



Social Research &
Planning Council



Operated by:

United Way
Perth-Huron

A young boy in a striped shirt is holding a small sapling, looking up with a hopeful expression. A man in a red and blue plaid shirt is kneeling beside him, with his hands on the soil around the base of the tree. The background is a soft-focus field of green trees and grass.

QUALITY OF LIFE: A CLEAN ENVIRONMENT

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contributed to this project. We value your contribution.**

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A CLEAN ENVIRONMENT

The environment around us is key to our existence. Our forests, rivers, lakes and soil provide us with the food we eat, the water we drink and the air we breathe. Our health and prosperity rely on the natural world and we must keep it healthy to survive. For Indigenous peoples, their relationship with the land is spiritual, whereas the Western worldview largely sees the land and its resources as commodities to develop and extract for the benefit of humans. In our region, there are reasons to be concerned about the environment, from a rise in *Special Air Quality Statements* to the state of our forests and wetlands.



Air

Special Air Quality Statements Are On the Rise

Ontario uses a two-level air quality alert system. The first level is a Special Air Quality Statement (SAQS). This level warns of reduced air quality expected to last one to two hours.¹ The second level is a Smog and Air Health Advisory (SAHA). This level warns of reduced air quality expected to last three or more hours. From 2017 to 2022, there were nine SAQS and one SAHA in Perth and Huron.

The number of Special Air Quality Statements has been increasing since 2019, going from zero to three per year.

Worsening air quality can be attributed to pollutants — including greenhouse gas (GHG) emissions — as well as the impacts of climate change, chiefly increasing temperatures and more wildfires.²

Higher levels of ozone can cause reduced lung function and irritation of breathing passages. Common sources include industrial and automobile emissions, gasoline vapours and electrical utilities.

Similarly, nitrogen dioxide in the atmosphere can be caused by automobile emissions and electricity generation and can also lead to inflammation and irritation of breathing passages. Particulate matter can be caused by construction sites, fires and unpaved roads. Higher concentrations in the atmosphere can increase the risk of an irregular heartbeat, irritation of breathing passages and worsening of asthma.³

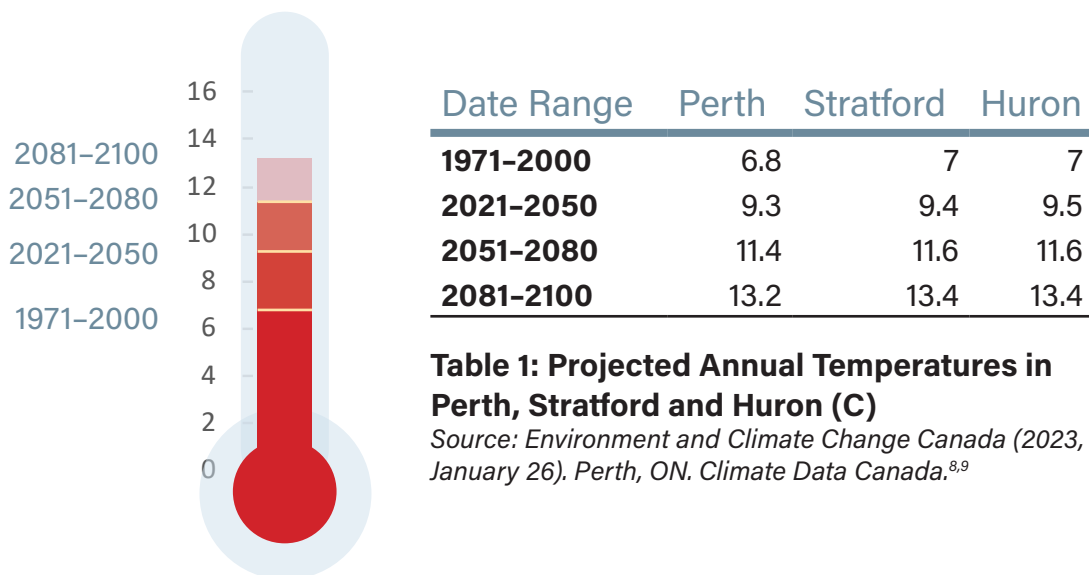


Our Climate is Changing

Climate change refers to shifts in temperature and weather patterns (such as precipitation and wind) over long periods of time, often decades or more.⁴ Because of the deep connection Indigenous cultures maintain with the natural world, they were among the first to notice the changing climate.

Fossil fuels are the biggest contributor to climate change. Globally, they account for over 75% of GHG emissions and 90% of carbon dioxide emissions. Power generation, manufacturing of goods, deforestation, transportation and food production are all causes of climate change. Climate change can lead to warmer temperatures, greater severity of storms, drought, rising ocean levels, extinction of species and food shortages.⁵

The following chart shows projected average annual temperatures for Perth-Huron, which are expected to rise dramatically by 2100:



Average annual precipitation is also projected to increase.

In both Perth and Huron, average annual precipitation is expected to rise 12% from 2051-2080^{6,7} and 16% from 2081-2100. In Stratford, the increase is projected to be 11% and 16% respectively during the same periods.

In both counties, **winters are becoming shorter each year with fewer and fewer frost days.** In Huron, the number of annual frost days is projected to decrease from 124 in the 2020s to 97 in the 2050s and 74 in the 2080s. In Perth, annual frost days are expected to drop from 132 in the 2020s to 122 in the 2050s.



