

4.1.7 Landfilling

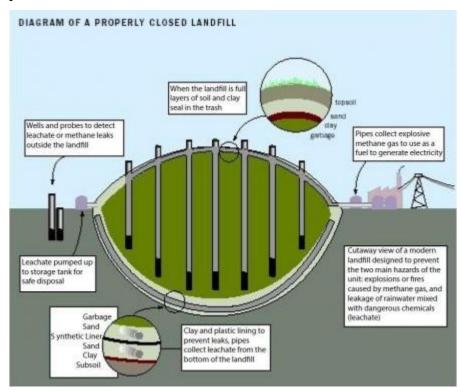
A municipal solid waste landfill (MSWLF) is a discrete area of land or excavation that receives household waste. A MSWLF may also receive other types of nonhazardous wastes, such as commercial solid waste, nonhazardous sludge, conditionally exempt small quantity generator waste, and industrial nonhazardous solid waste. In 2009, there were approximately 1,908 MSWLFs in the continental United States all managed by the states where they are located.

Non-hazardous solid waste is regulated under <u>Subtitle D of RCRA</u>. States play a lead role in ensuring the federal criteria for operating municipal solid waste and industrial waste landfills regulations are met, and they may set more stringent requirements. In absence of an approved state program, the federal requirements must be met by waste facilities. The revised criteria in <u>Title 40 of the Code of Federal Regulations (CFR) part 258</u> addresses seven major aspects of MSWLFs, which include the following:

- Location restrictions—ensure that landfills are built in suitable geological areas away from faults, wetlands, flood plains or other restricted areas.
- Composite liners requirements—include a flexible membrane (i.e., geomembrane) overlaying two feet of compacted clay soil lining the bottom and sides of the landfill. They are used to protect groundwater and the underlying soil from leachate releases.
- Leachate collection and removal systems—sit on top of the composite liner and removes leachate from the landfill for treatment and disposal.

 Operating practices—include compacting and covering waste frequently with several inches of soil.

These practices help reduce odor, control litter, insects, and rodents, and protect public health.



- <u>Groundwater monitoring requirements</u>—requires testing groundwater wells to determine whether waste materials have escaped from the landfill.
- <u>Closure and post-closure care requirements</u>—include covering landfills and providing long-term care of closed landfills.
- Corrective action provisions—control and clean up landfill releases and achieves groundwater protection standards.
- <u>Financial assurance</u>—provides funding for environmental protection during and after landfill closure (i.e., closure and post-closure care).
 - The Steuben County landfill has been the efficient and compliant MSW disposal option of choice in the County for many years.

4.2 C&D Options

The County landfill currently handles approximately 8,000 tons annually of primarily residential and small industrial C&D. Also operational in the County is Hakes C&D Landfill, located in Painted Post. The Hakes landfill is owned and operated by Casella, who largely import C&D from downstate and out of state.

We will evaluate three methods of managing C&D material generated within the County, including Landfilling, Processing, and Controlled demolition.

4.2.1 C&D Processing

C&D material is generated from the demolition of structures, generally. Over the last few years especially, there have been more major demo jobs happening within the County that have employed at least some form of processing and recycling of C&D materials.

Larger buildings with significant concrete foundations and metal framework are routinely demolished in a way that allows for reclamation of those materials. Metal is reclaimed and resold as scrap, while concrete is crushed and screened to produce a valuable aggregate material. Reclamation of these materials from the demo not only offsets the costs of the project through resale and landfill tip fee avoidance, but it reduces landfill airspace usage.

C&D processing facilities do exist in other areas that will grind the remainder of the demo materials to further reclaim valuable elements of the waste stream. After running through a processing facility like this, a finely ground material will be produced, suitable for beneficial uses such as landfill cover (ADC/AOC).

The County does not own or plan to own any of the expensive equipment required to conduct these operations. Contractors from out of the County will normally conduct this type of work.

4.2.2 C&D Landfilling

Materials that can't be reclaimed will likely be landfilled. Due to the state of this leftover material, and the lack of market for most of it, it will likely be delivered to either the Bath Landfill or the Hakes Landfill.

Landfilling is inexpensive and simple to manage for a contractor.

Environmentally it is less desirable than recycling but is the only economical option for

much of the demo material.

4.2.3 Deconstruction

There are organizations that have demonstrated that it is possible to reduce costs, increase the amount of material diverted from landfills, and accomplish the goals of demolishing a small structure.

The idea is that a team will go through the structure and remove everything that might have any resale value, including light fixtures, sinks, cabinets, electrical components, etc. This approach can be feasible when dealing with small demo jobs, and particularly in residential applications.

Deconstruction definitely has merits when applied in the right context. Not the type of alternative that can handle all C&D materials, but an interesting alternative to be used in conjunction with other options to increase diversion rates.

4.3 Biosolids Management Options

Biosolids in the County are landfilled, composted, or land applied. Most facilities use some method of dewatering in order to make the sludge suitable for disposal.

4.3.1 Incineration

This is the firing of biosolids at high temperatures in an enclosed device. It results in an ash that must be properly disposed.

There are 12 biosolids incinerators in the State. These incinerators, located at POTWs, handle a total of 170 dry tons per day. Also, about 30 dry tons per day are incinerated at out-of-state facilities. Incineration by itself is not a disposal method. Incineration does reduce biosolids quantity by at least 70 percent but results in a residue, ash, that must be properly managed. Ash from biosolids incineration in New York State is currently landfilled.

There are currently no Biosolid incinerators active in the County.

4.3.2 Landfilling

This is the placement of biosolids in a disposal facility, including mono-fills (sludge-only landfills) and co-disposal with mixed solid waste. Typically, landfills must have liners, groundwater monitoring, and comply with other regulatory design and operational criteria.

Of the 520 dry tons of biosolids landfilled per day, 51 percent is landfilled instate, the remainder leaves the State for disposal. In New York State, biosolids are landfilled in municipal solid waste landfills that accept primarily municipal solid waste (refuse). At present there are 27 landfills accepting biosolids in the State.

When mixed with other wastes in a well-run landfill, biosolids can stimulate additional gas production which can be beneficial to a LFGTE facility. Additional landfill gas can be a benefit to the operator or can be a nuisance to the surrounding area if gas is not collected properly. Most of the landfills in New York now have an active gas collection and control system (GCCS). The Steuben County landfill collects LFG and produces renewable energy.

4.3.3 Beneficial Use

There are many methods for beneficial use of biosolids including direct land application, composting, chemical stabilization, and heat drying.



• **Direct land application** of biosolids is the placement on or in the soil to benefit the crop grown and the soil present. Application can occur on agricultural land, forest land, and for land reclamation. Biosolids are used because they provide nutrients (nitrogen and phosphorus) and organic matter to the soil and plants grown. Biosolids can be applied as either a

liquid or semi-solid (dewatered) material, similar to animal manure. Biosolids are either directly injected into the soil or spread onto the soil surface and then incorporated into the soil. The application rate is determined by the crop grown and the nutrient content of the biosolids. The rate of nitrogen application must not exceed the needs of the crop grown.

• Composting involves the aerobic decomposition of organic material, such as biosolids, using controlled temperature, moisture, and oxygen levels. Composting results in a humus-like material that is typically used in landscaping to enhance topsoil. All composting methods are aimed at optimizing conditions for microorganisms to efficiently degrade the material. Bulking agents such as sawdust, woodchips, or leaves are added to the biosolids to absorb moisture, increase porosity, and add carbon. The mixture is stored (in windrows, static piles, or a vessel) for a period of intense decomposition. Following this active period, the material is stored for an additional period to cure prior to use.



- **Heat drying** is a treatment process in which almost all water is removed from biosolids by exposure to a heat source. The chemical composition of the biosolids remains essentially the same but the percent of solids of the resultant material is 90 percent or greater. Depending on the system, the end product is a powder-like material or grain-sized pellets. The heat dried product is typically used directly as a fertilizer or blended with other material to produce a higher grade fertilizer.
- **Chemical stabilization** is a process in which chemicals are mixed with biosolids. Alkaline materials, such as lime or cement kiln dust, are added

to dewatered biosolids. The chemicals react with the biosolids and generate heat and increase the pH of the biosolids. Due to the lime addition, the resultant product is used primarily as a lime substitute in agriculture. These facilities are relatively simple, consisting of storage facilities, mixing equipment, and an area where the material is allowed to cure.

4.4 Non-Hazardous Industrial Waste Options

Industrial waste means solid waste generated by manufacturing or industrial processes. Such processes may include, but are not limited to the following:

- electric power generation
- fertilizer/agricultural chemicals; inorganic chemicals
- iron and steel manufacturing
- leather and leather products
- nonferrous metals manufacturing/foundries
- organic chemicals
- plastics and resins manufacturing
- pulp and paper industry
- rubber and miscellaneous plastic products
- stone, glass, clay and concrete products
- textile manufacturing
- transportation equipment
- water treatment

The forms of such wastes are exemplified by but not limited to: liquids such as acids, alkalis, caustics, leachate, petroleum (and its derivatives), and processes or treatment wastewaters; sludges which are semi-solid substances resulting from process or treatment operations or residues from storage or use of liquids; solidified chemicals, paints or pigments; and dredge spoil generated by manufacturing or industrial processes, foundry sand, and the end or by-products of incineration or other forms of combustion. This term does not include oil or gas drilling, production, and treatment wastes (such as brines, oil, and frac fluids); overburden, spoil, or tailings resulting from mining; or solution mining brine and insoluble component wastes.

4.4.1 County Industrial Waste

In Steuben County, and for the purposes of this plan, the materials of most interest are the solid industrial wastes from Corning Inc. For the most part, the materials are inert glass/ceramic extrusions and their component raw materials. A large fraction of these wastes have been granted a BUD determination and are used beneficially in the landfill, as either daily cover or road base. That which cannot be used beneficially is buried alongside MSW, biosolids, etc. and are compatible with the landfill operations. The County values local manufacturers and makes every effort to assist in efforts to manage their waste responsibly.

4.4.2 Recycling Industrial Waste

Recycling options have been explored by the local manufacturers. Their attempts to efficiently manage costs for waste disposal and limit environmental liabilities motivate them to consider these options. Their considerations are generally considered proprietary and case specific, and will not be expanded upon in this plan.

4.5 Landfill Gas Management Options

The Steuben County Landfill is home to a LFGTE facility. Landfill gas is a readily available, local and renewable energy source that offsets the need for non-renewable resources such as oil, coal, and gas. Landfill gas projects also generate revenue from the sale of the gas and also create green jobs associated with the design, construction, and operation of energy systems. Once collected, landfill gas can be utilized in many ways: to generate electricity, heat, or steam; as an alternative vehicle fuel; or sold on the energy market as a renewable "green" power or gas. Electricity is the most widely used of landfill gas projects. The electricity can be used for internal facilities or sold to external consumers. Direct-use is implemented to replace non-renewable resources such as coal, oil, and natural gas.

In addition to the renewable energy production, LFGTE facilities help reduce CO2 emissions generated by the landfill by up to 98%.

4.6 Leachate Treatment

Landfill leachate is defined as water that has been in contact with waste stored in a landfill. Landfills generally contain a highly heterogeneous mixture of materials, which include both a very high organic component as well as soluble mineral substances. There are various technologies available for the treatment of landfill leachate. These include biological processes for wastewater treatment such as MBBR, TFR, activated sludge processes, anammox and loop reactors as well as reverse osmosis. The Steuben County Landfill and Leachate Treatment Facility use an activated sludge process in conjunction with a Metals Removal system to treat the leachate produced in the Old Bath and New Bath Landfills. The treatment facility also treats leachate shipped from regional landfills such as the closed Lindley North and South landfills.

Leachate is first treated in a Metals Removal Reactor (MRR) which extracts dissolved metals and volatile organic components from the leachate. It then enters a Sequencing Batch Reactor (SBR) that uses microorganisms to nitrify the leachate.

The other option for managing landfill leachate is hauling untreated leachate to a local POTW. This option introduces elements of uncertainty and cost. Hauling costs would be steep, and striking agreements with several local POTW facilities would be restrictive and costly.

Chapter 5. Strategies & Integrated System Selection

The purpose and statutory framework for the Steuben County Solid Waste Management Plan is described in the Executive Summary. Based on the data gathered and discussed in the preceding Chapters, the County has identified program strategies to work toward during a tenyear LSWMP planning period that is consistent with the State Solid Waste Management Policy. The strategies set forth below were identified with the goal of further enhancing the reuse and recycling of materials generated in Steuben County to reduce the quantity of materials requiring disposal, while providing for the means to recover energy in an environmentally sound manner from solid waste that has not been reused or recycled. Each strategy and corresponding goal will be further evaluated for feasibility and cost effectiveness on an individual basis according to the implementation.

The NYSDEC's rules and regulations for Comprehensive Solid Waste Management Planning (Subpart 360-15 of 6NYCRR Part 360) require that all solid waste management plans provide for the management of solid waste within the planning unit for a minimum of a ten-year period. Since the County's current LSWMP has expired, LSWMP planning period will be the 10-year period beginning January 1, 2018 and expiring December 31, 2028. The County can address and report any changes to their solid waste planning efforts that take place over the 10-year planning period to the Department as part of the solid waste management plan compliance reports that Steuben County is required to prepare and submit to the Department every two years.

5.1 Program Strategies to Increase Recyclables Recovery

The County has always identified waste streams that have emerged as candidates for additional recycling programs. This happens through a sudden increase in volume of certain materials (electronic waste), developing markets or the realization of the need to handle wastes in special ways (pharmaceutical waste).

Steuben County understands that various tasks will need to be completed to promote a successful recyclables recovery program. The following sub-sections summarize solid waste management program strategies that encourage greater waste diversion and more recycling.

