

REPORT TO COUNTY COUNCIL

2024 Annual Waste Management Reports

To: Warden and Members of County Council

From: Director of Public Works

RECOMMENDATION

1. That County Council receive Report PW 2025-18 entitled “2024 Annual Waste Management Reports” as information.

REPORT HIGHLIGHTS

- This report summarizes the annual performance of the Oxford County Waste Management Facility (OCWMF) and waste diversion programs in 2024.
- The County achieved an overall landfill waste diversion rate (residential and Industrial, Commercial and Institutional (ICI) waste material handled by Oxford County) of approximately 46% in 2024 and has an estimated remaining landfill service life of approximately 31 years.
- 2024 achievements include the diversion of 35,010 tonnes of material received at the OCWMF and includes brush, leaf and yard waste, construction and demolition waste, blue box material, biosolids, electronic waste, scrap metal, film plastic and agricultural plastic.
- Other 2024 accomplishments include the start of the South Fill Area Expansion Landfill Gas Wellfield Expansion projects.

Implementation Points

The 2024 Annual Waste Management Reports will be submitted to the Ministry of Environment, Conservation and Parks (MECP) by March 31, 2025, in accordance with regulatory requirements and posted on the County’s website for public access.

Financial Impact

There are no financial impacts as a result of this report. Any required actions that will result in expenditures have been accounted for in the 2025 Business Plan and Budget for Waste Management.

Communications

The 2024 Annual Waste Management Reports will be available for public viewing on the County's website on March 26, 2025, at <https://www.oxfordcounty.ca/en/your-government/reports-and-publications.aspx#Public-Works-Annual-Reports>.

The County communicates the performance of key Public Works systems (Waste Management, Transportation, and Water and Wastewater) annually to the public through an annual social media campaign after the last performance report has been submitted to Council. In addition, the County will further communicate 2024 performance highlights of key Public Works systems, including Waste Management, to the public through an annual social media campaign during National Public Works Week (May 18 – 24, 2025).

A copy of Report PW 2025-18 will be circulated to Area Municipalities and Zero Waste Oxford.

2023-2026 STRATEGIC PLAN

Oxford County Council approved the [2023-2026 Strategic Plan](#) on September 13, 2023. The Plan outlines 39 goals across three strategic pillars that advance Council's vision of "Working together for a healthy, vibrant, and sustainable future." These pillars are: (1) *Promoting community vitality*, (2) *Enhancing environmental sustainability*, and (3) *Fostering progressive government*.

The recommendation in this report supports the following Strategic Plan pillars and goals:

		
Promoting community vitality	Enhancing environmental sustainability	Fostering progressive government
	Goal 2.1 – Climate change mitigation and adaptation Goal 2.2 – Preserve and enhance our natural environment	Goal 3.1 – Continuous improvement and results-driven solutions

See: [Oxford County 2023-2026 Strategic Plan](#)

DISCUSSION

Background

Waste Management Services

As the Waste Management Authority, the County is responsible for residential curbside waste collection (garbage, recycling, large items) and management of waste generated within the County through landfill disposal, waste diversion, and resource recovery programs. The OCWMF is operated by County staff and receives solid waste from residential and ICI sources within the County. Residential waste collection services are managed by the County through a third-party contractor and municipal service agreements with Area Municipalities (City of Woodstock and Township of South-West Oxford).

Curbside collection of residential garbage, recycling (Blue Box) and large items is further supplemented by convenience depots located throughout the County where residents can drop off various waste materials (yard waste, film plastic, bulky Styrofoam, large items, recyclables, household hazardous waste, electronics, tires, scrap metal, and agricultural plastics). Convenience depots are operated by Area Municipalities on behalf of the County and are funded through the County's Waste Management budget.

A summary of the County-wide residential waste collection services and associated County service providers is provided in Table 1.

