

2019-20 Solid Waste Services Annual Report

The Solid Waste Services (SWS) Division’s goal is to provide a safe, convenient and cost-effective service to County of Wellington residents while protecting the air, water and land through environmentally sound practices. SWS provides waste management services and planning with a focus on:

- Excellent customer service
- Effective and efficient financial management
- Environmental stewardship

SWS operations, services and programmes are evaluated on an on-going basis to attempt to identify and implement efficiencies and improvements wherever possible. To support those efforts, SWS staff worked with County Council to develop a long-term strategy which was completed in 2020.



Home deliveries of user pay garbage bags

COVID-19 impacted many of the solid waste services and programmes in 2020. The SWS Annual Report was postponed as staff addressed the challenges of providing solid waste management services during the pandemic. As a result, this year’s report will highlight activities and achievements for two years.

Customer Service

Programmes and Services

- SWS worked with two schools to provide unique user pay garbage bag fundraisers.
- The Recycle Coach waste app was launched in early 2020. It provides residents with their own personalized collection schedule, set-out reminders, tips and alerts, and a “what goes where” look up tool.
- COVID impacts
 - During the pandemic, the curbside collection service never missed a week.
 - Waste facilities were briefly closed in the spring of 2020 and have remained open since the end of May 2020.
 - County staff developed an online ordering system for user pay garbage bags and provide home delivery of user pay garbage bags for those that are trying to limit their.
- Launched the new curbside collection programme in July 2020, during the pandemic!
 - Began organics collection, with delivery of over 32,000 green bins.
 - Standardized collection frequency and delivery of service (at the end of the driveway for all households)
 - New monthly leaf and yard waste collection at curbside in urban areas, and free residential drop-off at all six waste facilities, from April through November.
- Green cone digesters now available for pet waste that can’t go in the green bin.

Quick Fact:

In 2020, 43% of all waste managed by Wellington County Solid Waste Services was diverted from landfill.

Key Customer Service Statistics	2018	2019	2020
number of calls and emails	3,606	4,010	8,379
number of customers at waste facilities	250,012	247,989	182,351
number of garbage curbside stops	530,972	560,241	543,619
number of garbage bags picked up at curbside	807,427	839,989	843,685
number of blue box curbside stops	800,802	812,108	934,728

Promotion and Education

- The Municipal Waste Association recognized the promotion and education efforts of SWS by awarding the County with five awards in our household category. In 2019 we received a silver award for a reusable bag in partnership with Dixon Home Hardware, and bronze for both our 2018 SWS Calendar and 2018 Fall/Winter Newsletter. In 2020, the County was proud to receive gold awards for both the 2019 SWS Calendar and the 2019 Spring/Summer Newsletter.
- Staff participated in the County Museum’s 2019 March Break event, with a focus on blue box recycling. Outside was a curbside collection vehicle and roll-off truck for kids to see and touch, inside was a recycling sorting game, and all participants received mini blue boxes and pencils made of recycled newsprint.
- Staff made many presentations, both in-person and on-line, to Seniors’ groups, schools, the Elora Sparks/Brownies, as well as regular appearances on The Grand 101’s radio show “Swap Talk” and The River radio station.
- Two animated videos were released in 2020 on YouTube related to the Green Bin Programme and Recycle Coach Waste App.



School presentation with Waste Management collection vehicle

County Website – SWS Pages (unique visitors)	2018	2019	2020
most visited in 2020 – hours and locations	21,406	32,544	63,992
second most visited in 2020 – other materials	2,526	6,758	28,750
third most visited in 2020 – curbside collection	7,150	5,567	26,666
Reuse Website (total number of visits)			
# of visits	2,675	1,895	3,354
# of pages	36,367	23,329	21,964

Financial

- Tipping fees were increased each year on January 1. These incremental increases bring the County's tipping fees in line with the average fee of our municipal neighbours.
- A new curbside collection contract was tendered and awarded in 2019, and began on July 1 2020. As the contract started in July, the cost increase was spread over two years.
- As part of the new curbside collection contract, green bins were purchased by joining the Region of Waterloo contract on a consortium basis to obtain improved pricing.
- Cost-savings for minor road repairs and grading at waste facilities was realized by working with the County's Roads Division.

Quick Fact:

More than one million user pay garbage bags were sold in 2020!

Environmental Stewardship

As part of the County's commitment to protect and enhance the natural environment, the SWS Division looks to our "Green Strategy". Staff and Council endeavour to incorporate "Green Principles" into all areas of waste management decisions and actions.

The core green principles are:

- To protect and enhance the natural environment.
- To reduce the carbon footprint of our operations.
- To practice a "Life Cycle" approach.