5.1.1 Increase Recycling at County Facilities

As previously discussed, multiple options exist for the Steuben County resident when choosing a recycling system. The County run program is cost effective to the County, and produces a good end product, but is cumbersome to the average resident. It is believed that the extra effort required to participate acts as a deterrent to many. As a result of this, if residents are unwilling to spend the time and energy to separate their recyclables, they are left with two (2) options:

- 1. Find hauler who will provide single stream services. In this area, that means for most people they are selecting Casella. There are other small waste haulers who will take the collected recyclables to a Casella facility and pay to have them sorted/recycled. This usually results in added monthly fees to the resident.
- 2. Cease recycling. To simply quit separating recyclables from the waste stream is an undesirable option but is a reality.

To increase recycling rates at the County facilities, several options have been investigated over the years.

- 1. *Increase education:* Since 2010, the Steuben County DPW position of Recycling Manager has been left vacant. The recycling manager had been responsible for outreach and public education, specifically as it related to Recycling. Since then, the responsibilities have been shared within the department, relegating the full-time job to a part time job. While programs and progress have thrived during this period, public outreach has decreased. The County should evaluate the feasibility of staffing a full-time recycling outreach position to focus primarily on increasing diversion and promoting recycling.
- 2. *Implement more user-friendly system*: The system in place has been in place since the program's inception in 2000. Developments to infrastructure and processing technologies have improved the viability of single and dual stream recycling systems. The County should evaluate the feasibility of implementing a more user-friendly recycling system, such as single stream.
- 3. *Increase recycling promotion*: Simply increasing expenditure on promotional materials directed at increased diversion rates could have a noticeable effect on recycling rates. Make sure that recycling is on the front of people's minds when

they are making their disposal decisions. This goes hand in hand with increasing education.

Based on previous system performance, it seems reasonable to target a 4% increase in diversion rates at County facilities during the planning period. Specific data is provided in the Population and Municipal Solid Waste Composition Calculator (appendix L).

5.1.2 C&D Recycling/ Reuse Partnership

Steuben County provides several landfilling options for C&D disposal, including the County landfill in Bath, Hakes C&D landfill in Painted Post, and all the County transfer stations. We do not provide a single recycling option for this material, other than for some of its components (scrap metal).

Currently, in the County it is most cost effective to Landfill the material. Tip fees are low, while other options are limited. There are options, such as those discussed in the previous chapter, to divert some of this material from the landfill.

Reuse Partnership: Product reuse is one of the most efficient forms of recycling. Steuben County proposes to assess the feasibility of providing a system by which their residents can drop off used, but still usable items free of charge. Items would be salvaged from the existing recycling streams, such as construction materials, doors, windows, and major appliances.

The County is pursuing is a partnership with a building material Re-use operation, such as the Habitat for Humanity ReStore. The County will pursue a partnership by developing an RFP that would allow us to divert reusable building materials at the landfill or transfer station. We will set up a drop off location that will be convenient for local contractors to use. Hopefully, if a program is set up to cater to the local contactor, usable building materials can be diverted.

Additionally, reuse centers are already available to county residents, such as, Salvation Army, Volunteers of America, Habitat for Humanity ReStore. etc. Steuben County will encourage these types of reuse centers throughout the County for increased convenience to residents.

5.1.3 Support Product Stewardship Framework

Product Stewardship is based on the concept that producers selling a product should be responsible for designing, managing, and financing a stewardship program that addresses the lifecycle impacts of their products, including end-of-life management. It is a nationwide undertaking to encourage government, at the State level, to implement product stewardship legislation based on the same framework principles in order to maintain a consistent starting point for nationwide implementation of a product stewardship policy. The New York Product Stewardship Council is working to implement the principles of product stewardship in New York State. Steuben County intends to work together with the New York Product Stewardship Council to coordinate and participate in product stewardship initiatives locally. It is the intent to adopt these product stewardship framework principles through a resolution.

5.1.4 Special Waste Collection Programs

Steuben County has increased the Special Waste collection program over the last few years. Special wastes, for the purposes of this plan, are those wastes that can be collected through special events and either disposed of properly or recycled. These types of wastes range from agricultural plastics to household hazardous waste to confidential document shredding. Some are disposed of properly, as in the case of HHW, while others that require special equipment to collect or process are recycled, as in the case of the confidential document shredding.

The County has attempted to listen to the needs of the people of the County. Programs such as Tire Amnesty day have gone by the wayside to make way for the Latex Paint event and Shred It events. In 2017, the County offered eight (8) special events, including:

 Book Recycling Week: One-week event where residents can recycle old soft and hardcover books. The books can be picked up or dropped by residents, allowing for reuse opportunities. It requires little staffing and little budgetary consideration.

- HHW events: Multiple events are conducted each year, with locations rotating to
 ensure the community is equally served. Due to the cost of the events, they are
 limited. A preregistration is required, and the opportunity to discuss County run
 programs and disseminate information is taken.
- Shred it: Events have been run annually at each County facility for several years now. A local document shredding company provides the services of a truck and a driver, and residents are allowed to bring a reasonable amount of documents and witness them being shredded. The events began due to requests to local legislators, who passed them on to the Solid Waste division.
- Latex Paint day: A recent event in which residents can dispose of their old latex based paint. Paint cans are accumulated in a dump truck at the landfill, mixed with sand and buried in a trench. The event is no charge to County residents.

5.1.4.1 Future event considerations

The County tries to offer events that the residents want. Suggestions are received throughout the year, in the normal course of contact with the public. Whenever it appears to be that a suggestion is recurring, we will look to see how that need can best be met.

In many cases, there are already disposal or recycling options available. For instance, the following wastes are often inquired about, and residents are referred to the proper location to handle the materials.

- o Rechargeable batteries: Collected in a bin at Home Depot
- Lead acid batteries: Interstate Battery in neighboring Chemung County will purchase used lead acid batteries from residents.
- o Thin Film Plastic: Collected in bins at the front of most grocery stores.
- Textiles: Many drop off locations throughout the County. Operations associated with local churches often offer these.

The County will look to identify needs that are not being met by the private or public sector, evaluate the need for a program, and develop a program if feasible.

5.2 Strategies to Increase Organics Recovery

According to the Population and Municipal Solid Waste Composition Calculator, Organics account for ~20% of the MSW waste stream. The Diversion rate is only 3.5%, which indicates that there is a significant amount of material to account for.

5.2.1 Support Yard Waste / Backyard Composting

The County promotes, through education and outreach, grass-cycling (leave clippings in place) and backyard composting. Due to the rural and suburban nature of the County, the average resident can easily and effectively manage their own yard waste and even food scraps right in their own backyard.

Combining yard waste with food scraps in a compost bin or compost pile provides several benefits:

- the backyard management of these wastes reduces the transportation element. Since a truck doesn't need to be dispatched, fuel and labor are conserved.
- by separating food scraps from the garbage that is destined for the landfill, waste volumes to the landfill are reduced and local landfill life is extended.
- 3. Leaving grass clippings in place, after mowing with a mulching blade, is actually beneficial to the lawn and reduces the need for chemical fertilizers.
- 4. A useful compost material is produced that can be used for amending soils and when planting new plants.
- 5. An element of personal involvement with one's waste management leads to increased awareness of what/how much they are producing.

The County will continue to promote these practices as the recommended options for managing yard waste and residential food scraps.

5.2.2 Manage Biosolids / Sludge

Biosolids are produced at many different locations throughout the County, all by individual municipal organizations with established infrastructure. The

options for these operators are landfill or beneficial use. In most cases, these options are limited based on the design elements of their facilities.

The County will continue to make landfill space available for County produced biosolids. The material is compatible with the landfilling operation, and provides the benefit of increasing gas production to the LFGTE facility.

Alternately, the County will continue to support the beneficial uses that are in place today, namely land application. Facilities that send their biosolids to land application operations, like those run by Dickson Environmental in Bath, NY, would be encouraged to continue to do so. If the existing facilities have the land available to spread these biosolids in a beneficial manner, where they will act as a fertilizer, that would be the preferred method. Sometimes due to environmental conditions, including cold weather, heavy rains, etc., the biosolids would be more appropriately landfilled.

The County will continue to ensure that these materials will be managed properly, and support both their producers and beneficial users.

5.3 Public Education Elements

Steuben County recognizes that a well informed and involved public is paramount to our success. Whether it be understanding the recycling separations that are required or knowing who to contact to get information on proper disposal, the residents of this County need to be properly informed. Therefor it is our responsibility to clearly and effectively disseminate information about the Solid Waste management system we run.

5.3.1 Landfill/ Transfer Station Tours

It has been our experience that the best way to reach someone who may not know or care much about their wastes is to take them on a tour of their local facility. Local groups who have interest in recycling, sustainability, the environment, water quality, or any number of other topics that are pertinent to the Solid Waste management system in their area, ask for tours.

Landfill tours are an excellent way to enlighten groups of school children, who might be studying the environment in class. It is an opportunity to dispel the old

dump myths that persist, where the average citizen may not realize that landfills are dual composite lined, have daily cover applied, don't have bears roaming around and aren't actively polluting the surrounding area. The results of these tours are people who now know what happens to their wastes, and what some of the consequences are. They can more effectively make informed decisions.

We also have the opportunity to highlight the specifics of our recycling system, show people how it works, explain why we accept what we do, tell them where it goes, and answer the questions that arise. People who get a 1-2 hour tour of the facilities are usually surprised to learn that we run a small power plant off the landfill gas (LFGTE), that we have sheep grazing on an old closed landfill, that we have a unique onsite pre-treatment plant for our leachate.

The tours can be conducted by several members of the existing staff and take only an hour or two. Resources required are minimal to offer tours, so they are low impact to the budget. Groups usually contact our organization and request tours, but information on who to contact for landfill/ transfer station tours will be made more easily accessible.

5.3.2 Social Media & Online Resources

The County has primarily utilized newspaper and radio advertisements for many years. Any special waste collection program or change to the recycling program would be communicated through these media. Peoples' methods of acquiring information has changed drastically in the last few years. Newspapers are on the decline, as is terrestrial radio. As a result, the way we reach the public to educate them about their solid waste system must change.

Over the course of the planning period, the County will continue to increase our utilization of:

5.3.2.1 County Website:

The County website is our main repository for solid waste management information. All the basics about our system are there, including:

Schedule

- Pricing
- Recyclables accepted
- Locations
- Information about how to dispose of special wastes
- Information about our special programs, such as the Grazing Project and the LFGTE facility

It is currently the responsibility of the Environmental Project Coordinator to get updates to the County website developer to make updates. This responsibility might be better handled by a dedicated employee within the department, perhaps the unfilled Recycling Manager position. This position would be able to focus on education and outreach.

Improvements to the website must be made to improve the user experience when looking for information. This is one area of need that will be worked on during the planning period. Resources will be required and working with the County Information Technology Department will be required.



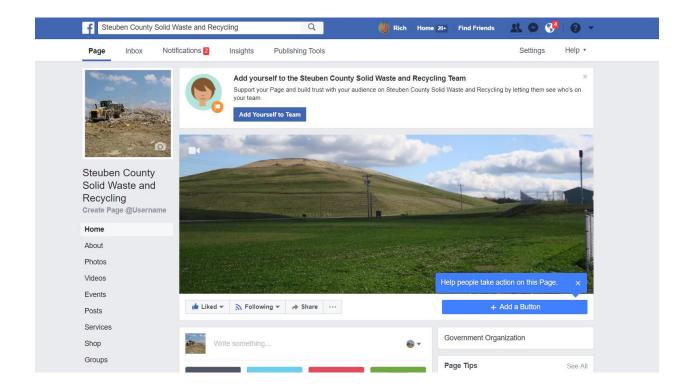
5.3.2.2 Social Media

Social media is a large part of today's culture and seems certain to grow during the planning period.

Presently, the County has a Facebook page, *Steuben County Solid Waste & Recycling*. This page is not only used to disseminate information similar to that

discussed above on the County website, but timely information that may relate to recycling, or developments in the news that affect what we do. It also allows for a dialogue between the residents who may see our page, and the County. Questions can be asked, information can be shared.

During the planning period, exposure to different Social Media platforms will be explored. Popular platforms right now that will be investigated are Twitter and Instagram. The County may not see the need for these today, but may in the future. New platforms may arise that will help the County reach more residents. Routinely evaluating these options will be required during the planning period, to be sure to maximize the effect of the Social Media.



Resources required for this are primarily time. In most cases, using these platforms is free of charge. Fees may pay to increase the distribution of certain posts to more people. This must be investigated. Also, determining a County staff member(s) who will generate content must be evaluated.

5.4 Infrastructure Needs

The County currently has the infrastructure that is needed to divert waste. However, the following programs will assist in diverting waste, which will lessen the strain put on the current infrastructure. This will benefit the solid waste management system in place as the County will not need to add to its current infrastructure during the planning period.

5.4.1 Improving Solid Waste and Recycling Data Compilation

Steuben County has developed a comprehensive recycling program, one which offers its residents an outlet for the majority of their potentially recyclable materials. While the County's tracking system accounts for all of the solid waste and recyclables that pass through our system, there are other unreported outlets in the county for both solid waste and recyclables. For example, a large, privately owned company operates a transfer station within the County limits and handles both solid waste and recyclables. In addition, large recyclables producers such as big box stores, and even private recyclables collection companies, may ship recyclable products directly to the end user for a profit, bypassing the county recycling facilities. As a result, these materials are not being accounted for in the County's recycling reports.

The County mails out a recycling data survey annually, which is distributed to various sectors of the County in order to compile more complete recycling data. These surveys are used to help develop a better picture of the total amount of recyclables that are recovered. Survey recipients are asked to indicate volumes of recyclable material (metals, plastic, and paper) produced per year. However, since there is no requirement for these recipients to participate, we receive only a limited number of responses. This survey is helpful, but undoubtedly we are missing a certain component of the actual materials that are recovered in the County each year.