Greenhouse Gas Emissions

Climate change is caused by an increase in concentrations of GHGs in the atmosphere. This increase is caused by human activities including agriculture and the consumption of fossil fuels. In Canada, emissions are put into seven categories.¹⁰

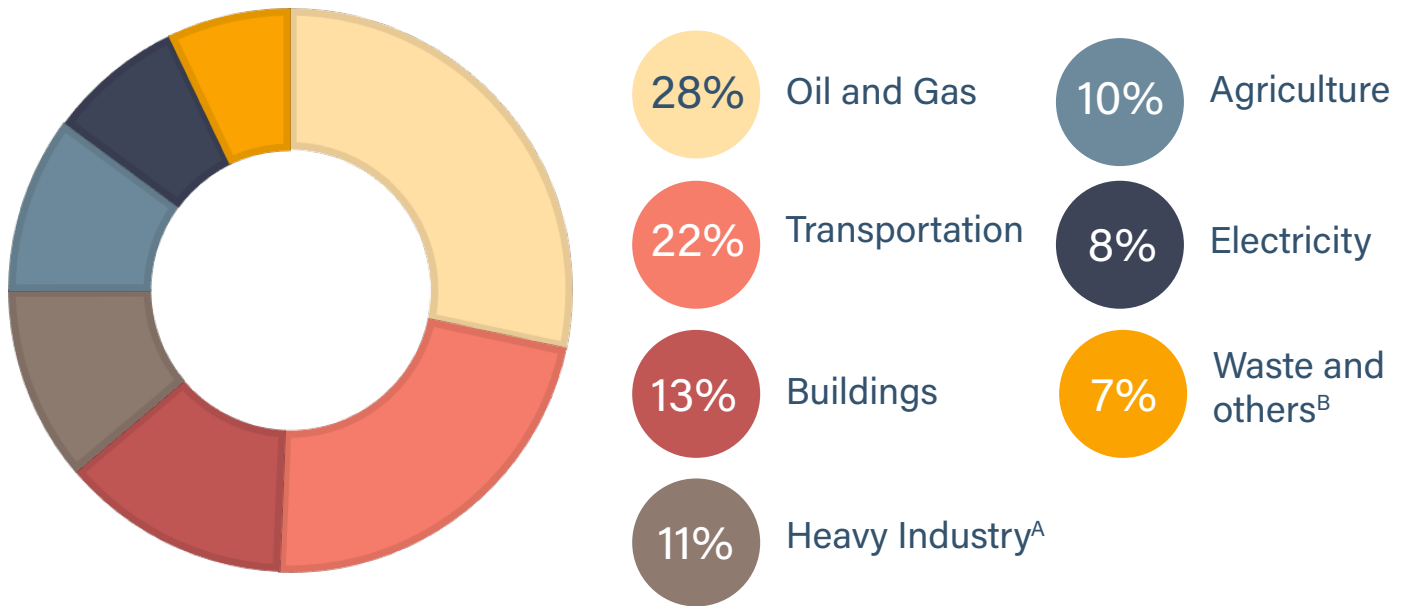
In 2009, the province passed the Green Energy and Green Economy Act (GEA) requiring that all public agencies in Ontario publish annual reports on GHG emissions. Both Perth County and Huron County prepare and publish yearly reports. The following is a look at this region's largest industrial emitters. In comparison to the large emitters, county facilities reported significantly lower GHG emissions.



See Page 22

Graph 1: Canadian Green House Gas Emitter Categories

Source: Environment and Climate Change Canada. (2023, April 14). *Canada's National Greenhouse Gas Inventory (1990–2021)*.



^AHeavy industry is emissions from non-coal, oil & gas mining, smelting & refining and production of industrial products such as cement, paper and chemicals.

^BOther emissions refers to coal production, light manufacturing, construction and forest resource extraction.

^cThe GHGs included are carbon dioxide (CO₂), methane (CH₄), nitrous oxide (N₂O), hydrofluorocarbons (HFC), perfluorocarbons (PFC) and sulphur hexafluoride (SF₆).

^dCurrently St. Marys Cement uses petroleum coke and natural gas as fuels, however, the facility has applied to use Alternative Low Carbon Fuels including but not limited to wood and plastic wastes. The fuel substitution is estimated to reduce the facility's overall CO₂ emissions by 20%.

*For more information about St. Marys Cement's planned GHG reductions, you can visit the project website at: <https://stmaryscement.com/Pages/Sustainability/St-Marys-Alternative-Low-Carbon-Fuels.aspx>.

Our Six Largest Industrial Emitters

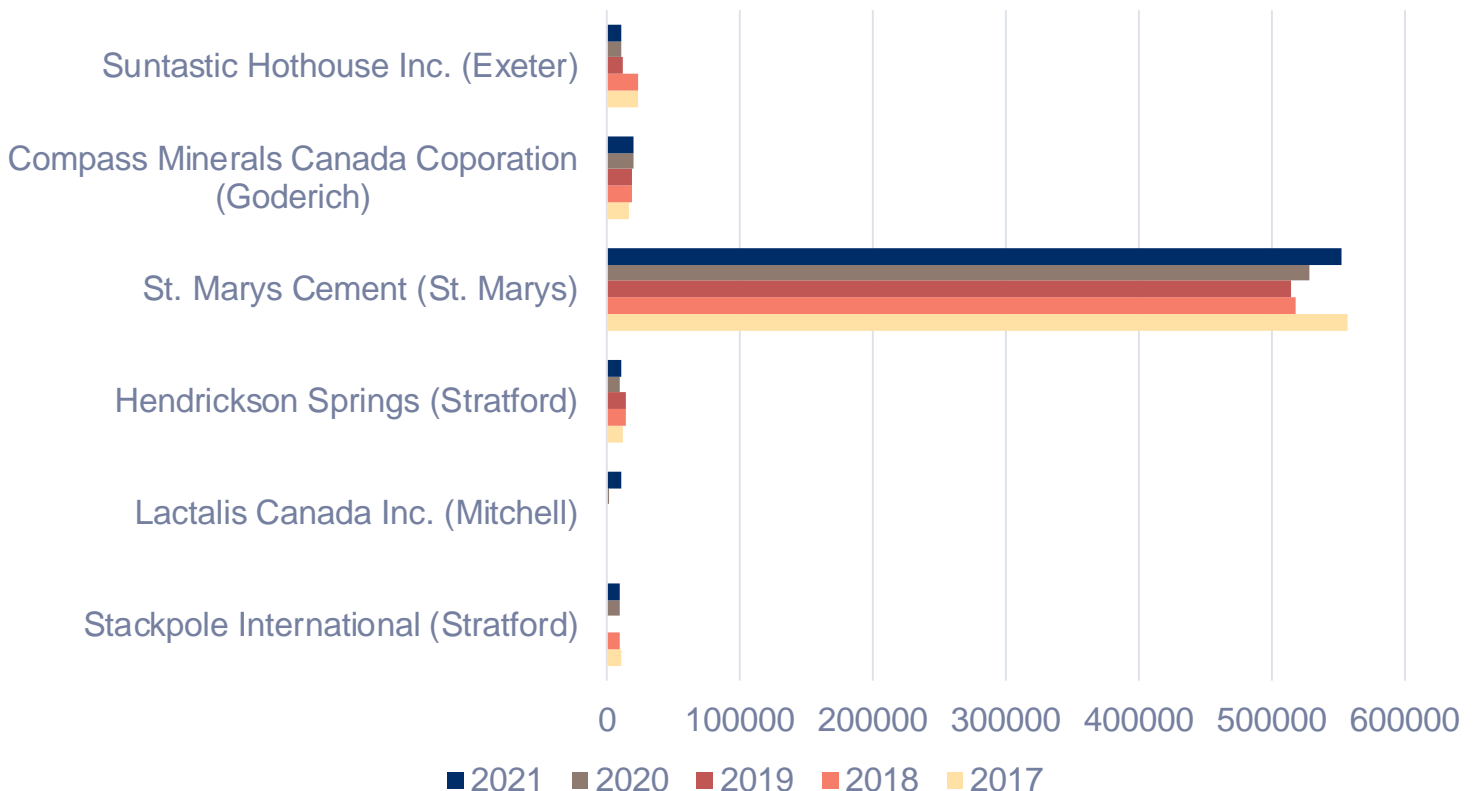
The national Greenhouse Gas Reporting Program (GHGRP) collects information annually on GHG emissions from facilities emitting 10 kilotonnes of GHGs or more.^c The GHGRP is mandatory and data is reported to Environment and Climate Change Canada.