All operations are assessed and tracked over time with an aim of:

- Reducing negative environmental impacts created in providing services.
- Reducing the carbon footprint created in providing services.
- Improving life cycle performance through reduction, reuse and recycling practices.
- Enhancing environmental health.



Aerial view of Phase 1 Riverstown Landfill Site and public drop-off areas

Tonnes Landfilled	2018	2019	2020
total tonnes disposed	23,375.82	23,203.53	18,918.33

County Diversion Programmes	2018	2019	2020
blue box recyclables	6,019.68	5,896.17	5,918.64
wood, brush, Christmas trees	2,380.05	2,505.09	3,469.45
green bin organics	0.00	0.00	1,156.95
leaf and yard waste	0.00	0.00	1,287.30
scrap metal	460.29	471.70	421.91
electronics	136.23	114.16	114.5
tires	174.60	160.66	151.40
household hazardous waste	223.37	223.27	252.66
clothing and textiles	20.90	19.59	11.74
reuse centres and website	12.46	15.85	2.05
backyard composting (estimate)	1497.50	1,507.40	1,510.70
total tonnes diverted from landfill	10,925.08	10,913.89	14,297.30

- In May 2019, the County was thrilled to learn the joint Smart Cities proposal with the City of Guelph was awarded \$10 million to implement “Our Food Future”. The County and City are collaborating together to create the first technology-enabled circular food economy, one goal of which is to see food as a resource and valuing food waste.
- In September 2020, the County officially opened the Aberfoyle Pollinator Garden. Pollinator friendly plantings have also been established at several other closed landfill sites.
- The County of Wellington has commissioned a representative, random phone survey of County residents to better understand households’ habits around the purchasing, preparation and disposal of food. This feedback will provide direction for more effective targeted messaging around reducing food waste at home.
- The new curbside collection contract has multiple environmental benefits:
 - Fleet of compressed natural gas (CNG) vehicles replaced traditional diesel-powered trucks. Each vehicle will reduce greenhouse gas emissions by an average of 15% (or 14 metric tonnes per year), while also producing 50% less nitrous oxide emissions and virtually zero particulate emissions.
 - Diverting organics and leaf and yard waste will reduce methane gas and leachate production at the Riverstown landfill site, while allowing the nutrients in the organic material to be composted and used for beneficial purposes.



Aberfoyle Pollinator Garden

- Phase II of the Riverstown landfill site has been under development for many years, and will be ready to open in 2021. One of the key environmental features of Phase II is the collection and treatment of leachate. This new landfill area will serve the County for approximately 25-30 years at the current rate of fill.



Quick Fact:

Construction of Phase II at the Riverstown Landfill included:

- 575 metres of leachate pipe
- 44,200 square metres of geotextile
- 7,000 tonnes of gravel

Other Achievements and Activities

- National Public Works Week (NPWW) is celebrated in May each year. The County’s Engineering Services Department participated for the first time in 2019. That year, the County was honoured to be awarded with three awards for their educational and fun events. Two awards were from the Canadian Public Works Association and the third was received from the Ontario Public Works Association (OPWA).
- Two of the County’s excellent equipment operators participated in the OPWA Road-e-o in 2019. They represented the County well and each placed in the top three in their respective categories. As a team, they were honoured to earn second place overall.
- NPWW was celebrated again in 2020, with most activities taking place on-line.



National Public Works Association Awards Presentation at County Council

SWS Strategy

In 2001, at the request of the local municipalities, the County of Wellington accepted responsibility for all waste management services from its seven member municipalities. Over the intervening years, many changes have been made to the waste services and programmes provided to County residents.

In 2015, County Council directed SWS staff to undertake a review of waste services to help focus the planning of the future of waste management and diversion in the County. The goal of this project is to provide the County with a long term strategy for all its waste operations and services, and how they are provided.

Staff and Committee developed the framework and broad outline of the Strategy. Guiding principles, goals and priorities were established to provide direction for the Strategy. These principles reflect a balance of customer service, economic considerations, and environmental stewardship.

The SWS Strategy was completed in 2020 and a final report was submitted to County Council in January 2021. The following table provides a summary of the decisions made, actions taken, and plans moving forward. Projects are continually re-evaluated and modified depending upon the County and Division priorities, and will be implemented as time and resources allow. For more information, the Strategy Report Summary is available on the County’s website at www.wellington.ca/sws-strategy.