To further enhance the effectiveness of this survey, the survey has been augmented by requesting organic material produced per year, C&D material produced per year, and current disposal/recycling methods. A periodic review of

the businesses operating in the County will be conducted, to ensure that the maximum number of recyclers is included.

A listing of responders to the survey is kept and is used in the assembly of the mailing list for the upcoming year. It is anticipated that the mailing list will be refined on or before 2019, taking into account information from respondents in previous years, additions of new businesses to the County, etc. Recently, an option was provided for residents to respond to the survey through email, which seemed to receive a good response by several respondents. Further efforts in this vein will be investigated.

Intermediate facilities such as confidential paper shredding services and scrap metal dealers may also be contacted to determine how much material they receive from within Steuben County. This information will then be compiled to help the County more accurately determine the actual recycling rate within the County, which recycling efforts are most effective, and which new recycling methods would be most prudent for the County to pursue. If response rates are low, the County may consider enforcement to obtain better data.

5.4.2 Update Local Law

The County's local laws governing solid waste are relatively old. The laws of interest should be reviewed, evaluated for applicability, and potentially updated and consolidated during the planning period, including:

5.4.2.1 Waste importation: The County intends on allowing for the importation of waste from other planning units that do require it. Per 360-1.9(f) and our landfill permit, importation of waste from Planning Units that have a DEC approved Comprehensive Recycling Analysis *is* allowed.

This is often done through the use of Inter Municipal Agreements (IMA).

5.4.2.2 Source Separated Recyclables: Steuben County Local Law #9 of 1991 and its amendments require all generators to source separate recyclables. Recyclables required to be source separated include newspaper, corrugated

cardboard, clear glass, tin and #1 & #2 plastic containers. Recyclables collected and accepted at the County's facilities include newspaper, corrugated cardboard, junk mail, magazines, catalogs, white and colored paper, telephone directories, craft paper and bags, tin cans, clear and green glass containers, #1 & #2 plastic containers, scrap metal, white goods. Other recyclables accepted include motor oil and oil filters, antifreeze, tires, fluorescent bulbs and propane tanks and cylinders and electronics. All recyclables received are processed and marketed to private processors through a private vendor.

This law should be reevaluated and the following considerations should be kept in mind:

Update list of mandatory recyclables

- Recycling at multiple-resident dwellings
- Recycling at hotels and motels
- Commercial recycling
- Review and revise definitions
- Revise recordkeeping and reporting requirements for haulers and/or generators
- Review enforcement options

5.4.2.3 Local Flow Control Option

The County has discharged its duties in running its solid waste management program to be a steward of the environment and to promote a responsible and comprehensive solid waste program. To that end the County reserves unto itself the option to implement flow control consistent with the U.S. Supreme Court ruling in" United Haulers Association v. Oneida-Herkimer Solid Waste Management Authority".

Municipal Solid Waste in the County is collected by private haulers. The haulers are currently not required to dispose of the waste at the County's landfill. Between about 57 - 65 percent of the collected waste is disposed of at the County's landfill. About 35 - 43 percent is disposed of at privately owned or operated landfills outside of the County.

Flow Control is a measure which the County may need to use to ensure that sufficient quantities of solid waste and recyclables are delivered to the Steuben County Solid Waste Management facilities so that the facilities are financially self-supporting. Also, Flow Control can have the effect of stabilizing the waste flow to the County, thereby giving the County an opportunity to stabilize tip fees and environmentally beneficial services to County residents.

Flow Control can be implemented by a contractual arrangement or by enacting a local ordinance or law. Flow Control through contractual arrangement would involve a contract between the owner/operator of the facility and the waste haulers. As the facility is owned and operated by the County, a contract between the County and its townships may be more appropriate. If a contractual arrangement is not feasible, the County may opt to pass legislation which requires waste flow to be directed to the Bath Landfill, including all wastes collected at any transfer stations in the County.

As a measure designed to aid neighboring planning units, any Flow Control legislation that the County may enact should be written to include provisions for IMA (Inter Municipal Agreements). This will allow the County to continue to aid these neighboring planning units that do not have the infrastructure to handle their waste. Presently, the County is entered into such an agreement with the City of Middletown. Other planning units would also be allowed this opportunity.

The Division has been authorized to, and has completed, a draft flow control law. This draft law has been presented to the legislature for review and consideration.

5.5 Selection of Integrated Solid Waste Management System

Several waste management options were outlined in the previous Chapter. This section will provide the solid waste management technologies the County has decided to utilize and consider throughout the planning period.

Steuben County will continue to accept non-recyclable municipal solid waste at the Bath Sanitary Landfill. The practice of landfilling of these wastes has been, and will remain, a

reliable, environmentally-sound means of disposal within the county. Landfilling is a stable source of revenue to the local economy, is environmentally sound.

As discussed in Chapter 4, the County has been collecting the gas produced in the landfill and creating energy and electricity for the town of Bath, New York. The landfill will continue to utilize this process for it is economically feasibility for the community and gas emissions reduction capacity.

The landfill also has a leachate pre-treatment facility which provides a safe alternative to disposing of raw leachate created in the Steuben County Landfill. This facility has had great success in treating the leachate and will continue to do so throughout the planning period.

The County will continue to monitor anaerobic digestion options as a way to divert municipal solid waste, and specifically a way to more effectively manage Organics. This process also uses gas produced in the landfill for electricity production or the gas can be converted to high BTU natural gas when the process is complete. Anaerobic digestion may be economically and environmentally feasible because it provides consistent power, reduces Greenhouse Gases and odor, protects water quality, is renewable, and produces valuable by-products. The County owns sufficient land for development of a digester project, and would like to supplement the fuel to the LFGTE if possible. We will continue to consider this technology a viable supplement to the landfill.

The County will continue to improve the data collection and information dissemination with regards to Organics. Venturing into the management of the remaining organics at this point would require a significant investment and is not seen to be necessary. We will however closely monitor the technologies and volumes and seek to improve the diversion rates when possible.

The County also will continue to manage special wastes through special programs, such as Household Hazardous Waste (HHW) events. Programs such as this vary across the country but they include both educational and collection components. Drop-off events are provided each year and the County will continue to run programs during the planning period when feasible. The county will continue to operate its source separated recycling system, while routinely investigating the feasibility of a more user friendly system.

Chapter 6 – Plan Administration

LSWMP draft implementation schedule (including status-to-date 2010 – 2017)

*The implementation schedule is provided as a guideline, but it is subject to change. There are certain external factors that may affect the timing of these activities, including State and Federal Regulation changes, changes in technology, the economy, legislative approvals and decisions, and budgetary considerations.

Year	Activity	Expected Result	Status
2010	Submit modification to the Department for Extension of Planning Period	Receive extension within next year	On hold
	Commence delivery of landfill gas to the on-site landfill gas to energy facility.	Recover energy and receive revenues from the sale of power generated from landfill gas.	Complete – plant operational
	Release RFP for usage of excess waste heat from Gas to Energy Facility	Receive and evaluate proposals for possible projects, and follow-up with contract negotiations if appropriate	Failed to reach agreement with local respondent for AD project
	Tour existing facilities in area to research Product Reuse and Collection Center	Develop ideas for our own project.	Complete Had plan to build facility rejected. Attempting agreement with ReStore
	Adopt resolution supporting legislation for expanded manufacturer responsibility for E-Waste	Support the Product Stewardship movement.	Complete

	Receive final determination on bulk transport of used oil by County to oil burning highway shops	Improve used oil transport	Complete
		efficiency within the County.	Approved, but presently use contractor
	Prepare local flow control law for possible consideration by the	Stabilize economics of the	Complete
	County Legislature	County's integrated solid waste management system and programs.	Denied by legislature
	Extend program accepting Agricultural Plastics at landfill	Give farmers opportunity to	Complete
	A tighted hard a transfer of the tighted hard a transfer of th	utilize program, improve our sample size for study	Allow free landfill disposal of Ag Plastics.
2011	Receive approval from the	Extend Planning	On Hold
	Department for Extension of Planning Period	Period.	
	Enhance existing Recycling Data Survey	Improve response to	Complete
		existing survey.	Do annual survey recipient update.
	Potentially enter in to contract with developer for utilization of	Develop project that will utilize	Complete
	excess waste heat at Gas to Energy Facility	waste heat.	Failed to reach agreement for AD project
	Identify additional needs for Organics management based on	Identify areas to focus efforts, i.e.	Complete
	Recycling Data Survey	Bioreactor, composting, etc.	Did not identify need for infrastructure. Complete
	Evaluate demand for full time.	Determine that	Full time
	Evaluate demand for full-time E- Waste Recycling program	Determine that full time program will be used by residents	program was instituted.

	Make purchase of (used) oil tanker for bulk transport of used oil to highway shops with oil burners	Reduce likelihood of spills, increase efficiency of oil transport	Truck was not purchased, contractors utilized
	Renew agreements with Tioga and Middletown	Maintain steady flow of MSW to landfill	Middletown yes, Tioga went private after flood
	Compile data collected during Ag Plastic program and evaluate feasibility of implementing recycling program	Make decision on if/how to pursue Ag Plastic recycling	Complete 40 ton max/year. Interest waning.
	Evaluate resources and demand for a Product Reuse Collection and Distribution Center	Make decision on whether or not to pursue	Complete Building was located for facility, was vetoed by Commissioner
2012	Evaluate markets and conduct cost/benefit analysis on C&D debris recycling program	Make decision on whether or not to pursue	Complete. Cheaper to landfill locally
	Implement local Flow Control law if legislation passed	Secure economics of Landfill	Not approved by legislature.
	Begin Ag Plastic recycling program, if determination is made to proceed	Enter into recycling markets for Ag Plastics	Complete. Markets not viable.
	Revise focus on Recycling Survey recipients to increase response rate - Organics	Improve response rate and data quality of Organics recycling in the County	Complete. Local generators contacted. Survey response good.

	Prepare and file landfill permit renewal application with the Department	Secure permit necessary to continue to meet the disposal needs of the County	On Hold
2013	Evaluate feasibility of developing training program for residents on Backyard Composting	Evaluate demand, look to team up with other orgs.	Complete Determined demand is low.
	Make decision on C&D debris Begin search for	Complete	
	recycling program based on markets and cost/benefits analysis	grinders, etc., or shelf idea	Not viable financially. Idea shelved.
2014	Revise focus on Recycling	Improve	Complete
	Survey recipients to increase response rate – Grocery Stores	response rate and data quality of Grocery Store recycling in the County	Ongoing effort to keep list of businesses updated.
2015	Begin working on future landfill	Begin contact	Ongoing
	expansion planning	with DEC, consulting engineers	
	Enhance existing Recycling Data Survey	Ensure that survey captures up-to-date information from the largest generators in the County	Ongoing effort to keep list of businesses updated.
2016	Reevaluate our handling of Organics in waste stream	Examine current practices, research available technologies	Complete Continued to pursue use for waste head/AD partner.

	Reevaluate resources and demand for Product Reuse, Collection and Distribution Center Revise focus on Recycling Survey recipients to increase response rate – Scrap Metal	Do cost/benefit analysis Improve response rate and data quality of Scrap Metal recycling in the County	Economy of scale is low. Complete Awaiting direction from legal department. Complete. The few scrap metal handlers in the area are responsive.
2017	Reevaluate Flow Control legislation, if not previously enacted	Decide whether enacting Flow Control is necessary	Complete Not approved through legislature.
	Reevaluate resources and demand for a Product Reuse Collection and Distribution Center	Make decision on whether or not to pursue	Plan is to release RFP for ReUse partner.
2018	Submit expansion request to the Department for future landfill expansion	Secure permitted landfill airspace suitable to meet the plans of the County	In process
	Reevaluate and improve Ag Plastics recycling program	Look to increase diversion amounts of Ag Plastic	
	Revise focus on Recycling Survey recipients to increase response rate – Organics	Improve response rate and data quality Organics recycling in the County	

2019	Submit completed LSWMP draft to Department for approval	Complete draft and submit to the Department for approval	In process – ahead of schedule
	Improve recycling outreach efforts within County.	Increase online presence and increase involvement.	
2020	Receive approved Expansion Permit from the Department for landfill expansion	Begin planning for implementation of approved expansion	
	Revise focus on Recycling Survey recipients to increase response rate in a particular industry/area (to be determined)	Improve response rate and data quality of recycling in the County in an area that we determine needs improvement	
2021	Economic and demand-based evaluation of HHW program	Provide appropriate level of services	Implement full time program or continue with events
	Monitor development of legislation enhancing producer's responsibility and offer support.	Lend vocal support to Product Stewardship movement.	