Table 1: Residential Waste Management Collection Services/County Service Providers

Waste Collection Services		Ingersoll, Blandford-Blenheim, East Zorra-Tavistock, Norwich, Zorra	Tillsonburg	South-West Oxford	Woodstock
Garbage and Blue Box Service Providers	Curbside Collection	County Contractor (weekly co-collection garbage and single stream recycling)		South-West Oxford * (six-day co-collection garbage and single stream recycling)	Woodstock * (weekly garbage and bi-weekly two stream recycling collection)
	Garbage Disposal	Oxford County Waste Management Facility (OCWMF) (User Fees Apply)			
	Blue Box Processing	County Contractor			Woodstock Contractor *
Convenience Depots Service Providers <i>(includes Blue Box, Cardboard, Film Plastic and Bulky Styrofoam, Agricultural Bale Wrap, Scrap Metal, Household Hazardous Waste, Cooking Oil (FOG), Tires, Electronics, and Construction and Demolition)</i>		Woodstock Enviro Depot * (Excludes agricultural bale wrap) (User Fees Apply for Non-Woodstock Residents)			
		South-West Oxford - Beachville Fire Hall * (Film Plastic Only)			
		Tillsonburg Transfer Station * (Excludes collection of blue box, household hazardous waste, tires, electronics, and agricultural bale wrap) (Open to all County residents in 2024, User Fees for Non-Tillsonburg Residents)			

Waste Collection Services		Ingersoll, Blandford-Blenheim, East Zorra-Tavistock, Norwich, Zorra	Tillsonburg	South-West Oxford	Woodstock
		Oxford County Waste Management Facility (OCWMF) (User Fees for Some Materials May Apply)			
Leaf and Yard Waste Depots Service Providers	Collection	Ingersoll, Zorra, East Zorra-Tavistock, Blandford-Blenheim, Tillsonburg and Norwich Leaf and Yard Waste Depots		OCWMF Leaf and Yard Waste Depot	City of Woodstock Leaf and Yard Waste Depot *
	Processing	Oxford County Compost Facility			
Large Items Service Providers	Collection	County Contractor (once annual curbside collection) (NEW in 2024 – once annual curbside collection in Tillsonburg)			Woodstock * (once annual curbside collection)
	Convenience Depots	Woodstock Enviro Depot * (User Fees Apply)			
		Tillsonburg Transfer Station * (Open to all County residents in 2024 with User Fees)			
		Oxford County Waste Management Facility (OCWMF) (User Fees Apply)			
	Processing	Oxford County Waste Management Facility (OCWMF)			

* Services provided by the Area Municipality under contract to the County

Oxford County and its eight Area Municipalities are scheduled to transition to the Provincial common collection system and Extended Producer Responsibility (EPR) on January 1, 2026. With the transition to full EPR, Ontario municipalities will no longer be responsible for managing and financing the traditional Blue Box program (collection and processing).

Environmental Regulatory Compliance

Operation of waste management facilities and waste diversion programs are regulated by the MECP through applicable legislation and issuance of Environmental Compliance Approvals (ECAs). Submission of annual reports to the MECP for various waste management services and activities is a regulatory requirement to demonstrate environmental compliance with associated legislation and specific ECA terms and conditions.

Annual reporting requirements must comply with the guidelines set out in the MECP's Technical Guidance Document: Monitoring and Reporting for Waste Disposal Sites Groundwater and Surface Water. This document provides a general framework for completing technical reports, as well as a report structure to ensure that all necessary information is provided for the MECP to complete a technical review of monitoring performed at both active and closed waste disposal sites.

In accordance with regulatory requirements, the 2024 Annual Waste Management Reports, prepared for submission to the MECP, provide performance data on Oxford County's waste management facilities, operations, and programs. The pertinent regulatory requirement is referenced in each Annual Waste Management Report.

Closed Landfill Sites

Oxford County owns the following eight closed landfill sites that were historically owned and operated at the lower-tier level and were transferred to the County in the early 1980s.