Topic	Task	Direction/Action	Status - Complete	Status - Ongoing
Group A - Provision of Curbside Services Topics				
Rural curbside collection	Evaluate feasibility, options and desire for expansion of rural curbside collection of garbage and recyclables.	Expanded rural curbside collection to all seven member municipalities.	✓	
Curbside user fee	Evaluate the appropriate fee(s) for curbside garbage collection.	Standardized user fees for garbage bags collected at curbside and dropped off at waste facilities at \$2 each.	✓	
Single stream vs. two stream recycling	Cost-benefit analysis of the two collection and processing methods.	Maintain two-stream recycling for blue box materials.	✓	
Cart collection	Seek opportunities to increase diversion through multi-residential and Industrial, Commercial and Institutional (ICI) sectors. Also consider carts for household use.	Maintain current containers for waste and recyclables collection. Continue to look for opportunities for additional diversion in multi-residential and ICI sectors such as the Circular Innovation Council pilot programme that is planned.		➡






Topic	Task	Direction/Action	Status - Complete	Status - Ongoing
Bulky item collection	Determine if bulky collection at curbside is desirable and in what circumstances it could be appropriate.	Maintain bulky item drop-off at waste facilities.	✓	
Organics collection	Evaluate feasibility of an organics programme and/or leaf and yard waste collection.	Established organics green bin collection and leaf and yard waste collection in new curbside collection contract. Implemented July 2020.	✓	
User Pay bag improvement	Assess opportunities to improve User Pay bags or whether to switch to a tag based system. Consider container system including use of garbage boxes.	Continue using stamped user pay bags for curbside garbage collection.	✓	
Additional recyclable materials added to programme	Research whether markets exist to expand the number of acceptable items in the blue box programme.	Deferred until Waste-Free Ontario Act determines which recyclable materials are to be included in the future Blue Box Programme Plan.	✓	
Collections and processing contracts – timing, length, best practices	Research how to best craft the curbside collections contracts in order to achieve maximum cost-effectiveness and flexibility.	After extending the curbside collection contract for three years, a new contract was tendered and awarded in June 2019, and began in July 2020.	✓	
Group B - Future of Waste Disposal Topics				
Riverstown expansion (i.e. Phase III)	Feasibility analysis of a Phase III expansion on Riverstown lands.	The expansion of the Riverstown landfill site is the current preferred option for meeting Wellington County's future waste management needs.	✓	

Topic	Task	Direction/Action	Status - Complete	Status - Ongoing
Other landfill siting	Pending results of above, the County may need to consider siting a new landfill in the future.	No new landfill site search required at this time as the expansion of the Riverstown landfill site is the current preferred option for meeting Wellington County's future waste management needs.	✓	
Landfill mining	Cost-benefit analysis of landfill mining. Weigh cost of mining against estimated increase in landfill capacity.	Landfill mining operations will not be undertaken at this time and may be revisited at a future date.	✓	
Buffer land acquisition	Evaluate if there is a need to consider acquiring buffer lands around active or closed landfills. Determine if the County should have a policy on the subject.	That the current policy be unchanged allowing County staff to explore opportunities to acquire buffer property where appropriate.	✓	
Landfill operations	Evaluate closure and leachate treatment options for Phase I and Phase II, respectively, of the Riverstown landfill.	The Riverstown landfill's Phase I will be at capacity in 2021. The County is undertaking an Environmental Assessment to determine leachate treatment method.		➡
Use of closed landfill properties	Develop a long-term plan for use of closed landfill sites. Explore naturalization or educational opportunities.	Naturalization of closed landfills continues and pollinator food sources will be planted where possible. Pollinator friendly plantings have been established at four of the 16 closed sites.		➡
Explore technologies for managing waste	Assess alternative and emerging technologies (i.e. Energy from Waste, gasification, "Dirty MRFs") in order to determine if any are viable options for the County.	The expansion of the Riverstown landfill site is the current preferred option for meeting Wellington County's future waste management needs and alternative technologies may be revisited at a future date.	✓	

Topic	Task	Direction/Action	Status - Complete	Status - Ongoing
Mandatory recycling	Determine the usefulness and desirability of material specific landfill bans or graduated fees in order to increase diversion.	No mandatory recycling policies will be established and they may be revisited at a future date.	✓	
Group C - Waste Facility Optimization Topics				
Optimal number and location of waste facilities	Analyze site trends and usage and determine number and location of waste facilities, in order to balance operating costs, customer service and meeting diversion targets.	The current complement of six waste facilities will continue at the current locations.	✓	
Vision of how to use waste facilities	Assess the best use of existing waste facilities. To be utilized as they are now, or re-oriented to be "Diversion Centres"?	Waste facilities will be re-oriented as diversion centres to fully maximize landfill diversion opportunities.		➡
Explore additional materials that can be managed at sites	Cost-benefit analysis of collecting and diverting various materials such as leaf and yard waste, shingles, drywall, plastic bags, mattresses, carpets, etc.	Leaf and yard waste is now collected at all six waste facilities from April through November. Additional diversion opportunities will continue to be explored as space and markets allow.		➡
Hours and days of operation	Determine the preferred hours and days of operation, in order to balance operating costs, customer service and operational considerations.	A survey was conducted in August 2018 of site customers. Decision to maintain current hours and days of operation at all waste facilities.	✓	
User fee for bagged waste at sites	Evaluate the appropriate fee for bagged waste at waste facilities.	Standardized user fees for garbage bags collected at curbside and dropped off at waste facilities at \$2 each.	✓	