	Remain in-tune with NYSASWM efforts to further Product Stewardship	Maintain awareness of what is going on in the industry	
	Promotion of recycling at schools and special events, as much as staffing level permits	Look for cost effective ways to increase outreach programs	Increase Recycling participation
2022	Evaluate Solid Waste staffing levels and continue to optimize with revenues and needs, including regulatory compliance.	Offer best service we can afford to provide to residents of County	Hire additional staff if funding allows and need demands.
	Continue cooperation with local outlets for sharps disposal	Continue to provide information to residents	
	Keep in contact with neighboring municipalities regarding solid waste needs, i.e. IMAs	Offer outlet to neighboring counties for solid waste services, if needed	

	Expand landfill gas collection system as needed	Provide additional gas to on-site landfill gas to energy facility, which may result in future expansions of that facility	
2023	Continue to submit LSWMP Compliance Reports during every odd numbered year	Keep the Department updated on the County's progress toward LSWMP goals	
	Reevaluate and improve Ag Plastics recycling program	Look to increase diversion amounts of Ag Plastic	
	Revise focus on Recycling Survey recipients to increase response rate – Textiles	Improve response rate and data quality of Textiles recycling in the County	Determine progress towards diversion goals
	Evaluate needs for new special recycling events	Survey public and listen to needs	Implement new programs where indicated
2024	Begin construction of first newly permitted landfill cell.	Let bid for general contractor to construct Cell 5.	Cell will be providing 5 years of additional landfill space.
	Evaluate possibilities of alternate waste management technologies	Research alternatives to landfill operations	Determine which disposal technology should be utilized for rest of plan duration
2025			

	Reevaluate and improve Ag Plastics recycling program	Look to increase diversion amounts of Ag Plastic	Implement improved plan
	Revise focus on Recycling Survey recipients to increase response rate in a particular industry/area (to be determined)	Improve response rate and data quality of recycling in the County in an area that we determine needs improvement	Receive better data
2026	Economic and demand-based evaluation of HHW program	Evaluate economics and demand for HHW services	Provide services if feasible
	Monitor development of legislation enhancing producer's responsibility and offer support	Lend support to Product Stewardship movement	
	Remain in-tune with NYSASWM efforts to further Product Stewardship	Maintain awareness of what is going on in the industry	
2027	Promotion of recycling at schools and special events, as much as staffing level permits	Look for cost effective ways to increase	Implement best options

	outreach programs	
Evaluate Solid Waste staffing levels and continue to optimize with revenues and needs, including regulatory compliance.	Determine needs	Offer best service we can afford to provide to residents of County

2028	Determine if available constructed landfill space requires construction in 2029.	Review fill progression and survey data to determine available space.	Design cell 6
	Keep in contact with neighboring municipalities regarding solid waste needs, i.e. IMAs	Offer outlet to neighboring counties for solid waste services, if needed	

Expand landfill gas collection system as needed	Provide additional gas to SREC's on-site landfill gas to energy facility, which may result in future expansions of that facility	
Develop LSWMP for next planning period	Evaluate state of the system, technologies available, financial aspects, and solicit public input	Author plan to manage County Solid Waste needs until 2039.

Section II - State Environmental Quality Review (SEQR) Determination

The plan may need to undergo the SEQR process prior to final adoption by the Steuben County Legislature.

Section III: Public Participation/Notification to Neighboring Jurisdictions

Participation and input by both the public and neighboring planning units is welcomed and encouraged. In an effort to make the plan available to interested parties, an early version of a draft plan was posted on the County's website as a .pdf document for the time period of May 4, 2010 to August 24, 2010. This plan was shelved and a fully reworked version was created.

The availability of the draft plan was communicated to the public through a legal notice published in the local newspapers in October, 2018. Neighboring planning units were contacted by letter on October 5, 2018. The notice sent to neighboring counties can be found in Appendix H.

A public information meeting was held on October 24, 2018. The meeting minutes are included as Appendix G. A copy of the notice that was distributed is included as Appendix H, and proof of public notice is included Appendix I.

Section IV: Plans for SWMP Modification Distribution

As outlined in Section V, the final plan will be posted on the County's website as a .pdf document. The availability of the final plan will be communicated through a legal notice published in the local newspaper and neighboring planning units will be contacted by letter.

Section V: Resolution Adopting the SWMP Modification

Upon final approval by the Department, all comments and responses will be attached to the plan and presented to the Steuben County Legislature for ratification. The resolution will be added to the plan and a final copy will be forwarded to the Department.



RESOLUTION STEUBEN COUNTY LEGISLATURE BATH, NEW YORK

DATE APPROVED : PERM. NO. :	_	02/25/2019 045-19	10		INTRO. INTRO.	MH7.7 (5)	13-12 02/25/2019
INTRO. BY:	_G	. Swackhamer		SECOND	ED BY:	R. Weaver	-
VOTE: ROLL CALL ADOPTED ACCLAMATION	X X	YES NO ABSENT ABSTN'D	9267 0 605 0	AMENDED TABLED POSTPONED REF'D/COM		LOST W/DRWN	
COMMITTEES: P. W. Y: 4	N:	0	Y:	N:		Y:	N:

TITLE: ADOPTING THE STEUBEN COUNTY LOCAL SOLID WASTE MANAGEMENT PLAN MODIFICATION.

WHEREAS, Steuben County is the planning unit responsible for developing a Local Solid Waste Management Plan (LSWMP) pursuant to New York State Conservation Law Section 27-0107 and the State's Local Solid Waste Management Plan Contents regulations, 6 NYCRR Part 366-2; and

WHEREAS, on February 7, 2019 the New York State Department of Conservation (NYSDEC) issued a letter stating that the current draft of the LSWMP constitutes an approvable plan; and

WHEREAS, the Public Works Committee has reviewed the Final LSWMP and recommends approval of this resolution.

NOW THEREFORE, BE IT

RESOLVED, that the Steuben County Final LSWMP is hereby adopted by the County Legislature as the solid waste planning unit for Steuben County effective upon NYSDEC's final approval of the LSWMP; and it is further

RESOLVED, that the County will implement the solid waste management programs, projects and plans as identified in the LSWMP; and it is further

RESOLVED, that the County will submit annual planning unit reports and biennial updates; and it is further

RESOLVED, the Public Works Department is directed to send notice of the availability of the LSWMP to adjacent solid waste planning units and will ensure that an electronic copy of the final LSWMP is made available for public review on the County's website; and be it further

RESOLVED, certified copies of this resolution shall be forwarded to the Commissioner of Public Works, the Planning Director and Richard Clarkson, Director, Bureau of Solid Waste Management, Division of Materials Management, New York State Department of Environmental Conservation, 623 Broadway, 9th Floor, Albany, NY 12233-7260.

Appendix B

LEGAL NOTICE

ALL LOADS MUST BE TARPED

OPERATING HOURS

BATH LANDFILL: Monday -- Saturday 7:30 AM - 3:30 PM.

ERWIN, HORNELL & WAYLAND TRANSFER STATIONS: Tuesday - Saturday 7:30 AM - 3:30 PM. CLOSED MONDAY

RATES

	<u>KATES</u>	
	R PRE-PURCHASED TICKETS ARE NOW ACCEPTED AT ALL SITES	
GARBAGE, BAGS: 30 gallon bag or les	s (or equivalent amount)	\$3.00/BAG
	Landfill	
GARBAGE FROM TRANSFER STA	TIONS, in transfer trailers, to Bath Landfill	\$33.00/TON
	n, Hornell, & Wayland Transfer Stations	
MINIMUM FEE FOR ALL WEIGH	ED LOADS	\$15.00/LOAD
	NT PLANT SLUDGE	
LEACHATE By special permit only.	Approval required prior to deliveryLOW - MEDIUM STRENG	гн \$10.00/TON
	High streng	
ASBESTOS Bath Landfill only.	Approval required prior to delivery	\$250.00/TON
BUDS Bath Landfill only	Contaminated SoilApproval required prior to deliver	y. \$20.00/TON
	Processed Construction DebrisApproval required prior to delive	ry. \$15.00/TON
	Auto Fluff, disposal onlyApproval required prior to delive	ry. \$12.00/TON
	Auto Fluff, picked up and disposed by Steuben County within 100 Mile	es \$23.00/TON
CERTIFIED SCALE WEIGHT		\$5.00
DIG OUT FEE		\$25.00
MUNICIPAL RATES:		
LOADS TO TRANSFER ST	<u> </u>	\$44.00/TON
<u>C & D (to Bath Landfill)</u> .		\$30.00/TON
ASBESTOS (to Bath Lane	<u>lfill)</u>	\$200.00/TON
TIRES must be separate from othe	r waste and rims must be removed	
	cluding 20". All Sites	42 50/FACH
2) Truck/Tractor Tires All Sites	\$300.00/TON / \$1	5 OO MINIMUM
3) Truckload quantities up to a	and including 20" tires at Bath Landfill only	WOT/NO 00C\$
•	-	
DEER		\$4.00/EACH
COUCHES, BOX SPRINGS, MATT	RESSES, CHAIRS, DRESSERS, SINKS, CABINETS, TOILETS	\$5.00/EACH
	EON REMOVAL	
TELEVISIONS/MONITORS		\$15.00/EACH

MAJOR APPLIANCES AND SCRAP METAL: NO CHARGE

Metal stoves, dishwashers, washer/dryers, hot water tanks, furnaces and miscellaneous scrap metal. Only residents may use Transfer Stations for this service. All commercial haulers and all loads larger than a pickup truck must go directly to the Bath Landfill.

RECYCLABLE MATERIALS: NO CHARGE

NEWSPAPER: Must be dry. May be mixed with magazines, junkmail, glossies, catalogues & telephone books.

CORRUGATED CARDBOARD: Must be flattened. Cereal or soap/detergent boxes are acceptable. Waxy surfaces are unacceptable.

CLEAR GLASS AND GREEN GLASS: May have labels. Metal/plastic tops must be removed.

#1 and #2 PLASTIC: Such as clear and colored jugs and bottles. Must be clean and free of foodstuffs. Oil containers are acceptable. Labels need not be removed.

TIN CANS: Must be clean and free of foodstuffs. Labels need not be removed.

ELECTRONICS: (except televisions and monitors): Basic household electronics.

Recyclables must be inspected by Transfer Station personnel.

Wet or contaminated will be charged as solid waste.

TICKETS MUST BE PURCHASE BEFORE GOING TO THE LANDFILL OR TRANSFER STATIONS.

Residents may purchase only \$15 and \$20 tickets at most Municipal Clerk offices. Tickets for \$15, \$18, \$20, \$40, \$160, and \$285 are available at the Steuben County Public Works Office, 3 E. Pulteney Square, Bath, NY. \$15 tickets are available at: Hatfield's and Tops in Bath; Cy's Shurfine in Arkport; Canisteo Shurfine in Canisteo, North Main Lumber(HEP Sales)I in Hornell; Dandy Mini Mart, Corning Building Company in Corning; Food Mart in Wayland.

COMMERCIAL HAULERS MUST HAVE A STEUBEN CO. PERMIT WITH A \$500.00 SECURITY DEPOSIT.

Appendix C

Steuben County

Department of Public Works

County Office Building 3 E. Pulteney Square Bath, New York 14810

Vincent Spagnoletti Commissioner (607) 664-2460 (607) 664-2167

2017 Recycling Tonnage Yearly Report Form

Name of Organization: Recycling Contact Person:	
Recyclables Paper	Volumes (cubic yards or tons)
Newspaper Corrugated Cardboard Office Paper Other (specify)	
Glass Clear, Green and Brown Other (specify)	
Metal Metal Cans White Goods Scrap Metal	
Plastics Plastic Containers (#1 – 7) Plastic Film and Bags Other (specify)	
Organics Yard Waste Food Waste Biosolids Other (specify)	
Miscellaneous Sludge/Sewage/Ash Used Oil Oil Filters Tires Electronics Textiles C&D Debris Other	