Industry is a backbone of Canada's economy and is significant to the Perth-Huron economy. In Perth-Huron, six facilities meet the threshold and must report: *St. Marys Cement* (St. Marys), *Compass Minerals* (Goderich), *Hendrickson Canada ULC* (Stratford), *Stackpole International* (Stratford), *Lactalis Canada Inc.* (West Perth) and *Suntastic Hothouse Inc* (South Huron).

Consistent with Canada's industrial sector GHG emissions, *St. Marys Cement* is the largest emitter, emitting more than five times as much as the other five Perth-Huron facilities combined. Their emissions data, for the years these companies reported in the last five years, are shown in the following tables. The data reported in 2020 and 2021 was affected by COVID-related production slow-downs and reduced demand. Other factors affecting emissions levels in recent years include lower coal consumption and fuel switching.^{11,D}

Graph 2: GHG Emissions (kt) of Large Emitter Facilities

Source: Statistics Canada. Greenhouse Gas Reporting Program (GHGRP).



Climate change mitigation focuses on the reduction or prevention of climate change and its impacts. To mitigate climate change, actions must be taken to decrease GHG emissions. Preserving, planting and restoring natural carbon sinks such as wetlands, forests, trees and soil will also help remove excess emissions from the atmosphere.¹²

RECOMMENDATION



Individuals, organizations and governments find other ways to heat buildings and replace fueled vehicles and equipment with electric options.



WATER

Years of Pollution, Shoreline Erosion and Climate Change are Affecting Our Coastal Environment

Climate scientists predict a more turbulent atmosphere, causing more frequent weather and wind events and leading to more erosion. Less ice cover also offers less protection to the shoreline during winter months. **In Lake Huron, water levels could lower almost 20 inches by mid-century.** From 1973 to 2010, seasonal ice on the lake decreased by 71%. This is due to rising water temperatures, which are projected to increase 2–4 degrees by 2100. As temperatures keep rising, the decline in lake ice will continue.¹³

Every year, the Lake Huron Coastal Centre publishes a coast watchers report based on data collected by volunteer coast watchers in the area. Years of pollution, shoreline erosion and climate change have caused concern for the coastal environment in our region.

Coastal Conditions

In 2022, coast watchers recorded 283 instances where litter or microplastics were found on beaches. Microplastics are plastic items less than 5 mm in size, such as microbeads, fragments and foam. Most commonly, coast watchers found cigarette butts, food wrappers, plastic bags and plastic bottles. **Plastic poses a health and safety risk to both humans and animals on the shoreline.** Litter can lead to choking, starvation, bioaccumulation or biomagnification if consumed by wildlife or if wildlife becomes entangled in it. **A total of 80 kg of litter was removed by coast watchers in 2022.** This number was 80.5 kg in 2021 and 61.2 kg in 2020.¹⁴



<https://www.lakehuron.ca/coastwatchers>



Beach Water Quality is Impacted by Many Factors and Fluctuates Year to Year

Huron Perth Public Health (HPPH) regularly takes samples of beach water for bacteria. When levels of E. coli exceed the Ministry of Health guidelines, HPPH recommends that people do not swim. If people still choose to swim, they are at risk of being exposed to bacteria that can cause diarrhea and infections in the eyes, throat and skin. HPPH recommends swimmers be aware of the following when assessing whether it is safe to swim:



- Are you unable to see your feet while standing waist-deep in water?
- Has there been heavy rainfall in the last 24–48 hours?

If your answer to these questions is yes, then the E. coli levels on the beach are too high and it is unsafe to swim. E. coli bacteria levels are measured at 18 beaches in Perth-Huron. The geometric mean tells us the typical value for E. coli bacteria concentration on a beach. Any mean over 200 indicates an unsafe beach for swimming. In 2019 and 2020 none of the beaches had values above 200, but in 2021 four beaches had values over 200 and in 2022 three beaches had values over 200.¹⁵