- Lakeside (East Nissouri) Landfill
- Embro (West Zorra) Landfill
- Thamesford (North Oxford) Landfill
- Blandford-Blenheim (Drumbo) Landfill
- Gunn's Hill (East Oxford) Landfill
- Otterville (South Norwich) Landfill
- Tillsonburg Industrial Landfill
- Holbrook Landfill

The local landfill sites noted above were closed prior to being transferred to the County, with the exception of the Tillsonburg and Holbrook sites that remained open and were operated by the County for a period of time until the OCWMF was opened in 1986.

With the exception of the Holbrook Closed Landfill Site, annual reporting to the MECP for the County-owned closed landfills is not a regulatory requirement. However, monitoring programs for landfill gas, groundwater, and surface water have been implemented at these sites as a due diligence exercise to identify any adverse environmental impacts and mitigate the County's risk and potential liability.

Comments

Summary of County-Wide Waste Generation

Approximately 112,450 tonnes of waste (0.3% decrease over 2023) was generated in Oxford County in 2024. Of the total amount of waste generated, 82,840 tonnes (0.6% decrease over 2023) was processed at the OCWMF. The remaining approximately 29,610 tonnes of waste was exported out-of-County (without direct handling at the OCWMF). This includes an estimated 26,790 tonnes of waste from the ICI sector (disposed of by private haulers) and 2,820 tonnes of Blue Box material from the City of Woodstock's curbside collection program exported directly to an out-of-County processing facility. Overall, approximately 26% (equal to 2023) of the total waste generated is being exported out of County.

A summary of County-wide waste generation in 2024 is depicted in Figure 1 with a historical summary of County-wide waste generation illustrated in Table 2. The total waste and large item generation tonnage per household (hh) for 2024 was 389 kg/hh for the entire County, representing a 5% increase over 2023.