Appendix D

NAME	category	COMPANY NAME	ADDRESS		STATE	ZIP
Vr. Justen Wade	auto	Advanced Auto Parts Store	7451 Seneca Road	Homell	NY	14843
	manuf	Advanced Transit Manufacturing	14 South Main Street		NY	14823
		AIR FLOW MFG CO INC	PO BOX 289 MAIN STREET		NY	14873
		AIR VENT ALUMINUM PRODUCTS	14 MAIN		NY	14807
		ALL SEASON TIRE	SR 415 N BOX 494		NY	14810
		ALLENS AUTO	135 E FRONT STREET		NY	
		BATH AUTO PARTS	24 LACKAWANNA STREET	BATH	NY	1481
Susan Daniels		BATH GAS & ELECTRIC	PO BOX 310	BATH	NY	1481
		BENNETTS AUTO PARTS	ROUTE 415N		NY	14810
		BENNETTS BUICK-CHEV-GEO-OLDS CORP	7 LACKAWANNA AVENUE		NY	14572
	scrap	Burnan's Salvage	9336 Bellman Road	Lindley	NY	1485
		CAMPBELL-SAVONA SCHOOL	64 E LAMOKA AVENUE	SAVONA	NY	14879
	scrap	Carrier Salvage and Recycling	2440 Wetmore Road	Branchport	NY	14418
	wine	Chateau Frank	9683 Middle Road	Hammondsport	NY	14840
		CITY OF CORNING DPW	DENISON PARKWAY	CORNING	NY	14830
		CITY OF HORNELL	108 BROADWAY	HORNELL	NY	14843
		CL HAINES MFG CO	20 CARRINGTON STREET	AVOCA	NY	1480
	manuf	CLARK SPECIALTY CO INC	8440 ROUTE 54	HAMMONDSPORT	NY	14840
	100000000	COLONIAL MOTORS	SR 54	BATH	NY	14810
		CORNING COMMUNITY COLLEGE	SPENCER HILL ROAD	CORNING	NY	14830
	med	CORNING HOSPITAL	176 DENISON PARKWAY	CORNING	NY	14830
		COSTAS AUTO BODY	SR 414	CORNING	NY	14830
		CROWLEY FOODS INC	25 HURLBUT STREET	ARKPORT	NY	14807
100000	-	CRYSTAL CITY PARTY CENTER	242 E CORNING ROAD	CORNING	NY	14830
		DELS QUALITY EXHAUST	374 W MORRIS STREET	BATH	NY	14810
No. of the last of	wine	Dr. Konstantin Frank Vinifera Wine Cellar	9749 Middle Road	Hammondsport	NY	14840
TED PAWLIK		DRESSER RAND CO	HAMILTON STREET	PAINTED POST	NY	14870
I LO I MYTH	-	DUANES RADIATOR SHOP	9 N HORNELL STREET	CANISTEO	NY	14823
GREG GEORGEK		DYCO ELECTRONICS INC	INDUSTRIAL PARK	HORNELL	NY	14843
JILO GEUNGEN	-	ERWIN EASY LUBE	321 S HAMILTON	PAINTED POST	NY	14870
	1	FAGANS INC	W MORRIS STREET	BATH	NY	14810
		FIRESTONE TIRE & SERVICE CENTERS	100 VICTORY HIGHWAY	PAINTED POST	NY	14870
		FIX IT SHOP	5 MAIN STREET	SAVONA	NY	14879
	-	FLETCHER & RICE AUTO SERVICE	STIMSON STREET	CORNING	NY	14830
A DRIVE DECEMBRANT	-	FRANT CORPORATION	380 W MORRIS STREET	BATH	NY	14810
ARBYS RESTAURANT	-	FREY & CAMPBELL INC	87 LAKE STREET	HAMMONDSPORT	NY	14840
	1	GARDNER AUTO PARTS INC	CUNNINGHAM CREEK ROAD	CANISTEO	NY	14823
	-	GOODRICH BODY SHOP	7255 WORTH ROAD	BATH	NY	14810
		GOODYEAR AUTO SVC CENTER	20 DENISON PARKWAY	CORNING	NY	14830
	-	GREENWOOD CENTRAL SCHOOL	MAIN STREET	GREENWOOD	NY	14839
				ARKPORT	NY	14807
		GRISWALDS ETR SERVICE	DANSVILLE ROAD	WAYLAND	NY	14572
	manuf	GUNLOCKE CO INC	LACKAWANNA AVENUE			
	med	Guthrie Medical	130 Centerway	Corning	NY	14830
		HAMMONDSPORT CENTRAL SCHOOL		HAMMONDSPORT	NY	14840
ROBERT BENNETT		HAVERLING CENTRAL SCHOOL	25 ELLAS AVENUE	BATH	NY	14810
	wine	Heron Hill Winery	9301 County Route 76	Hammondsport	NY	14840
		HORNELL FURNITURE OUTLET	40 BROADWAY MALL	HORNELL	NY	14843
	scrap	HORNELL WASTE MATERIAL CO INC	SHAMUT YARDS	HORNELL	NY	14843
		HUBURTUS SERVICE	28 WEST MAIN	CANISTEO	NY	1482
		HULTS AIR CONDITIONING HEATING & REF	10798 W CATON ROAD	CORNING	NY	14830
						-
	1					
	med	Ira Davenport Memorial Hospital	7571 State Route 54	Bath	NY	14810
		JASPER-TROUPSBURG CENTRAL SCHOOL	MAIN STREET	JASPER	NY	14885
		JRS AUTO BODY & CAR CLEANING	BUCK SETTLEMENT ROAD	BATH	NY	14810
		KENS AUTO COLLISION	15 W MAIN STREET	CANISTEO	NY	14823
		KEUKA CONSTRUCTION CO	196 WEST SIXTH STREET	CORNING	NY	14830
	wine	Keuka Lake Vineyards	8882 County Route 76	Hammondsport	NY	14840
MS DUELL		KMART	420 W MORRIS STREET	BATH	NY	14810
		KNIGHT SETTLEMENT SAND & GRAVEL	KNIGHT SETTLEMENT ROAD	BATH	NY	14810
		LAMACCHIA FORD	195 SENECA STREET	HORNELL	NY	14843
		LANE METAL PRODUCTS CO INC	MAY STREET	BATH	NY	14810
		MAPLE CITY DODGE INC	AIRPORT ROAD	HORNELL	NY	1484
		MARVIN APPLIANCE CENTER	48 W STEUBEN STREET	BATH	NY	14810
	manuf	MERCURY AIRCRAFT INC	17 WHEELER STREET	HAMMONDSPORT	NY	14840
	-	MJ WARD & SON INC	PO BOX 747	BATH	NY	14810
	1	MODERN REFRIGERATION	BULLY HILL ROAD	HAMMONDSPORT	NY	14840
		MONRO MUFFLER BRAKE	PULTENEY PLAZA	CORNING	NY	14830
		MONROE MUFFLER BRAKE	365 W MORRIS STREET	BATH	NY	14810
		MONROE MUFFLER BRAKE	ARKPORT ROAD	HORNELL	NY	1484
		MULLERS LAKEVIEW INC	6748 BATH SAVONA ROAD	BATH	NY	1481
RON CONRAD	1	NORTH AMERICAN PHILIPS	SR 54	BATH	NY	1481
TOTA GOTHERD	1	NORTH HORNELL SCHOOL	AVONDALE AVENUE	HORNELL	NY	1484
KAREN SCHU/RANDY JACKSON	1	NYS OFFICE OF GENERAL SVCS	107 BROADWAY	HORNELL	NY	1484
NAME OF THE PARTY		ORLANDOS AUTO BODY	304 WOODVIEW AVENUE	CORNING	NY	1483
	1	OWL HOMES	PO BOX 407	BATH	NY	1481
	1	PARTRIDGES TYPEWRITER EXCHANGE	WHEELER ROAD	AVOCA	NY	1480
		THE THE PERSON OF THE PERSON O	86 WASHINGTON	HORNELL	NY	1484
	-	DETER AUTOMOTIVE REDVICE				1481
2 - 24		PETES AUTOMOTIVE SERVICE	7986 State Poute 54			
Roger-Cole	manuf	PETES AUTOMOTIVE SERVICE Phillips-Lighting	7265 State Route 54	Bath	NY	
Roger Cole		PETES AUTOMOTIVE SERVICE Phillips-Lighting PIZZA HUT OF BATH	7265-State Route 54 357 W MORRIS STREET	Bath BATH	NY	1481
Roger Cole	manuf	PETES AUTOMOTIVE SERVICE Phillips Lighting PIZZA HUT OF BATH Pleasant Valley Wine Company	7265-State Route 54 357 W MORRIS STREET 8260 Pleasant Valley Road	BATH Hammondsport	NY NY	14810
Reger Cole		PETES AUTOMOTIVE SERVICE Rhillipe-Lighting PIZZA HUT OF BATH Pleasant Valley Wine Company PRATTSBURGH AUTO	7265-State-Route 54 357 W MORRIS STREET 8260 Pleasant Valley Road 50 N MAIN	Bath BATH Hammondsport PRATTSBURGH	NY NY NY	14810 14840 14873
Roger-Cole		PETES AUTOMOTIVE SERVICE Phillips Lighting PIZZA HUT OF BATH Pleasant Valley Wine Company	7265-State Route 54 357 W MORRIS STREET 8260 Pleasant Valley Road	BATH Hammondsport	NY NY	14810

		RI CALLAHAN	1150 CR 19	BEAVER DAMS	NY	14812
		S&H AUTOMOTIVE	242 GRAY LANE	PAINTED POST	NY	14870
		SALVATION ARMY	745 W AVENUE	ROCHESTER	NY	14611
-	grocery	SAVE-A-LOT	ROUTE 54 BONADY PLAZA	BATH	NY	14810
	grocery	SAVINOS AUTOMOTIVE & RADIATOR SVC	511 E HIGH STREET	PAINTED POST	NY	14870
	scrap	Schulman Co. Inc	197 East Washington Avenue	Elmira	NY	14901
	эсгар	SONNYS SERVICE	47 MAIN STREET	AVOCA	NY	14809
-		SOUTHERN OIL CO	HAMMONDSPORT ROAD	BATH	NY	14810
	food	Southern Tier Hide and Tallow	3385 Lower Maple Avenue # 1	Elmira	NY	14901

Kevin Rice Elton Badeau Anthorly Colomaio Ron Gillespie Luke Turek Lynn Wheaton James Campbell Michael Wetherbee	NAME Phil Dickson Scott Slavick Ed Phelps Suzanne Dunn Neil Hertzler Constance Gwinn John Istler Doug Gross Mike Ford Pete Lauzze
School School School School School School School	recycle scrap manuf constr manuf med manuf manuf manuf
Addison Central School District Avoca Central School District Bath School District Corning-Painted Post School District Hornell City School District Jasper-Troupsburg Central School Prattsburgh Central School District Wayland-Cohocton Central School District	CATEGORY COMPANY NAME Dickson Environmental Services Dickson Environmental Services Dickson Environmental Services Dickson Environmental Services Wegmans Safety-Kleen Wegmans Safety-Kleen Wegmans Wegman Wegman Kreft Foods Doug Gross manuf Multi Media Services Printers St. James Mercy Hospital Frey and Campbell Sirianni Hardwoods Panelogic inc
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krice@addisoncsd.org ebadeau@avocascd.org acolomalo@bathcsd.org rgillesple@copmail.com henv.turek@homeilcsd.org campatpratts@prattsburghcsd.org Mwetherbee@wccsk12.org	email mayrayeski@gamail.com sort slavick@cassella.com hornellsvillerecycling@amail.com suzanne.dunn@wegmans.com Nell.Hertzler@asfety-kleen.nel. constance.gwinn@walmart.com jistler@kraft.com info@dougarossconstruction.com info@dougarossconstruction.com info@mmsny.com info@mmsny.com info@mmsny.com info@dougarossconstruction.com info@dougarossconstruction.com

NAME	
CATEGORY COMPANY N. manufacturing Air Flow Mfg. healthcare Absolut Care is manufacturing Babcock Com healthcare Founders Pav manufacturing Panelogic Inc. service Sitel Corp. manufacturing Storflex Fixtur manufacturing World Kitchen auto Simmons-Roc auto Simmons-Roc auto Simmons-Roc auto Simmons-Roc auto Griffith Energy Steuben Gas.	
CATEGORY COMPANY NAME ADDRESS Ad South Main Street manufacturing Babcock Company manufacturing Babcock Company healthcare manufacturing Babcock Company Founders Pavillon manufacturing Panelogic Inc. Sitel Corp. Sitel Corp. Stel Corp. Storflex Fixture Corporation manufacturing Transportation and Transit Assoc 1 William K. Jackson Lane manufacturing World Kitchen Inc. Simmons-Rockwell Simmons-Rockwell Simmons-Rockwell Sinanni Hardwoods The Krog Corp. Steuben Gas Storage ADDRESS 40 South Main Street A0 South Main Street A6 Baker Street To Canada Road A92 West Pulteney Street To Canada Road To Canada Road To Canada Road Steuben Street To Canada Road State Route 66 State Route 54 Denison Parkway East To 24 State Route 54 To 25 State Route 54 To 26 State Route 54 To 27 State Route 54	
ADDRESS 40 South Main Street 101 Creekside Drive 36 Delaware Ave 205 East First Street 366 Baker Street 101 Canada Road 392 West Pulteney Street (1 William K. Jackson Lane 1 Steuben Street 1160 County Route 66 State Route 54 912 Addison Road 8 Denison Parkway East 7324 State Route 54 4979 Downs Road	
CITY Prattsburg Painted Post Bath Corning Corning Painted Post Corning Hornell Corning Hornell Bath Painted Post Corning Corni	
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	Roger Cole	Mr. Justen Wade							Scott Lyons													NAME
manuf	manuf	auto	med	manuf	scrap	manuf	scrap	scrap	scrap	wine	wine	wine	wine	wine	wine	wine	wine	med	med	med	food	CATEGORY
Advanced Transit Manufacturing	Phillips Lighting	Advanced Auto Parts Store	CORNING HOSPITAL	MERCURY AIRCRAFT INC	HORNELL WASTE MATERIAL CO I SHAMUT YARDS	GUNLOCKE CO INC	Schulman Co. Inc	Buman's Salvage	Swarthout Recycling Services	Chateau Frank	Ravines Wine Cellars	Keuka Lake Vineyards	Dr. Konstantin Frank Vinifera Wine C 9749 Middle Road	Chateau Renaissance Wine Cellars 7494 Fish Hatchery Road	Heron Hill Winery	Bully Hill Vineyards	Pleasant Valley Wine Company	Ira Davenport Memorial Hospital	St. James Mercy Hospital	Guthrie Medical	Southern Tier Hide and Tallow	CATEGORY COMPANY NAME
14 South Main Street	7265 State Route 54	7451 Seneca Road	176 DENISON PARKWAY	17 WHEELER STREET	I SHAMUT YARDS	LACKAWANNA AVENUE	197 East Washington Avenue	9336 Bellman Road	1514 County Road 19	9683 Middle Road	14630 New York 54	8882 County Route 76	C 9749 Middle Road	7494 Fish Hatchery Road	9301 County Route 76	8843 Greyton H. Taylor Memoria Hammondsport NY	8260 Pleasant Valley Road	7571 State Route 54	411 Canisteo St.	130 Centerway	3385 Lower Maple Avenue # 1	ADDRESS
Canisteo	Bath	Hornell	CORNING	HAMMONDSP	HORNELL NY	WAYLAND	Elmira	Lindley	Beaver Dams	Hammondsport NY	Hammondsport NY	Hammondsport NY	Hammondsport NY	Bath	Hammondsport NY	ik Hammondsport	Hammondsport NY	Bath	Hornell	Corning	Elmira	CITY
NY	NY	N	NY	NY	NY	NY	NY	NY	NY	NY	NY	NY	NY	NY	NY	NY	NY	NY	NY	NY	NY	STATE
	14810	14843	14830	14840	14843	14572								14810				14810	14823	14830	14901-9452	ZIP

Appendix E

COMPOST SITE

LOCATION

Addison (Village) CR 119- (yard debris)

Arkport (Village) YES, not sure of location

Avoca (Village) Reservoir Road (yard debris)

Bath (Town) Also uses Morris Street

Bath (Village) Morris Street (yard debris)

Campbell Town) CR 333 (yard debris)

Canisteo (Village) Yes, CR 128, Canisteo Center Road

Corning (City) Corning picks up brush bi-weekly

Corning (Town) YES, Clark Street, Yard debris

Erwin (Town) Addison Road

Hornell (City) Yes

Hornellsville (Town) Yes, use City of Hornell

North Hornell (Village) Yes, use City of Hornell

Riverside (Village) Corner of Hamel & Water St.