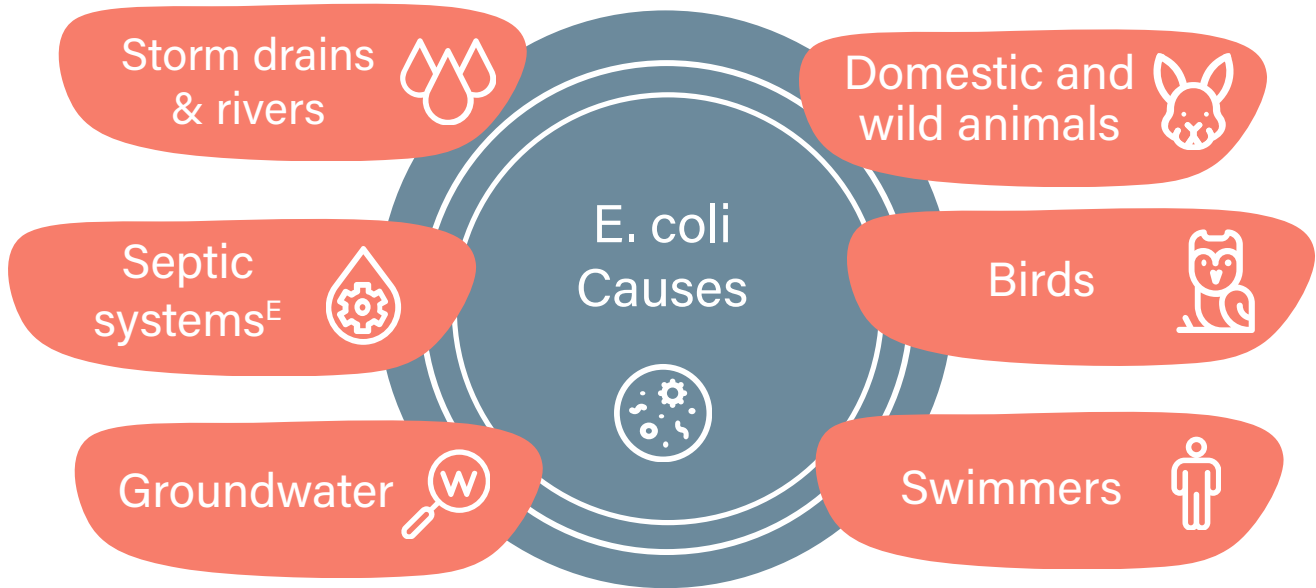
HPPH samples beach water from mid-June until Labour Day weekend. The following table displays the public beaches in Perth-Huron and the geometric mean collected every August from 2019–2022.

Beach	2019	2020	2021	2022
Amberley Beach	14	66	66	103
Ashfield Township Park Beach	41	90	90	278
Black's Point Beach	10	16	16	20
Goderich - Main Beach	11	13	13	983
Goderich - Rotary Cove	10	23	23	286
Goderich - St. Christopher's Beach	12	N/A	N/A	141
Hay Township Park Beach	17	N/A	N/A	32
Howard Street Beach (Bayfield Main Beach)	N/A	11	11	12
Pier Beach		11	11	44
Port Albert Beach	18	24	24	149
Port Blake Beach	16	15	15	189
St. Joseph's Beach	123	15	15	17
St. Marys Quarry		10	10	23
Sunset Beach	10	10	10	17
Wildwood Conservation Area Beach	N/A	15	15	49

Table 2: Public beach August E. coli geometric mean

Source: Huron Perth Public Health

High E. coli levels can be caused by a variety of factors, including:



RECOMMENDATION



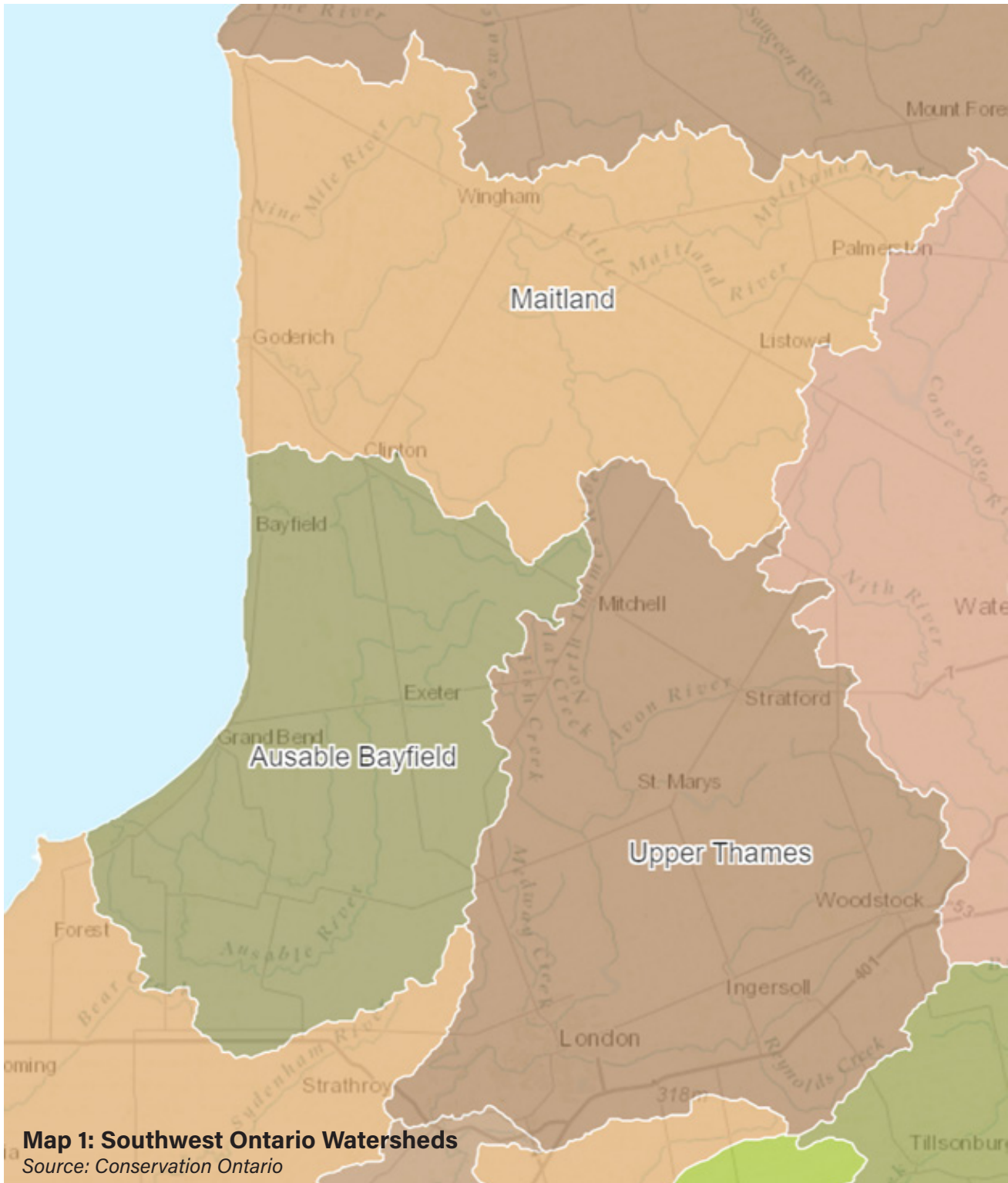
Individuals perform simple actions to have a positive impact on E. coli levels in surface waters and improve beach water quality.