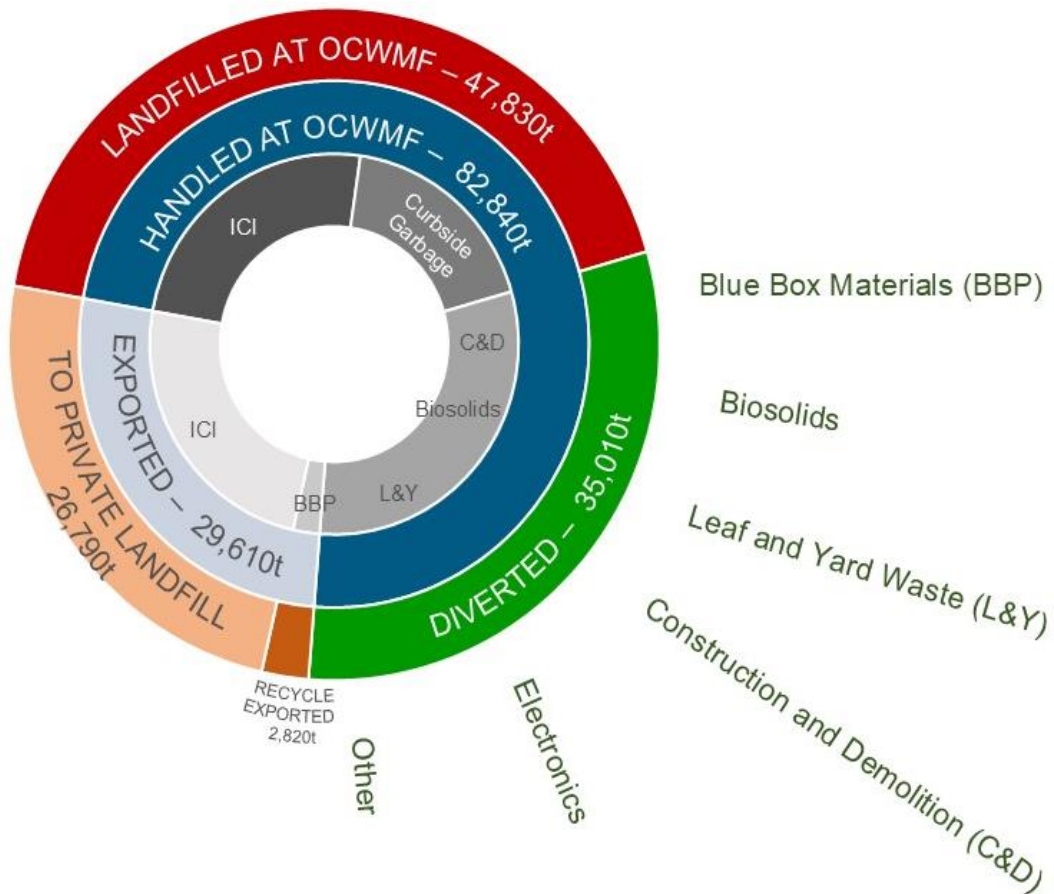


Figure 1: 2024 County-wide Waste Generation

Table 2: Historical County-Wide Waste Generation Summary (2020-2024)

Year	Total Waste Generated in Oxford County (tonnes)	Waste Exported out of County (tonnes)	Waste Processed at OCWMF (tonnes)	Waste Diverted and Recycle Exported (tonnes)	Landfill Diversion Rate
2024	112,450	29,610	82,840	38,000	46%
2023	112,780	29,425	83,355	37,350	45%
2022	109,454	29,232	80,222	36,280	45%
2021	115,195	29,040	86,155	40,095	47%
2020	122,610	26,025	96,585	40,320	42%

2024 Annual Waste Management Reports

The 2024 Annual Waste Management Reports have been generated to satisfy ECA terms and conditions, regulatory requirements, and Ministry technical reporting guidance documents, and will be submitted to the MECP by March 31, 2025.

The annual reports are linked below, followed by a summary section for each:

- [2024 Oxford County Waste Management Facility, Salford Operations and Monitoring Report](#)
- [2024 Oxford County Waste Management Facility, Annual Monitoring Report, Landfill Gas Collection and Flaring System](#)
- [2024 Oxford County Holbrook Landfill, Water Monitoring Report](#)
- [2024 Oxford County Stormwater Pond Results - Summary and Interpretation](#)
- [2024 Oxford County Waste Management Facility, HHW Annual Report](#)
- [2024 Oxford County Leaf and Yard Waste System Annual Report](#)
- [2024 Oxford County Blue Box System Annual Report](#)
- [2024 Oxford County Closed Landfill Sites, Due Diligence Monitoring](#)

Staff are pleased to inform County Council that in 2024, the County's waste management facilities and programs operated within environmental regulatory compliance and that no adverse environmental impacts were observed.

Oxford County Waste Management Facility, Salford 2024 Operations and Monitoring Report

- Approximately 82,840 tonnes of waste was handled at the site, with approximately 35,010 tonnes being diverted and recovered as material resources. Overall resource recovery material brought to the OCWMF in 2024 decreased by 6% and landfilled material decreased by 0.6%.
- The total trips by all vehicles using the facility averaged about 4,702 per month in 2024, an increase of 16% compared to 2023.
- The film plastic drop-off program generated 15 tonnes of material in 2024, a 67% increase over 2023.
- The bulky Expanded Polystyrene (Styrofoam) program generated 11 tonnes of recycled packaging material for reuse in product manufacturing, no change from 2023 tonnages.
- The remaining landfill site service life in 2024 is calculated to be approximately 31 years based on the current landfilling rate and waste diversion rate (approximately 46%).
- There were no influences of leachate in the groundwater at the site boundaries.
- Private well monitoring showed no landfill influence.

The MECP conducted a routine facility ECA inspection in August 2024. Of the items that were inspected, no environmental compliance orders were issued. However, the inspection report identified one ongoing concern and one recommendation:

- MECP identified a concern with surface emissions but acknowledged ongoing abatement efforts by the County to undertake repairs to the interim landfill cover, manhole sealing, and expansion of the landfill gas wellfield pending ECA approval in 2025.
- MECP recommended installation of a gas monitoring alarm system at the County's Biosolids Centralized Storage Facility (BCSF) due to proximity to the active landfill site.