South Corning (Village) Sewage plant, River Road

Urbana (Town) behind town barn (back Valley Rd)

Wayland (Village) Yes, Village Barn, 3rd Ave. ext., Wayland

Wayne (Town) YES, open Fri, Sat, and Monday

Dickson Farms Bonny Hill Road, Bath, NY

STEUBEN COUNTY
SOLID WASTE MANAGEMENT PLAN
PUBLIC MEETING
Wednesday, October 24, 2018
6:00 p.m.
Legislative Chambers
County Office Building
Bath, New York

MINUTES

Present:

Vincent Spagnoletti, Commissioner of Public Works Steve Orcutt, Assistant Commissioner, Solid Waste Division

Richard Bills, Environmental Project Coordinator Brenda Mori, Clerk of the Legislature

The public meeting was convened at 6:00 p.m.

With no members of the public showing by 6:15 p.m., the public meeting was declared closed.

Respectfully submitted by,

Brenda K. Mori

Clerk of the Legislature

Appendix G

Steuben County

Department of Public Works

County Office Building 3 E. Pulteney Square Bath, New York 14810

Vincent Spagnoletti Commissioner

Phone Fax

(607) 664-2460 (607) 664-2167

MEMORANDUM

TO:

County Legislators

FROM:

Steve Orcutt - Assistant Commissioner



DATE:

October 5, 2018

SUBJECT: 2018 Draft Solid Waste Management Plan Modification

Notice of Public Information Meeting

The Public Works Department will be holding a public information meeting for the 2018 Draft Solid Waste Management Plan on October 24, 2018 in the Steuben County Legislative Chambers at 6:00 PM. The Department will be receiving public comments until November 21, 2018.

The 2018 Draft Solid Waste Management Plan is available for public review on the Steuben County website.

Thank you.

Cc:

J. Wheeler - County Manager

M. Alger - Deputy County Manager

B. Mori - Clerk of Legislature

V. Spagnoletti - Commissioner Public Works

Steuben County

Department of Public Works

County Office Building 3 E. Pulteney Square Bath, New York 14810

Vincent Spagnoletti Commissioner

Phone Fax

(607) 664-2460 (607) 664-2167

MEMORANDUM

TO:

Clerks of County Legislature, Board of Legislators & Board of Supervisors

FROM:

Steve Orcutt, Assistant Commissioner-Landfill

DATE:

October 5, 2018

SUBJECT: Draft Local Solid Waste Management Plan Modifications

Please be advised that the Draft Local Solid Waste Management Plan Modification for Steuben County is available for review and comment on the County's website: www.steubencony.org.

A public information meeting will be held on October 24, 2018 at 6:00 PM in the Steuben County Legislative Chambers.

All written comments must be received by November 21, 2018.

Steuben County DPW 3 E. Pulteney Square Bath, NY 14810

Attention: Steve Orcutt, Assistant Commissioner-Landfill

Thank you.

cc:

Brenda Riehle, Allegany County Clerk, Board of Legislators Linda Palmer, Chemung County Clerk of County Legislature Michele Rees, Livingston County Clerk, Board of Supervisors Kristin Mueller, Ontario County Clerk, Board of Supervisors Stacy Husted, Schuyler County Clerk of County Legislature Connie Hayes, Yates County Clerk of County Legislature

Appendix I

Public notrce

NOTICE OF PUBLIC INFORMATION M

Affidavit of Publication

STATE OF NEW YORK } COUNTY OF STEUBEN }

SS

Richard Emanuel, being duly sworn, says:

That he is Publisher of the The Leader, a daily newspaper of general circulation, printed and published in Corning, Steuben County, New York; that the publication, a copy of which is attached hereto, was published in the said newspaper on the following dates:

October 05, 2018

That said newspaper was regularly issued and circulated

on those dates. SIGNED:

Publisher

Subscribed to and sworn to me this 5th day of October 2018.

Becky A. Post, Notary Public, Steuben County, New York

My commission expires: July 21, 2022

02124018 00189145

Debbie Cotter STEUBEN COUNTY DEPARTMENT 3 East Pulteney Square Bath, NY 14810

NOTICE OF PUBLIC INFORMATION MEETING FOR THE STEUBEN COUNTY 2018 DRAFT SOLID WASTE MANAGEMENT PLAN MODIFICATION

NOTICE IS HEREBY GIVEN, that the Steuben County Department of Public Works will hold an Informational Meeting at the Steuben County Legislative Chambers, Steuben County Office Building, Bath, New York on the 24th day of October, 2018 at 6:00 PM to receive public comments on the Steuben County 2018 Draft Solid Waste Management Plan Modification.

PLEASE TAKE NOTICE THAT said plan is now on file and open to public inspection and review with comments on the Steuben County Website: www.steubencony.org , and also available at the Steuben County Department of Public Works, 3 East Pulteney Square, Bath, New York during normal business hours, for a period of 45

PLEASE TAKE FURTHER NOTICE that written comments relative to said draft solid waste management plan modification may also be submitted to the Department of Public Works, 3 East Pulteney Square, Bath, New York 14810, attention: Steve Orcult, Assistant Commissioner, Landfill. Written comments will be accepted until November 21, 2018

Dated: October 4th, 2018 Bath, New York

> ASSISTANT COMMISSIONER, LANDFILL STEUBEN COUNTY DEPT OF PUBLIC WORKS 3 EAST PULTENEY SQUARE BATH, NEW YORK 14810

BECKY A, POST
NOTARY PUBLIC, STATE OF NEW YORK
Registration Ne. 01PO6308199
Cualified in Steuben County
Cermission Expires July 21, 2022

1tz 10/5

0. Frid OPW, Solid Wash Division NA October 00

Auto Sales & Service

CASH FOR CARS: We Buy Any Condition Vehicle, 2002 and New-er. Competitive Offert Nationwide FREE Pick Up! Call Now For a Free Quotel 888-366-5659

Friday, October 5th 8:30am - 3:30pm

Variety of furniture & household items. No early sales!

Help Wanted

PART TIME CUSTOMER SERVICE REPRESENTATIVE

The LEADER is taking applications for a friendly outgoing person to work with our subscribers, carriers, and advertising customers in a very busy office setting. This is a partime entry level position and weekend work will be required. Candidate must be proficient with computers.

Applications are available at The LEADER 34 W Pulteney Street, Corning Or email your resume to:

<u>bhilton@the-leader.com</u>

Legals

REQUEST FOR PROPOSAL

Public Safety Vehicle

ADVERTISEMENT FOR PROPOSALS

Notice is hereby given that Proposals will be received by the Vice President of Admin-strative Services, Coming Community College until 4:0pm on October 18, 2018 for the purpose of conducting the above referenced request for proposals, according to the specifications on file at:

Coming Community College Attn: Gary Winger, Vice President of Administrative Services 1 Academic Divis Coming, NY 14830

Request for Proposal forms may be obtained from the Vice President's office at the address shown above. Proposals are to be submitted in a sealed envelope addressed to the Vice President at the above address and clearly marked in the lower efficiency of the envelope as "Public Safety Vehicle".

corning Community College reserves the right to reject any and all Proposals and to raive any informality contained in such Proposals.

Dated at Corning, New York, this September 27, 2018.

Gary Winger Vice President of Administrative Services 3tz 10/3, 10/4, 10/5

Legals

NOTICE OF PUBLIC INFORMATION MEETING FOR THE STEUBEN COUNTY 2018 DRAFT SOLID WASTE MANAGEMENT PLAN MODIFICATION

NOTICE IS HEREBY GIVEN, that the Steuben County Department of Public Works will hold an Informational Meeting at the Steuben County Legislative Champers, Steuben County Office Building, Balth, New York on the 24th day of October, 2018 at 6:00 PM to receive public comments on the Steuben County 2018 Draft Solid Wates Management Plan Hodification.

PLEASE TAKE FURTHER NOTICE that written comments relative to said draft solid waste management plan modification may also be submitted to the Department of Public Works, 3 East Pultenoy Square, Bath, New York 14810, attention: Steve Orcuit, Assistant Commissioner, Landfill, Written comments will be accepted until November 21, 2018

Dated: October 4th, 2018 Bath, New York

STEVE ORCUTT
ASSISTANT COMMISSIONER, LANDFILL
STEUBEN COUNTY DEPT OF PUBLIC WORKS
3 EAST PULTENEY SOUARE
BATH, NEW YORK 14810

1tz 10/5

Overnight Guest Service (11pm-7am shift) **Guest Service Clerks** Bell Person Restaurant Assistant F&B Director Dishwasher Great work ethic Weekend/Holiday

availability No phone calls please!!!!

Apply anytime online at ww.watkinsglenharborhotel.com Watkins Glen Harbor Hotel 16 North Franklin Street

SNAP IT and SELL IT











The Leader CLASSIFIEDS

607-937-4651 www.the-leader.com

Appendix J

New York State Department of Environmental Conservation Division of Solid & Hazardous Materials, Region 8

6274 East Avon-Lima Road, Avon, NY 14414-9516 Phone: (585) 226-5411 • Fax: (585) 226-2909

Website: www.dec.nv.gov



April 7, 2010

STATES CUESTY

MAY 1 7 2010

PHASE PROPERTY

Mr. Steven P. Orcutt Assistant Commissioner - Landfill Steuben County Department of Public Works County Office Building 3 E. Pulteney Square Bath, New York 14810

Dear Mr.Orcutt:

RE: Steuben County Solid Waste Management Plan (SWMP) Modification

The New York State Department of Environmental Conservation (Department) staff have reviewed the document entitled: "Solid Waste Management Plan Modification for the Steuben County Planning Unit DRAFT - January 20, 2010" (LSWMP or plan). The Department has determined the document is not yet approvable. Below is a list of comments that specify the matters in which this draft is deficient. Please make the changes necessary to address these comments and re-submit a draft to the Department for second review. If you have question on the comments please do not hesitate to call or e-mail me.

Section 1 – Overview of Steuben County's Current Solid Waste Management System
In order to make this document properly informative, please include the following or similar text between the second and third paragraphs. You should edit or add more information as needed in order to make it fully accurate:

Recycling Program:

Steuben County Local Law #9 of 1991 and its amendments require all generators to source separate recyclables. Recyclables required to be source separated include newspaper, corrugated cardboard, clear glass, tin and #1 & #2 plastic containers. Recyclables collected and accepted at the County's facilities include newspaper, corrugated cardboard, junk mail, magazines, catalogs, white and colored paper, telephone directories, craft paper and bags, tin cans, clear and green glass containers, #1 & #2 plastic containers, scrap metal, white goods. Other recyclables accepted include books, motor oil & oil filters, antifreeze, tires, fluorescent bulbs and propane tanks & cylinders. All recyclables received are processed and marketed to private processors through a private vendor (CECM). Funding for the program is derived from landfill tipping fees.

Composting Program:

Yard waste is banned from the landfill. The County promotes backyard composting and a 'Just Mow It' program encouraging grass clippings to be left on the lawn. Much of the County's



service area is rural and residents tend to manage yard trimmings on their own property. There are four municipalities in the County which have composting facilities where residents can drop off their yard waste for composting, that are exempt or registered due to their small size.

Education and Outreach:

Education and outreach is provided through the distribution of educational sheets and brochures, advertisements in the newspaper, tours of the solid waste management facilities, presentations to schools and civic groups, and the County's website.

Biosolids

Biosolids from the Planning Unit are managed approximately as identified in the following table:

FACILITY	TPY	DESTINATION
Addison (V) WWTP	43	Land Apply Leo Dickson
Bath (V) WWTP	350	Land Apply Leo Dickson
Canisteo (V) STP	79	Land Apply Leo Dickson
Corning (C) STP	175	Landfill Bath Landfill
Erwin (T) WWTP	162	Landfill Steuben County Landfill
Hornell (C) WPCP	242	Land Apply
Painted Post (V) STP	40	Landfill Steuben County Landfill
South Corning WWTP	7	Land Apply Thru Bath
Troupsburg (H) WWTF	2	Store On-Site
Wayland (V) WWTP	30	Landfill Steuben County Landfill

Section II - Description of Solid Waste Management Plan Modification and Enhancements

A. Introduction

To comply with 360-15.11(e)(2), the reasons for the proposed modification or update must be clearly stated. To comply with this you may wish to add the language below. Please note, much of this text was drawn from the third paragraph of Section II of the draft, which begins "The goal now...".

The reasons for the proposed modification/update are as follows:

- 1) to extend the expiration date of our DEC approved local solid waste management plan (LSWMP) until December 31, 2020.
- 2) to examine our existing projects,
- 3) to evaluate enhancements to those projects, and
- 4) to develop new projects that will enhance our existing SWM system.

In the last paragraph of Section II A, please indicate the date the recycling manager retired.

C. Recycling Survey Data

A copy of the current Recycling Data Survey form, and the list of the recipients of the recycling data survey, should be included as an Appendix to the plan.

The Implementation Schedule indicates that the Recycling Data is scheduled for enhancement during 2011. In order to maximize effectiveness of the survey, the Department strongly suggests review and revision of the Recycling Data Survey should occur at least one additional time between 2011 and 2020.

Please indicate how you propose to increase the response rate to the Recycling Survey. For example: Will you contact non-responders with follow up letters or phone calls? Would you consider requiring reporting as an option within a flow control or hauler licensing system?

D. Mercury Collection Program

For clarity, the following text should be inserted at the beginning of Section II.D:

State law prohibits disposal of mercury-added products in normal trash. Such products must be managed by separate delivery to a solid waste management facility, recycling facility, authorized hazardous waste facility or at a municipally sponsored household hazardous waste collection program.

Please include the list of "the other disposal options" and "private disposal companies" provided to residents with mercury disposal questions.

E. Management of Organics

Please provide a table listing the 17 composting options mentioned, including facility address and types of materials handled. This table can be included in an Appendix to this document.

II. Adopt Product Stewardship Framework

Would the County consider offering a public statement such as a Legislative resolution, press releases or other such support for this concept?