^ESeptic systems are tanks that are underground and watertight. These systems are designed to provide primary wastewater treatment by holding wastewater long enough to allow solids to separate from oil and grease before being dispersed into soil where it is naturally filtered.



Watershed Indicators For Conservation Authority Areas

A watershed is an area of land that catches rain and snow and drains or seeps into groundwater, a marsh, stream, river or lake.¹⁶ Most of Perth-Huron is covered by three conservation authorities: Maitland Valley, Ausable Bayfield and Upper Thames River.



These three conservation authorities release watershed report cards measuring groundwater quality, surface water quality, forest conditions and wetland conditions. The report cards allow authorities to benchmark conditions, measure change, identify issues and track progress for actions. The following grading system is used to evaluate the condition of these areas:

Grades

A: Excellent - Very healthy watershed conditions

B: Good - Healthy watershed conditions

C: Fair - Watershed conditions require improvement

D: Poor - Poor watershed conditions, require improvement

F: Very Poor - Watershed significantly degrading, require much improvement

Insufficient Data

Surface Water Scores Are Consistent With Provincial Average

Surface water makes up rivers, lakes and streams. Surface water quality is assessed by measuring several indicators^F for water chemistry and the health of small organisms living in streams and on riverbeds. Findings from Ontario indicate surface water quality decreases the closer the source of water is to an urban area. There can be multiple sources of discharge in highly populated areas, including winter salt application or stormwater runoff. The average score for surface water in Ontario is C, indicating "fair" surface water quality.¹⁷ Both Maitland Valley and Ausable Bayfield Conservation Authorities matched the provincial average with C scores.^{18,19} Upper Thames Conservation Authority also averaged a C score but received slightly more D scores in some areas.²⁰

^FThe quality indicators are as follows: total phosphorus concentrations, benthic macroinvertebrates (small organisms whose numbers indicate the level of pollution in water), E. coli levels and salts (e.g., road salt and de-icers).



RECOMMENDATIONS



Individuals can improve surface water quality by reducing or eliminating the use of chemicals such as backyard pesticides.



Individuals and businesses limit the use of chemicals, including fertilizers and winter salt, and always use and store these chemicals correctly to help protect groundwater.

Groundwater Scores Are Better Than Provincial Average

Groundwater is an important source of drinking water found in cracks in soil, sand and rock. In Ontario, 23% of the population, including most rural homes and businesses, depends on groundwater. In some areas this is the only source of water. **The contamination of local groundwater is a growing concern.** Contaminants from industrial, residential and agricultural activities can enter groundwater through cracks in exposed bedrock. Sometimes this contamination is impossible to resolve.

Contaminants include:²¹

- Fertilizers
- Septic systems
- Water treatment effluent
- Manure
- Winter salt runoff
- Water softeners
- Uncapped or unused wells can provide an access point for groundwater contaminants

Groundwater quality is assessed by measuring the concentration of nitrite and nitrate (from fertilizers, manure and leaky septic systems) and the concentration of chloride (from natural or human causes). The provincial average grade for groundwater quality is B (good) for both nitrite and nitrate and for chloride. Maitland Valley scored higher than the provincial average with an A (excellent) for both indicators. Ausable Bayfield received mostly A (excellent) grades, but two monitored wells received F (very poor) grades. It is likely the F (very poor) grade for nitrite and nitrate was the result of surface water contamination through nearby sinkholes. The F (very poor) grade for chloride might be attributed to the well's location in deep bedrock and susceptibility to contamination. Upper Thames River did not report grades for groundwater quality.²²

RECOMMENDATIONS



Individuals and businesses work to protect groundwater sources by properly disposing of chemicals.



Individuals ensure unused wells are decommissioned and agricultural landowners consult OMAFRA's source protection guide for best practices to protect vulnerable groundwater sources.





Forests and Wetlands Score Lower Than Provincial Average

Forests, wetlands and riparian areas (trees, shrubs and plants near bodies of water) provide important support for the ecosystem. They serve as habitats for wildlife, shade and help purify air and water. They also protect soil, reducing the risk of erosion and flooding. Forests absorb greenhouse gases and act as a natural “air conditioner” for the land. Forest conditions are measured by assessing the area covered by forest within a watershed and the amount of forest interior providing habitat for wildlife. In addition to the number of trees, the variety of native species of trees and vegetation indicates the resilience of a forest and its surrounding area to climate change impacts.²³

Between 2010 and 2015 approximately 353 hectares of forest were cleared for urban and agricultural uses in the Upper Thames River Conservation Authority area. During the same period, 781 hectares of forest were gained thanks to forest succession and improvements in mapping.²⁴

In the residential areas of Stratford, tree canopy percentages range from 30–35%. This is higher than average urban forest numbers in Ontario. If industrial and commercial areas are added to the equation, the overall percentage comes down to 25–28% in Stratford.

Conservation authorities in Perth and Huron all report on wetlands, although many other Ontario conservation authorities do not. **The greatest threats to forests, wetlands and riparian areas are urbanization, changes to natural water levels, pollution, climate change and invasive species.** There are three indicators used to assess forest conditions: per cent forest cover, per cent forest interior and per cent riparian zone forested. On average, all three of the conservation authorities covering Perth-Huron received C (fair) or D (poor) grades for both forest and wetland conditions. Overall, the grades were lower than the provincial average of C (fair).²⁵

Conservation authorities can help by providing details on native species and include guides and information on their websites. Ausable Bayfield and Upper Thames River Conservation Authorities also offer programs to purchase native species at affordable prices.²⁶



https://www.abca.ca/assets/files/Native_Plant_Guide_2021_LR.pdf

<https://thamesriver.on.ca/watershed-health/native-species/recommended-trees-and-shrubs/>

RECOMMENDATIONS



Landowners, community groups, governments and businesses increase the forest cover and improve the sustainability of woodlots and urban forests in consultation with local conservation authorities.

Bio-diversity protects forests from insects and diseases, improves resilience to climate variations and provides resources for wildlife. Woodlots and urban forest are habitat for wildlife.