Annual Monitoring Report, Landfill Gas Collection and Flaring System (LGCFS) January 2024 – December 2024, Oxford County Waste Management Facility

- The LGCFS operated as intended in 2024 and successfully controlled emissions even though volumes and concentrations of methane gas continue to remain low. The flare had an average run time of 65% compared to 32% in 2023. This increase in run time is due to modifications to operations to maximize flare run times. In 2024 the flare ran at an average flow of 97 cubic feet of gas volume per minute (cfm), down from 107 cfm in 2023 and an average 39% methane by volume, down from 48% in 2023.

2024 Water Monitoring Report, Holbrook Closed Landfill

- There was no clear indication of leachate influence in the deeper groundwater system at the property boundaries and no landfill influence at the private well monitoring locations.
- No methane was detected in 2024.
- Staff will continue to perform inspections at this facility to ensure the site is secure and to assess any potential environmental concerns.

2024 Due Diligence Monitoring Program, Oxford County Closed Landfill Sites

Monitoring programs for landfill gas, surface water and ground water were undertaken at County-owned closed landfill sites as a due diligence exercise and to identify any offsite adverse environmental impacts. The findings and recommendations of the 2024 Due Diligence Monitoring Program are highlighted below:

- No landfill impacts were identified at the Lakeside, Embro, Thamesford, Gunn's Hill and Otterville Closed landfill sites and therefore, further annual monitoring is not required.
- Continued annual monitoring is recommended to observe parameter concentration trends of potential historic impacts to the surface water and shallow groundwater to the east of the Blandford-Blenheim site.
- Continued monitoring at the Tillsonburg site is recommended to observe parameter concentration and flow rate trends at surface water monitoring locations to the east and southeast of the site.

Oxford County 2024 Compost Facility Storm Water Management (SWM) Annual Report

SWM system monitoring results indicated acceptable effluent concentrations were consistent with historical trends. In 2024, there were minor Provincial Water Quality Objectives/Canadian Environmental Quality Guidelines (PWQO/CEQG) exceedances for field pH, iron, total phosphorus, Total Suspended Solids (TSS) and phenols recorded, and mitigation was not deemed necessary based on external review using benchmark standards and historical reporting limits.

Oxford County 2024 Household Hazardous Waste (HHW) Depot Annual Report

- The depot serviced approximately 5,522 vehicles, a 7% increase from 2023.
- Approximately 218 tonnes of HHW material was collected, a 28% increase over 2023.
- The City of Woodstock's HHW Depot was open 159 days in 2024 and collected 115 tonnes of HHW (increase of 15% from 2023).

Oxford County 2024 Leaf and Yard Waste System Annual Report

- Over 17,840 tonnes of material was received, representing a 7% increase over 2023.
- Approximately 13,730 tonnes of finished compost was sold to the end market in 2024 and generated over \$264,400 in County revenue.
- A total of 95 composters and 170 green cones were sold to residents, a decrease of 37% from 2023.
- Home composters and green cones are sold throughout the County at a subsidized rate of \$20 and \$51.50 each, respectively.

Oxford County continues to undertake backyard composting program education and outreach to help reduce the quantity of organics currently black bagged/landfilled. Also, implementation of a County-wide SSO program will be phased in starting in 2026 for the Township of South-West Oxford and the City of Woodstock and in 2027 for the rest of the County.