J. Recycling at Schools, Public Facilities and Special Events

Since the Recycling Manager is not currently on staff, are there other groups, such as the EMC, Conservation District or Cornell Cooperative Extension, that can promote recycling in the County?

The Department acknowledges economic fluctuations can and do affect staffing levels. However, a continued down turn in the economy is not inevitable. Improvements in the economy in the next 10 years could prevent reduction or even allow expansion of your recycling programs. As such, removing the reference to inevitability is recommended. With that understanding, we strongly encourage the County to restore a Recycling Manager to the SW program as soon as is feasible.

K. C&D Recycling

To make the plan properly informative, please include a paragraph describing the Hakes C&D landfill in this Section. . Suggested language appears below; you should edit or add more information as needed to make it fully accurate.

"Hakes C&D Landfill is a large, private C&D debris landfill, located in the County, which accepts waste from a broad service area across the State, as well as from out of state."

L. Solid Waste Division Staffing Levels

In order to make this section properly informative, please include a statement confirming current Steuben County Division of Solid Waste staffing levels. This could be done by filling in the blank spaces in the text below. As with all of our suggested changes you should edit or add more information as needed make it fully accurate.

"The County Department of Public Works has the responsibility of administering, planning and overseeing operations. Staff includes the Commissioner and Assistant Commissioner, a Landfill Supervisor and Assistant Landfill Supervisor, a Wastewater Treatment Plant Operator, a Recycling Manager, a Motor Equipment Operator Supervisor, ____ motor equipment operators. ____ transfer station operators and ____ laborers."

P. Pay as You Throw Program

Please provide more details on the tip fee structure established for bagged and bulk MSW.

Q. Adopt Local Flow Control Law Option

The Supreme Court case you reference in the first paragraph was "United Haulers Association v. Oncida-Herkimer Solid Waste Management Authority". Please correct this section of text.

The Department suggests you add the text below to make this section more informative. Please edit or add more information as you feel appropriate.

"Municipal Solid Waste in the County is collected by private haulers. The haulers are currently not required to dispose of the waste at the County's landfill. About 57 percent of the collected waste is disposed of at the County's landfill. About 40 percent is disposed of at the Hyland Landfill in Allegany County. The remainder is disposed of at other nearby landfills."

Regarding Flow Control, it is not clear what the County's current position is regarding passing legislation to implement Flow Control. Please clarify if the county is currently considering or might consider implementing flow control in the future.

R. Future Landfill Expansion Areas Consistent w/ SWMP

Please include a more detailed estimate of the timeframe for filing the application for landfill expansion. The text indicating some point during this planning period is vague. Please provide your "best estimate" as to what year the application will be filed.

Please note, per 360-1.9(f) and the landfill permit, that importation of waste from Planning Units that have a DEC approved Comprehensive Recycling Analysis, is allowed.

Section III - Implementation of Modifications to the Solid Waste Management Plan

Table 1

The Implementation Schedule identified as Table 1 simply summarizes and repeats the text in Section II. A chronological table is necessary for a working implementation schedule. Such a table should use, at a minimum, headers such as Year, Activity, and Expected Result.

Many of the activities in the Implementation Schedule appear to be either ongoing or concentrated in the first few years of the planning period. A chronologically based Implementation Schedule should also allow for these activities to be more reasonably scheduled over the full term of the 10 year planning period.

We did not see any activities related to the Steuben Rural Electric Cooperative plant at the landfill. If this effort is still in the works, please address it in both Section II and the revised Implementation Schedule. If it is complete, please include it in the current program description.

Section IV - State Environmental Quality Review (SEQR) Determination

This section is appropriate and acceptable. Please include the SEQR information in the final LSWMP Modification document.

Section V - Public Participation/Notification to Neighboring Jurisdictions

This section is appropriate and acceptable. Please include a public comment responsiveness summary in the final LSWMP Modification document.

Section VII - Resolution Adopting the SWMP Modification

This section is appropriate and acceptable. Please include the comments and responses and the Legislative resolution adopting the LSWMP Modification in the final LSWMP Modification document.

If you have any questions or concerns regarding this letter, please contact me at (585) 226-5414.

Sincerely,

Gary Maslanka

Environmental Engineer

Common Mr. Magaile

cc: Gus Riberio NYSDEC Scott Foti NYSDEC

Appendix K

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

Division of Materials Management 625 Broadway, Albany, New York 12233-7250 P: (518) 402-8651 | F: (518) 402-9024 www.dec.ny.gov

FEB 0 7 2019

Mr. Steve Orcutt Assistant Commissioner - Landfill Public Works Steuben County Office Building 3 East Pulteney Square Bath, NY 14810

Dear Mr. Orcutt:

Re: Steuben County's Draft Local Solid Waste Management Plan

The New York State Department of Environmental Conservation (Department) has completed review of Steuben County's (County) Draft Local Solid Waste Management Plan (LSWMP) received as a final draft on January 17, 2019.

Based on this review, the Department has determined the County's LSWMP provides substantive consideration of the elements set forth in New York State Conservation Law (Section 27-0107) and the State's Local Solid Waste Management Plan Contents regulations (6 NYCRR Part 366-2) and constitutes an approvable plan.

In order for the Department to grant final approval of the County's LSWMP, a complete stand-alone final Steuben County LSWMP must be submitted which includes certified resolutions from Steuben County stating: 1) that the LSWMP is adopted by the County and 2) that the County will implement the solid waste management programs, projects and plans as identified in the final LSWMP.

A print copy and an electronic copy of the above items should be sent to the Department to each of the following:

Mr. Richard Clarkson, Director
Bureau of Solid Waste Management
Division of Materials Management
New York State Department of Environmental Conservation
625 Broadway, 9th Floor
Albany, NY 12233-7260

and



Mr. Greg Maclean, Regional Materials Management Engineer Region 8 Office New York State Department of Environmental Conservation 6274 East Avon-Lima Road Avon, NY 14414-9516

The Department will continue to work with the County through the finalization process. Please contact Katelyn John at (518) 623-1230 or katelyn.john@dec.ny.gov if you have any questions concerning this matter.

Richard Clarkson, P.E.

Director

Sincerely

Bureau of Solid Waste Management

Step 3. Planning Unit Population - Projections & Municipal Solid Waste (MSW) - Projections

This tab will provide you with population projections and MSW generation projections for the planning period you had previously selected. It is recognized that Municipal Solid Waste (MSW) generation is reliant on population changes, hence, it is necessary to project both and identify their correlation.

be from 2015.

In the first purple cell enter the total tons of MSW that was disposed in the year immediately before your plan period starts. For exemple: If the plan period is 2016-2026, the MSW disposed data should

Population Projection:

Calculations are determined by a linear regression based on the latest consus population data and an annual growth rate percentage specific to the planning unit. If it is anticipated that the population is going to decrease

The MSW generation rate ([Lityerson(5ay] celoufated on the previous tab from the Waste Generation Rate will serve as a start point for the planning period. On the calculator, three options are considered to anticipate the NSW generation over time, and one must be selected according to the goals of the planning unit.

First Option:

MSW generation rate does not change. Consequently, MSW generation fluctuates with the population of the planning unit. If the population increases, waste generation will rise as well, and vice versa. By selecting this option, the planning unit is in "status quo", meaning that is not making any improvements, and consequently is getting far from reaching the State's goal by 2030.

Second Option:

MSW generation amount remains the same, regardless of whether or not the planning unit's population changes.

As a result of successfully implementing the Local Solid Waste Management Plan, MSW generation will be reduced by an annual factor of ...

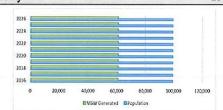
An Annual Factor of Reduction (%) should be calculated, defined, and selected by the planning unit. This factor will be the numerical expresentation of one of the planning unit's goals for the planning period. Once calculated, the Annual Factor of Reduction can be chosen from the drop down list provided.

• The graphic will display the Population and MSW Generation projections over the selected planning period. It has been designed to visualize the contrast of the final outcomes, based on the selections of each planning unit.

Steuben County

2017-2026

Current Data				
2010 Population Census	98,990			
2016 Population	99,168			
2016 MSW Generated (Tonsfyr)	61,007			
2016 MSW generation rate (Lb/person/day)	2.90			
2016 MSW Disposed (Tons/yr)	52,541			
2016 MSW Diverted (Tons/yr)	8,466			



Annual rate of population	growth	0.03%
(%)		0.03%

Population Projection												
2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026		
99,198	99,228	99,258	99,287	99,317	99,347	99,377	99,407	99,436	99,466	99,496		

Forecasting future conditions... What do you expect to happen to the MSW generation rate over the next 10 year period plan?

- MSW generation rate does not change. Consequently, MSW generation fluctuates with the population of the planning unit, if the population increases, write operation will for as well and vice were.

Reduction Factor (per year)

MSW generation rate	2.07
(Lb/person/day)	3.37

				n	rojectio	eration f	ISW Gen	M			
	2026	2025	2024	2023	2022	2021	2020	2019	2018	2017	2016
(Lb/person/day)	3 37	3.37	3 37	3 37	3.37	3.37	3 37	3.37	3 37	337	3.37
TonsAr	61,103	61.085	61,066	61,048	61,030	61,011	60,993	60,975	60,957	60,938	60,920

Step 4. Municipal Solid Waste (MSW) Detailed Composition Analysis

The next step is to <u>Mentify the Materials Composition of the Waste Stream</u> based on population density, and demographic characteristics of the Planning Unit.
This tab will provide the PU with a more detailed estimate of the materials present in the waste steam, which could be crucial when prioritizing the initiatives and programs of the LSWMP.
The population density distribution has been calculated based on the 2010 Census data and will be auto populated when a planning unit is satisfaed. The following parameters were used.

Rural <325 personalmi² Suburban: >325 and <5,000 personalmi² Urban: >5,000 personalmi²

Under Dessity Population Distribution, the user has the option to modify the percentage values for the Sester (Residential and Commercial/Institutions) based on land use and specific characteristics of each planning unit. For example: A rural population in Westchester County could be 64% Residential and 36% Commercial I Institutional, while in Wyoming County might be 60% Residential and 50% Commercial I Institutional.

The results are presented on the test right column under MSW Materials Composition. Be aware of color changes on the cells, whenever a category represents over 15% of the total waste generation, the cell will furn

red

to easily identify key categories of the waste stream. It will also facilitate the selection of initiatives, programs, and infrastructure for the solid waste management system.