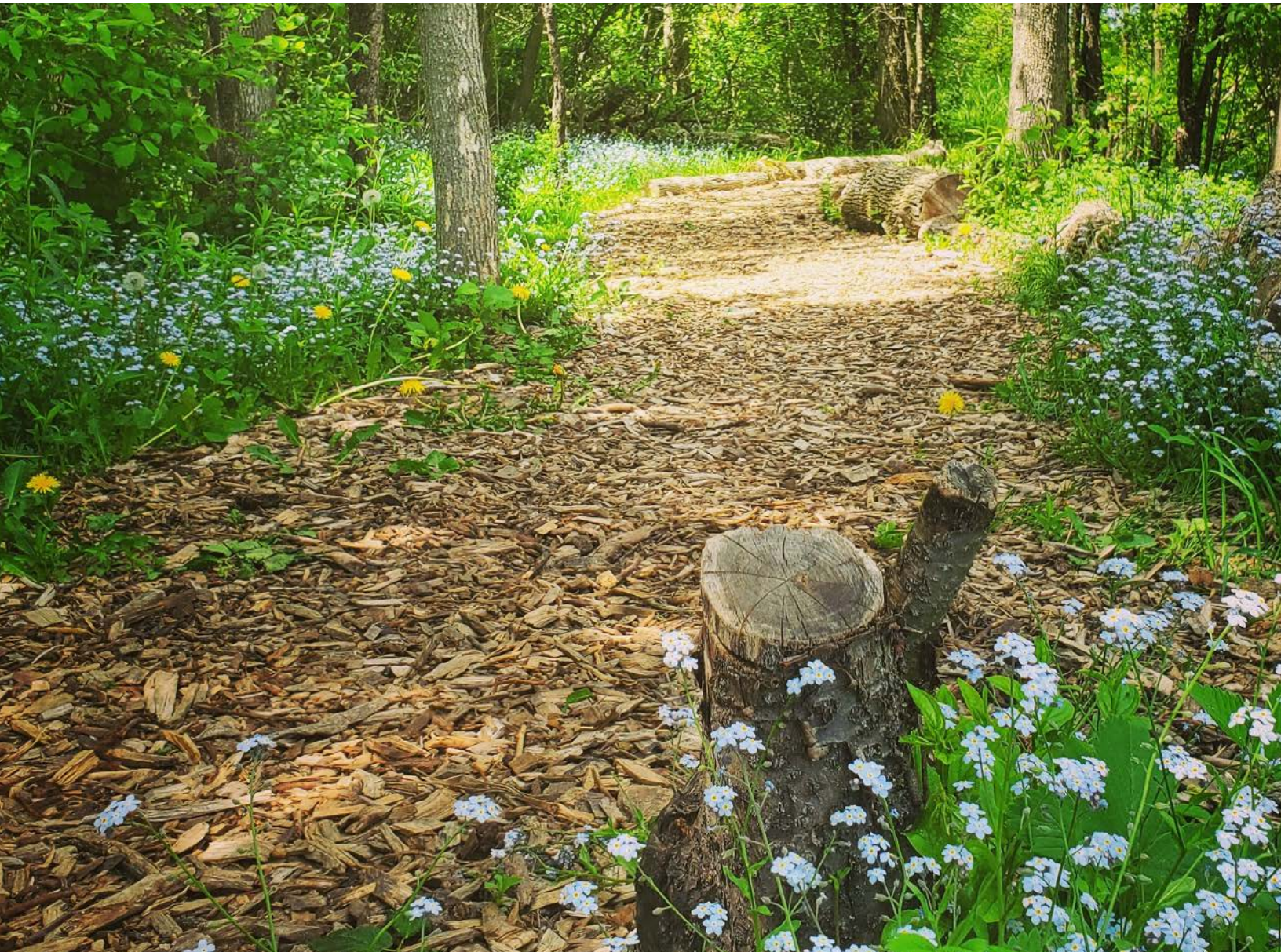
RECOMMENDATIONS



Individuals, community organizations and municipal governments increase the tree coverage in woodlots and urban forests with a diverse number of native species.



Municipal governments share information on the benefits of urban forests to increase knowledge and awareness of the importance of the canopy in improving the land, air and water quality. They can also support private landowners through stewardship programs to preserve and enhance woodlots, among other environmental protection activities, and even offer access to provincial tax relief programs.



Waste is Up, Recycling is Steady

The following charts display recycling and waste by households in the region. While trends for the different areas remained consistent from 2016 to 2022, changes can be explained by a variety of factors. For example, the jump in recycling and waste for Bluewater is the result of an automated collection launch, meaning the area went from bag tags to a wheelie bin system. Another jump occurred in 2021, explained by an upsize in the waste bin sizes available in rural areas.

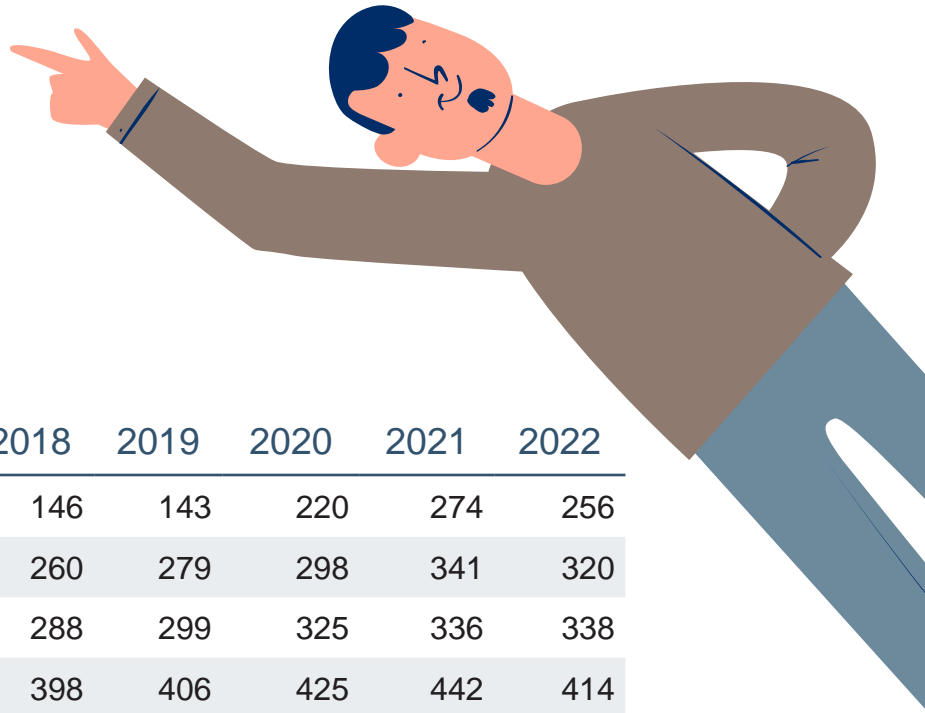
While recycling trends vary across municipalities, **waste per household has increased in every municipality.**