Topic	Task	Direction/Action	Status - Complete	Status - Ongoing
Fee options	Evaluate fee structures; minimum fees, surcharges for unsorted loads, cost per tonne, removing tipping fees on diversion materials (brush, scrap metal, etc.)	The current fee structure of charging a tipping fee on all materials that do not fall under a provincial diversion funding programme will continue, with no minimum fee applied at this time. The waste tipping fee has been increased to the average of neighbouring municipalities and will continue to increase towards full cost recovery.	✓	
Industrial, Commercial and Institutional (ICI) site diversion programmes	Investigate opportunities to support the ICI sector in increasing diversion.	SWS staff will work with the ICI sector to assist in identifying opportunities to increase diversion.		➡
Group D - Independent Topics				
Involvement in regional waste management systems	Consider opportunities to realize efficiencies through partnerships (e.g., Energy from Waste, Material Recovery Facilities, landfills, collections).	SWS staff have, and will continue to work with neighbouring municipalities to identify opportunities for partnerships and collaboration to increase efficiencies and diversion.		➡
Co-operative contract procurement	Assess benefits of maximizing buying power through collaborative purchasing practices.	SWS staff work with the County's Purchasing staff to identify opportunities for collaborative purchasing. For example, in 2020 the County piggy-backed on the Region of Waterloo's green bin supply contract.		➡

Topic	Task	Direction/Action	Status - Complete	Status - Ongoing
Master Composter programme	Examine how the programme can be enhanced in order to increase composting by Wellington residents.	A Food Waste Management Strategy has been implemented and a green bin programme established to divert more organics from landfill in addition to continuing the backyard composter subsidization programme. Additional efforts may include demonstration gardens at waste facilities and recruiting volunteers to assist residents with at-home composting.		
Education on reducing food waste	Devise a plan to initiate a promotions and education campaign on reducing food waste.	A baseline residential food waste survey has been completed and work is ongoing to further enhance food waste reduction and diversion through education.		
Partnering with various groups	Develop a plan to partner with community groups (i.e. Universities, horticultural groups, other County departments) to improve organics management practices.	The County has partnered with the City of Guelph on the Smart Cities Our Food Future project working towards reducing food waste and loss in both the residential and ICI sectors.		
Tours and presentations	Explore opportunities to expand outreach to schools and community groups.	A Programmes Coordinator position was filled in November 2019 and is working on promotion, education, and engagement with County residents and schools.		
Working with ICI sector to reduce waste	Develop a strategy for aiding the ICI sector in waste reduction.	SWS staff will continue to look for opportunities to assist the ICI sector in its waste reduction efforts and the new Programmes Coordinator will provide assistance with this work.		

Topic	Task	Direction/Action	Status - Complete	Status - Ongoing
Meeting outreach Green Strategy initiatives	Review the Green Strategy outreach initiatives and revise as necessary. Plan to achieve objectives.	SWS staff will continue to fulfill engagement commitments and the new Programmes Coordinator will assist with this work.		
Partnerships	Seek out partnerships with schools and Environmental Non-Governmental Organizations to expand awareness and achieve objectives.	SWS staff will continue to explore partnership opportunities and the new Programmes Coordinator will assist with that work.		
New outreach tools	Develop new tools and/or technologies to engage the public on waste reduction and diversion.	The Recycle Coach waste app was launched in early 2020. Two animated YouTube videos were released in 2020. The new Programmes Coordinator and SWS staff will continue to explore and develop new outreach tools.		
Spring clean-up support	Consider how the County can further support municipal spring clean-up days.	The County will send an annual reminder to its member municipalities advising that municipally organized spring clean-up events can be supported with rolloff bins, waived tipping fees and promotional support.	✓	
Earth Day or other event days	Consider if there are event days to hold that would be beneficial and desirable in the communities.	SWS will enhance promotion and support of official environmental event days.		
Special Event recycling	Consider options for providing recycling support to special events held in the County.	SWS will take a more active approach and seek out special event organizers to provide information on recycling services available and will consider developing waste diversion and reduction standards for all special events in the future.		

Topic	Task	Direction/Action	Status - Complete	Status - Ongoing
Setting goals or targets	Consider setting diversion targets or long term goals (i.e. "Zero Waste") for the County to work towards.	The County recommitted its goal to meet the capture rate target of 85% of all acceptable blue box materials, and will strive for continual improvements in performance for all waste management programmes and services.		➔