Note: If no data exists, use the pre-populated information in the worksheet

Total

Steuben County

2017-2026

100.00%

			Rural		Suburban			Urban			
Density Populat		53.55%			46.45%			0.00%			
		Residential	Comminst.	Combined	Residential	Comminst.	Combined	Residential	Comm/Inst.	Combined	
		58.00%	42.00%	100.00%	55.00%	45.00%	100.00%	58.00%	42.00%	100.00%	
Newspaper		5.20%	1.90%	3.81%	5.00%	1.90%	3.61%	6.60%	2.00%	4.67%	
Corrugated Cardiboard		6.60%	13.90%	9.67%	6.60%	13.90%	9.89%	6.90%	13.70%	9.76%	
	Paperboard	320%	1.10%	232%		1.00%	2.27%	3.60%	0.90%	2.47%	
	Office Paper Junk Mail	0.80%	3.80%	2.06%	0.90%	4 20%	2 39%	1.10%	5.80% 0.70%	3 07%	
	Other Commercial Printing	1.70%	2.30%	1.95%		2.40%	202%	2.30%	2 60%	2.43%	
Other Recyclable Paper	Magazines	1.10%	0.90%	1.02%	1.00%	0.80%	091%	1.10%	1 00%	1.06%	
	Books	0.50%	0.30%	0.42%	0.50%	0.30%	0.41%	0.60%	0.40%	0.52%	
	Paper Bags Phone Books	0.50%	0.20%	0.37%		0.20%	0.37%	0.60%	0.20%	0.43%	
	Poly-Coated	0.20%	0.30%	0.24%		0.20%	0.20%	0.30%	029%	0 26 %	
Other Recyclable Paper (Total)	11.30%	9.90%	10.71%	11.60%	10.10%	10.93%	13.40%	12.00%	12.81%	
Other Compostable Paper		6.80%	6.80%	6.80%	6.40%	6.40%	6.40%	6.80%	6.80%	6.80%	
Total .	Paper	29.90%	32.50%	30.99%	29.60%	32.30%	30.82%	33.70%	34.50%	34.04%	
Ferrous/Aluminum	Ferrous Containers	1.90%	1 00%	1 52%	1.20%	0.70%	0.93%	1.40%	0.70%	1.11%	
Containers	Aluminum Containers		0.40%	0.57%	0.60%	0.30%	0.47%	0.50%	0.43%	0.46%	
Ferrous/Aluminum Container	s (Total)	2.60%	1.40%	2.10%	1.80%	1.00%	1.44%	1,90%	1,10%	1.56%	
Other Ferrous Metals		5.20%	5.40%	5.28%	5.00%	5.80%	5.36%	3.30%	3.70%	3.47%	
Other Non-Ferrous Metals	Other aluminum Automotive batteries	0.20%	0.30%	0 24%		0.30%	0.25%	0.20%	0.30%	0.24%	
oo a maria di cosmicia s	Other non-aluminum	0.50%	0.30%	0.42%	0.30%	0.40%	0.35%	0.40%	0.20%	0.32%	
Other Non-Ferrous Metals (To	(ta)	1.50%	1.10%	1.33%	1000	1.10%	1.16%	0.80%	0.70%	0.76%	
Total i	Metals	9.30%	7.90%	8.71%	8.00%	7.90%	7.96%	6.00%	5.50%	5.79%	
PET Containers		1,10%	0.80%	0.97%	0.90%	0.80%	0.86%	1.20%	1.00%	1.12%	
HDPE Containers		1.10%	0.60%	0.89%	0.90%	0.70%	0.81%	1.00%	0.70%	0.87%	
Other Plastic (3-7) Containers		0.20%	0.10%	0.16%	-	0.20%	0.20%	0.20%	0.20%	0.20%	
Film Plastic		5.70%	5.90%	5.78%	5.50%	5.80%	5.64%	5.80%	5.80%	5.80%	
SHIRING STATE	Durables	3 10%	3 20%	3 14%		3.20%	3.04%	320%	3.30%	3.24%	
Other Plastic	Non-Durable:	1 60%	1.80%	1 68%		1.80%	1.69%	1.85%	1.90%	1.84%	
Other Plastic (Total)	Packaging	1.43%	1.10%	1 27%	-	1.16%	1 27%	1.50%	1.10%	1 33%	
The second second	W 192	6.10%	6.10%	6.10%	Name and Address of the Owner, where the Owner, which is the Owner, which is the Owner, where the Owner, which is the Owner,	6.10%	6.05%	6.50%	6.30%	6.42%	
Total F	Plastics	14.20%	13.50%	13.91%	13.50%	13.60%	13.55%	14.70%	14.00%	14.41%	
Glass Bottles, Jars and Conta	siners	4.10%	3.80%	3.97%	3.90%	3.80%	3.86%	4.30%	3.80%	4.09%	
Other Glass (Flat glass, disha	rare, light bulbs, etc.)	0.50%	0.40%	0.45%	0.30%	0.43%	0.35%	0.60%	0.43%	0.40%	
Total	Glass	4.60%	4.20%	4.43%	4.20%	4.20%	4.20%	4.70%	4.20%	4.49%	
Food Scraps		12.70%	13.30%	12.95%	12.90%	15.50%	14.07%	17.20%	25.20%	20.55%	
Leaves and Grass / Pruning a	nd Trimmings	3.10%	1.10%	2.25%	11.30%	9.10%	10.31%	4.20%	1.50%	3.07%	
Total O	rganics	15.80%	14.40%	15.21%	24.20%	24.60%	24.38%	21.40%	26.70%	23.63%	
Clothing Footwear, Towels, S	hoots	4.60%	3.00%	3.93%	4.40%	3.20%	3.86%	4.80%	2.50%	3.83%	
Carpet		1.40%	1.30%	1.36%	1.70%	1.40%	1.57%	1.70%	0.90%	1.36%	
Total 1	extiles	6.00%	4.30%	5.29%	6.10%	4.60%	5.43%	6.50%	3,40%	5.20%	
	Wood and non-adulterated wood)	4.10%	9.00%	6.16%	2.90%	4.10%	3.44%	2.00%	3.50%	2.63%	
DiY - Construction & Renovation		8.00%	7.60%	7.83%	3.80%	270%	3.31%	4.40%	3.80%	4.15%	
Diapers		1.90%	1.10%	1.56%	2.10%	1.20%	1.70%	2.30%	1,10%	1.80%	
Dectronics		130%	1.40%	1.34%	1.60%	1.70%	1.65%	1.30%	1.30%	1.30%	
Tres		1.50%	1.80%	1.80%	1.70%	1.40%	1.57%	0.50%	0.40%	0.45%	
HHW		0.60%	0.00%	0.35%	0.60%	0.00%	0.33%	0.50%	0.00%	0.29%	
Soils and Fines		0.60%	0.60%	0.55%	0.10%	0.20%	0.15%	0.10%	0.10%	0.10%	
Other Composite Materials - Di	rable sodbe had	1.90%	1.70%	1.82%	1.60%	1.50%	1.56%	1.90%	1.50%	1.73%	
			Facility of the Control of the Contr	10000000		- 2000	100000000000000000000000000000000000000	100000000000000000000000000000000000000	1000000		
Total Misc	ellaneous	16.10%	14.20%	15.30%	11.50%	8.70%	10.24%	11.00%	8.20%	9.82%	

100.00% 100.00% 100.00% 100.00% 100.00% 100.00% 100.00% 100.00%

Step 5. Municipal Solid Waste (MSW) Detailed Composition Analysis

On this tab, the composition of the municipal waste stream will be estimated based on the amount of material generated in the planning unit and the state average of the different waste materials. A pie chart will be generated to clearly show the composition of the waste stream and to identify key categories of the waste stream for the planning unit.

The total tons of MSW diverted per year will be auto populated based on previous data inputs, while the amount bors diverted for each material by category should be populated by the user.

Should be used for amounts of diverted waste by type of material, and a lotated number by category (e.g. paper, metal) should be put in streams in Tons.

Make sure that the total amounts at the bottom of the page are consistent with the data you already put into the calculator. If the cell is highlighted in rect.

You should revise the amounts of diverted waste by category.

Steuben County

2017-2026

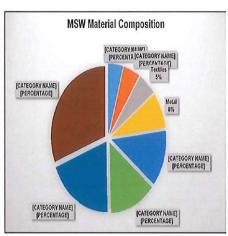
			2016	
		MSW Materials Composition (%)	MSW Generated (Tons)	MSW Diverted (Tons)
	Material	100.0%	61,007	8,466
	Newspaper	3.7%	2,268	71
-	Corrugated Cardboard	9.8%	5,959	1,466
Paper	Other Recyclable Paper (Total)	10.8%	6,595	1,050
Pa	Other Compostable Paper	6.6%	4,035	132
	Total Paper	30.9%	18,857	2,719
	Ferrous/Aluminum Containers (Total)	1.8%	1,093	114
7	Other Ferrous Metals	5.3%	3,245	882
Metal	Other Non-Ferrous Metals (Total)	1.2%	762	632
2	Total Metals	8.4%	5,100	1,628
	PET Containers	0.9%	560	18
	HDPE Containers	0.9%	520	128
Plastic	Other Plastic (3-7) Containers	0.2%	108	3
as	Film Plastic	5.7%	3,486	110
0.	Other Plastic (Total)	6.1%	3,706	190
	Total Plastics	13.7%	8,381	443
10	Glass Bottles, Jars and Containers	3.9%	2,391	215
Glass	Other Glass (Flat glass, dishware, light bulbs, etc.)	0.4%	247	8
Ö	Total Glass	4.3%	2,638	223
8	Food Scraps	13.5%	8218	305
ä	Leaves and Grass / Pruning and Trimmings	6.0%	3,660	115
Organics	Total Organics	19.5%	11,878	420
	Clothing Footwear, Towels, Sheets	3.9%	2377	149
ţį	Carpet	1.5%	887	28
Textiles	Total Textiles	5.4%	3,264	177
Wood	Total Wood (Pallets, crates, adulterated and non-adulterated wood)	4.9%	2,987	2,203
100	DIY Construction & Renovation Materials	5.7%	3,495	110
15	Diapers	1.6%	991	31
Miscellaneous	Electronics	1.5%	905	285
ane	Tires	1.7%	1,032	171
elle elle	HHW	0.3%	207	10
SC	Soils and Fines	0.4%	237	7
Z	Other Composite Materials - Durable and/or inert	1.7%	1,034	33
	Total Miscellaneous	13.0%	7.901	643

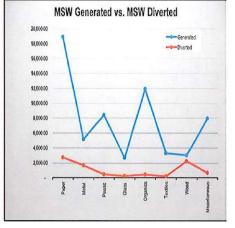
100.0%

61,007

8,466

Total





Step 6. Municipal Solid Waste (MSW) Diversion Projections

This tab will be used to create goals for the amount of material the planning unit will divert for each year of the planning period. These goals will be entered as percentages, based on how much of the material generated will be diverted for recycling or beneficial use.

The diversion goal percentages will be entered in the

purple cells for each material and each year of the planning period.

Steuben County

2017-2026

Year	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026
Projected MSW Generation (Tonslyr)	60,920	60,938	60,957	60,975	60,993	61,011	61,030	61,048	61,066	61,085
MSW Diverted (Tons/yr)	8,816	9,194	9,588	9,999	10,427	10,875	11,342	11,829	12,337	12,867

2020 2021 2022 2016 2017 2018 2019 2023 2024 2025 2026 MSW MSW Malariale % MSW MSW M % MSW % MSW MSW Diverte enerate Diverted Composition Diverted Diverted Diverted Diverted Diverted Diverted (Tons) (Tons) (%) Material 8,466 14.5% 15.1% 15.7% 16.4% 17.1% 17.8% 18.6% 21.1% 19 4% 20.2% lewspaper 3.7% 2 268 3.3% 71 32% 3.4% 3.5% 37% 38% 4.0% 41% 43% 4.5% 47% Corrugated Cardboard 9.8% 5,959 1.466 24.6% 25.6% 26.6% 27.7% 28.8% 29.9% 31.1% 32.4% 33.7% 35.0% 36.4% Other Recyclable Paper (Total) 10.8% 6,595 1,050 15.9% 17.2% 17.9% 18.6% 19.4% 21,0% 20.2% 21.8% 22.7% 23.6% Other Compostable Paper 6.6% 4,035 132 3.3% 3.4% 3.5% 3.7% 3.8% 4.0% 41% 43% 45% 4.6% 4.8% Total Paper 30.9% 18,857 15.0% 15.0% 15.0% 15.0% 15.0% 15.0% 15 0% 15.0% 15.0% 15.0% Ferrous (Aluminum Containers (Total) 1.8% 1,093 114 10.4% 10.8% 11.2% 11.7% 12.2% 127% 13.2% 13.7% 14.2% 14.8% 15.4% Other Ferrous Metals 5.3% 632 3,245 19.5% 20.3% 21.1% 21.9% 22.8% 23.7% 24.6% 25.6% 26.7% 27.7% 28.8% Other Non-Ferrous Metals (Total) 882 1.2% 115.7% 120.4% 762 125.2% 130.29 135.49 140.8% 146.4% 152.3% **Total Metals** 8.4% 5,100 33.2% 1,628 31.9% 33.2% 33.2% 33.2% 33.2% 33.2% 33.2% 33.2% 33.2% 33.2% PET Containers 560 18 0.9% 31% 3.3% 3.4% 3.5% 3.7% 3.8% 4.0% 4.1% 4.3% 4.5% 41% HDPE Containers 0.9% 520 128 24.5% 25.5% 26.5% 27.6% 28.7% 29.8% 31.0% 32.3% 33.6% 34.9% 36.3% Other Plastic (3-7) Containers 0.2% 108 3 3.1% 3.3% 3.4% 3.5% 3.7% 4.0% 3.8% 41% 4.3% 4.5% 4.7% Film Plastic 5.7% 110 3,456 3.1% 3.3% 3.4% 3.5% 40% 3.7% 3.8% 4.1% 43% 45% 47% Other Plastic (Total) 6.1% 3,706 190 5.1% 5.3% 5.5% 5.8% 6.0% 6.2% 6.5% 6.7% 7.0% 7.3% 7.6% **Total Plastics** 13.7% 8,381 5.3% 5.6% 56% 5.6% 5.6% 5.6% 5.6% 5.6% 5.6% 5.6% 5.6% Glass Bottles, Jars and Containers 3.9% 2,391 215 9.0% 9.4% 9.7% 10.1% 10.5% 10.9% 11.4% 118% 12.3% 12.8% 13.3% Other Glass (Flat glass, dishware, light bulbs, etc.) 0.4% 247 8 33% 31% 34% 35% 3.7% 3.8% 4.0% 4.1% 4.5% 4.7% 4.3% 2,638 223 8.8% 84% 88% 88% 8.8% 88% 8.8% 8.8% 8.6% 8.8% 8.6% Food Scraps 13.5% 8,218 305 3.7% 3.9% 4.0% 42% 43% 4.5% 47% 49% 51% 5.3% 55% Leaves and Grass / Pruning and Trimmings 6.6% 3660 115 31% 3.3% 34% 35% 3.7% 3.8% 4.5% 47% Total Organics 19.5% 11 878 420 3.5% 3.7% 37% 37% 3.7% 3.7% 3.7% 37% 3.7% 3.7% 37% Clothing Footwear, Towels, Sheets 149 3.9% 2.377 6.3% 6.6% 69% 7.6% 8.0% 8.4% 8.8% 9.3% 9.7% 10.2% Carpet 1.5% 887 28 3.3% 3.5% 3.6% 4.0% 42% 4.4% 47% 49% 5.1% 5.4% 3,264 177 5.7% 57% 5.7% 5.7% 57% 57% 5.7% 5.7% Wood Fotal Wood (Pallets, crates, adulterated and non-adulterated wood) 4.9% 2.987 2,203 73.8% 77.5% 81.3% 85.4% 89.7% 94.1% 109.046 98.9% 103.8% 114.4% 120.2% XY Construction & Renovation Materials 5.7% 3,495 110 3.1% 3.4% 3.3% 3.5% 3.7% 41% 3.8% 4.0% 4.3% 45% 4.7% Diapers 1.6% 991 3.1% 3.4% 33% 3.5% 3.8% 4.0% 41% 4.3% 45% 4.7% Electronics 1.5% 905 285 31.5% 32.8% 34.1% 35.5% 36.9% 38.4% 39.9% 43.2% 44.9% 467% Tires 171 1.7% 1.032 21.0% 16.6% 17.3% 18.0% 187% 19,4% 20.2% 24.6% 219% 22.8% HHW 0.3% 207 10 4.6% 4.8% 5.0% 5.4% 5.6% 6.0% 6.3% 6.5% 6.8% Soils and Fines 0.4% 237 7 3.1% 33% 34% 3.5% 3.7% 3.8% 4.0% 4.1% 43% 4.5% 4.7% Other Composite Materials - Durable and/or inert 1.7% 1,034 33 3.1% 3.3% 3.4% 3.5% 3.7% 4.0% 45% 3.8% 41% 43% 4.7% Total Miscellaneous 13.0% 7,901 648 8.5% 8.5% 8.5% 8.5% 8.5% 8.5%