Oxford County 2024 Year-End Blue Box Waste Management System Annual Report

- The recycling collection tonnage per hh for 2024 was 152 kg/hh for the entire County, representing a 1.3% decrease from 2023 even though there was a 1% increase in households. A contributing factor to the decrease in collected tonnes is due to material weight; Blue Box materials (e.g. paper products and packaging products) continues to be made lighter.
- 7,860 tonnes of residential curbside Blue Box material was collected (0.6% decrease from 2023). Following the removal of contaminated material (residual waste) during processing, approximately 6,640 tonnes of processed material was sent to end markets.
- The contamination rate of the 2024 County single stream recycling program is estimated at 15% and the South-West Oxford single stream recycling program is estimated at 3% based on third-party audit data. The variance between the diversion rates is due to the amount of sorting performed at the curb by the collector, the amount of urban vs rural stops and more specifically, the decrease in multi-residential collections, which typically have a higher blue box contamination rate. The Township collects on average 300 fewer stops per truck per day compared to the County's contractor. This variance in stops increases the amount of time available to sort material at the curb. The average contamination rate for single-stream recycling programs is 11% based on industry audit data, placing the South-West Oxford contamination rate below and the County higher than the industry average.
- The contamination rate for the two-stream recycling program in Woodstock was estimated at 9% based on third-party audit data, placing the contamination rate above the industry average of 7%.

2025 represents the last year that the Blue Box Program will be administered by municipalities and the County will continue to update residents on the Blue Box Program Transition to Producer Responsibility through the County's [website](#).

Film Plastics, Bulky Styrofoam, and Agricultural Bale Wrap Diversion Programs

There are five drop-off depots for film plastics and three drop-off depots for bulky Styrofoam located across the County and collected material tonnage continues to increase year over year with film plastic increasing by 66% in 2024 while bulky Styrofoam remained constant. The agricultural bale wrap program which started in 2023, increased collected tonnage by 60% in 2024.

Curbside Waste Collection Contract Performance

In 2024, staff monitored and tracked performance issues and any occurrences of missed and incomplete collections over the course of the year. Detailed contract performance metrics in 2024 are summarized in Table 3.

Table 3: 2024 County Curbside Collection Contractor Annual Completion Rate

Collection Performance		Ingersoll	Tillsonburg	Blandford-Blenheim	Norwich	East Zorra-Tavistock	Zorra	Total
Successful Route Completion Rate *	Q1	100%	100%	99%	99%	98%	100%	99%
	Q2	100%	99%	96%	99%	99%	95%	98%
	Q3	98%	100%	98%	97%	100%	96%	98%
	Q4	97%	99%	96%	99%	100%	99%	98%
Average Annual Completion Rate		99%	100%	97%	99%	99%	98%	98%

* Successful route completion indicates where the planned route curbside collection was completed on the designated pick-up day (no missed collections).

Staff regularly addressed contract performance issues with its collection contractor (Emterra) to ensure that any curbside collection customer service issues or incomplete collections were either resolved on the same collection pickup day (in most cases) or carried over to the next calendar day.

2024 Accomplishments

As part of the Goals and Objectives of the 2024 Business Plan and Budget - Waste Management, the following initiatives were implemented:

Residential (Curbside) Diversion Rate

The residential diversion rate (from curbside, depots, brush, leaf and yard waste depots, and OCWMF) was estimated to be 52% in 2024. The residential diversion rate has plateaued in recent years ranging between 47-52%.

Landfill Diversion Rate

The County's landfill diversion rate is currently 46% and takes into consideration all waste managed through County Waste Management services (residential and ICI). It is important to note that this diversion rate differs from what is published by the Resource Productivity and Recovery Authority, known as the residential diversion rate, which only takes into consideration residential generated waste.

Advancing to Zero Waste

To achieve the goals and objectives in the County's [Zero Waste Plan](#), as well as address provincial and federal regulatory requirements, the County will need to further increase waste diversion efforts through innovative programs and technologies.

In 2025, Council approved a County-wide green bin (SSO) program to be phased in over 2026 and 2027, which is the next step to increasing the life of the County's landfill site and further increasing the landfill diversion rate.

CONCLUSIONS

The 2024 Annual Waste Management Reports demonstrate that Oxford County's waste management programs and facilities continue to operate in compliance with regulatory requirements.

Residents and businesses across Oxford County continue to receive convenient access to curbside and waste management facility diversion programs.

Notable changes to management of waste across Oxford County will continue over the next decade and will contribute to the collective goals of a circular economy and recognizing waste as a resource.

SIGNATURES

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