Recycling	2016	2017	2018	2019	2020	2021	2022
Bluewater	107	114	112	114	152	171	172
Central Huron	200	201	194	192	190	207	190
Goderich	298	304	329	313	279	272	252
Morris-Turnberry	224	232	221	221	210	220	206
South Huron	318	310	300	286	265	264	262
North Perth	262	268	261	267	251	246	232
Perth East	165	199	216	233	234	239	228
Perth South	137	199	196	198	203	216	216
West Perth	275	276	277	285	271	265	263
St. Marys	341	332	328	334	325	347	308

Table 3: Recycling by household (kg/hhld)

Source: Bluewater Recycling Association





Waste	2016	2017	2018	2019	2020	2021	2022
Bluewater	122	136	146	143	220	274	256
Central Huron	226	239	260	279	298	341	320
Goderich	249	273	288	299	325	336	338
Morris-Turnberry	381	385	398	406	425	442	414
South Huron	345	375	398	429	492	482	480
North Perth	106	197	299	314	339	353	337
Perth East	147	254	282	279	300	316	305
Perth South	377	385	401	406	465	444	447
West Perth	445	443	449	463	478	510	479
St. Marys	341	332	328	334	325	347	308

Table 4: Waste by household (kg/hhd)

Source: Bluewater Recycling Association



Diversion Rates

This chart displays the diversion rates for Perth and Huron as well as Stratford:

Region	kg/hhld/yr	2019	2020	2021
Perth and Huron	Waste	289.97	322.49	345.94
	Recycling	230.04	229.24	238.78
	Diversion %	44%	42%	41%
Stratford	Waste	394.74	365.37	349.33
	Recycling	259.93	311.69	343.88
	Diversion %	40%	46%	50%

Table 5: Diversion Rates

Source: Bluewater Recycling Association, City of Stratford.

RECOMMENDATION



Provincial government legislates closed-loop recycling, requiring producers to ensure all packaging is recyclable.

As citizens and consumers we need to change our perspective that recycling is the solution to waste. Recycling systems were never designed to manage the large volume and complexity of materials we have today.²⁷

RECOMMENDATION



Municipal governments ensure that all residents, including small, rural and remote communities, have access to recycling.



Green Infrastructure

The use of natural and green infrastructure upgrades will reduce costs in the long term. Green infrastructure can cost 5 to 30% less to construct and can be 25% less costly over its life span, than similar traditional infrastructure.

RECOMMENDATION



Provincial and federal governments increase funding to green infrastructure programs, with a dedicated stream for natural infrastructure projects, particularly with an aim to replace and readapt aging water, wastewater and stormwater systems.

The federal government has the Green Infrastructure stream to support greener and more resilient communities. Eligible projects target climate change and disaster mitigation, greenhouse gas emissions reduction, renewable technologies, water and wastewater systems upgrades, soil and air pollutants.

Side by side with federal government support there is the use of natural infrastructure, which is the preservation, restoration or enhancement of ecosystem features and materials to meet infrastructure needs at the same time as offering environmental, economic and community health and well-being. Natural infrastructure has an added benefit of allowing access to nature by communities that don't have green spaces or lack natural protected area, in addition to providing critical infrastructure.

RECOMMENDATIONS



Municipalities in Perth-Huron, along with associated community organizations, promote the benefits of compost and best practices for using compost.

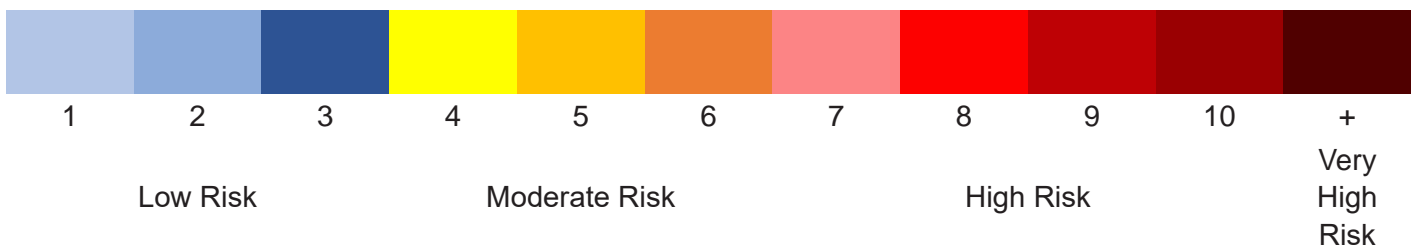


Compost needs to be made convenient and accessible to residents, community groups, farmers and services who could benefit from using this product.



The Air Quality Health Index (AQHI) is a scale designed by the Government of Canada showing how the air around us affects our health. Its aim is to limit exposure to air pollution by monitoring levels at any given time. The AQHI is calculated by assessing risks associated with a combination of the following air pollutants: ozone at ground level, particulate matter (PM) and nitrogen dioxide (NO₂).

In 2022, scores in Perth-Huron (measured at Grand Bend) were, on average, in the “low risk” category. In the spring and summer months there were some “moderate risk” scores with one “high risk” score in late June.
















The AQHI is measured on a scale of 1 to 10+. The diagram above displays this scale.















- Scores of 1-3 = Low risk. This is the ideal air quality.
- Scores of 4-6 = Moderate risk. There is no need to modify your usual activities unless you experience coughing, throat irritation or related symptoms.
- Scores of 7-10 = High risk. Reducing strenuous activities is recommended.
- Scores above 10 = Very High risk. Strenuous activities should be avoided.



GHG Emissions For PERTH COUNTY Facilities

The following chart displays GHG emissions (in kg) for Perth County buildings. Due to gaps in data and reporting errors, accurate data is not currently available for 2014-2016 and 2020. The jump in numbers for emergency medical services in 2018 can be attributed to the inclusion of Stratford EMS services, which was not included in previous years.

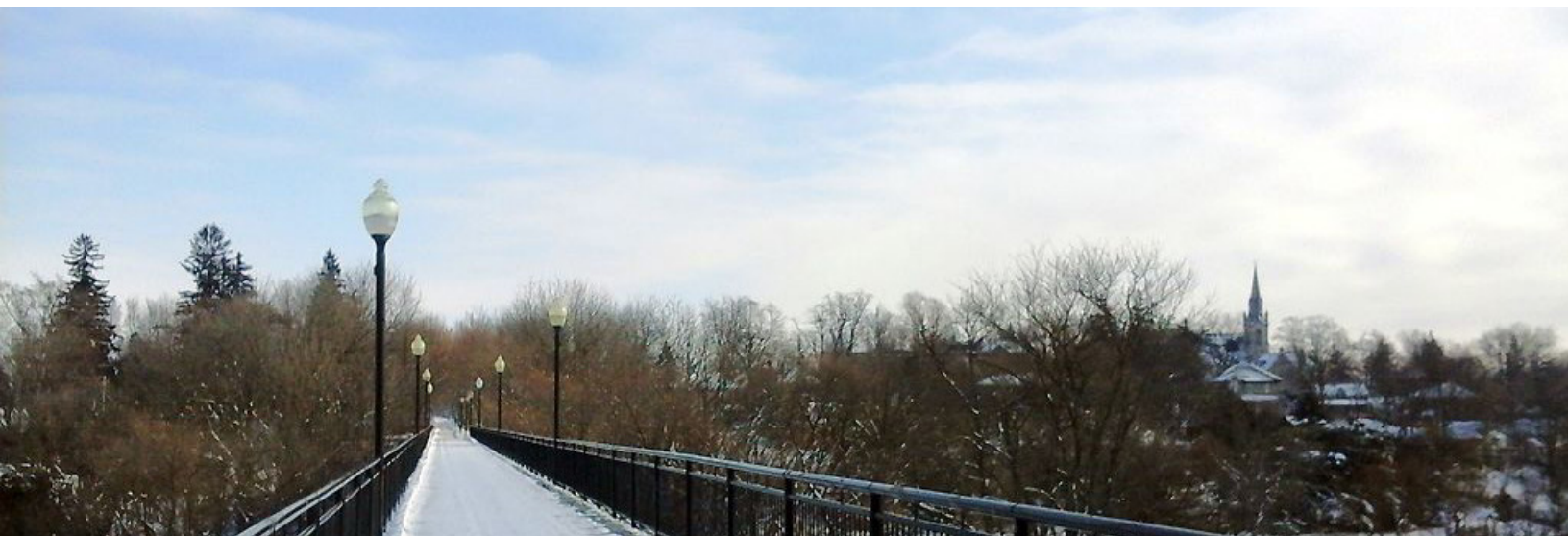
	Recommendation	Individual & Community	Businesses & Organization	Municipal Gov.	Provincial /Federal Gov.
1	Individuals, organizations and governments find other ways to heat buildings and replace fueled vehicles and equipment with electric options. (p.8)				
2	Individuals can perform simple actions to reduce E. coli levels in surface water and improve beach water quality for everyone. (p.11) Actions include: <ul style="list-style-type: none"> Proper disposal of animal and human waste Prevention of livestock grazing near lakes Maintaining septic systems and decreasing the use of fertilizer and manure near lakes Not feeding wildlife — particularly geese and seagulls — at home and in public spaces Reducing or eliminating the use of backyard pesticides Implementing farming best practices including keeping manure storage in a flat area and covered to limit runoff Implementing measures including buffer zones near lakes to prevent livestock grazing, as well as effectively managing stormwater runoff, could also have positive impacts on E. coli levels 				
3	Individuals can improve surface water quality by reducing or eliminating the use of chemicals such as backyard pesticides. (p.13)				
4	Individuals and businesses limit the use of chemicals, including fertilizers and winter salt, and always use and store these chemicals correctly to help protect groundwater. (p.13)				
5	Individuals and businesses work to protect groundwater sources by properly disposing of chemicals. (p.14)				
6	Individuals ensure unused wells are decommissioned and agricultural landowners consult OMAFRA's source protection guide for best practices to protect vulnerable groundwater sources. (p.14)				

	Recommendation	Individual & Community	Businesses & Organization	Municipal Gov.	Provincial /Federal Gov.
7	Landowners, community groups, governments and businesses increase the forest cover and improve the sustainability of woodlots and urban forests in consultation with local conservation authorities. (p.16)				
8	Individuals, community organizations and municipal governments increase the tree coverage in woodlots and urban forests with a diverse number of native species. (p.17)				
9	Municipal governments share information on the benefits of urban forests to increase knowledge and awareness of the importance of the canopy in improving the land, air and water quality. They can also support private landowners through stewardship programs to preserve and enhance woodlots, among other environmental protection activities, and even offer access to provincial tax relief programs. (p.17)				
10	Provincial government legislates closed-loop recycling, requiring producers to ensure all packaging is recyclable. (p.20)				
11	Municipal governments ensure that all residents, including small, rural and remote communities, have access to recycling.. (p.20)				
12	Provincial and federal governments increase funding to green infrastructure programs, with a dedicated stream for natural infrastructure projects, particularly with an aim to replace and readapt aging water, wastewater and stormwater systems. (p.21)				
13	Municipalities in Perth-Huron, along with associated community organizations, promote the benefits of compost and best practices for using compost. (p.21)				
14	Compost needs to be made convenient and accessible to residents, community groups, farmers and services who could benefit from using this product. (p.21)				

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About the SRPC

The Social Research & Planning Council (SRPC), operated by United Way Perth-Huron, is comprised of community representatives who are dedicated to the collection, analysis and distribution of information relating to social trends and issues in Perth and Huron counties. The SRPC approaches its work in two ways:

1. Commissioning research into specific social issues.
2. Developing recommendations for community improvement based on local findings and working collaboratively with community members to implement change.





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A photograph showing the back of a man's head and shoulders, wearing a white shirt and sunglasses on his head. A young child with blonde hair is leaning against his shoulder, looking towards the camera. They are in a field of tall green plants, possibly corn, under a bright sky.

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