

Climate action plan

2026-2030



Table of contents

Part 1: Where are we

Link to the Strategic Plan.....	5
Timeline of County initiatives	6
Climate mitigation vs. adaptation.....	7
Summary of engagement.....	8
Future projections of local hazards.....	10

Part 2: How we'll get there

A climate action roadmap.....	12
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Part 3: The next five years

Heat response strategy.....	14
Safe salt strategy.....	16
Air quality response.....	17
Sustainability checklist.....	18
Pollinator preservation.....	19
Flood resiliency measures.....	20
Enhancing the Water Conservation Program.....	21
Revisiting the 100% Renewable Energy Plan.....	22
Supporting awareness re: vector-borne disease.....	23
Operational tracking of weather events.....	24
Supporting staff-led sustainability and innovation.....	25



01

Where we are



Link to the Strategic Plan

The 2023-2026 Strategic Plan strives for a *healthy, vibrant and sustainable future*, with a pillar of the Plan dedicated to environmental sustainability. Specifically, Goal 2.1 – climate change mitigation and adaptation – outlines a Climate Action Plan as one of its initiatives. The Climate Action Plan (CAP) is an expansion of the County’s existing initiatives and aims to be interdisciplinary in nature, in that it is not “owned” by a singular department, but includes broad, wide-reaching projects that involves all internal departments, in addition to working with community partners.

Strategic Plan engagement

During the creation of the Strategic Plan, engagement activities found that 80% of respondents expressed the importance of:



Protecting and respecting the environment and Oxford’s natural assets



Managing growth effectively and ensuring the infrastructure is in place to support growth



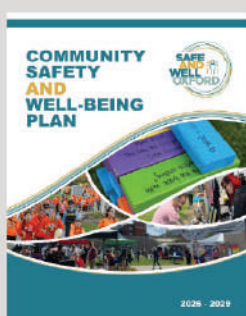
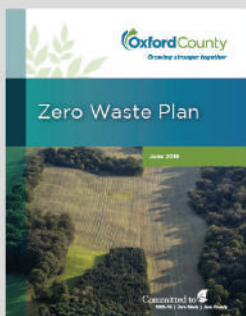
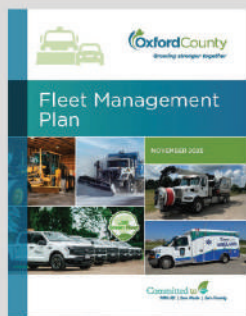
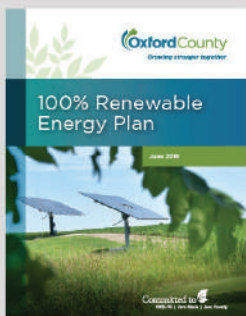
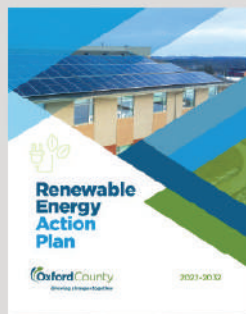
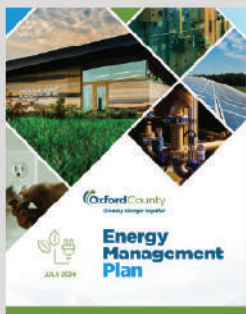
Enhancing community safety and well-being in our neighbourhoods



Working to provide better access to local healthcare services across the healthcare spectrum

^ You will notice these themes throughout the document

The Climate Action Plan considers all of these factors and, in collaboration with other guiding documents, aims to address them through long-term, effective initiatives that put our community first.

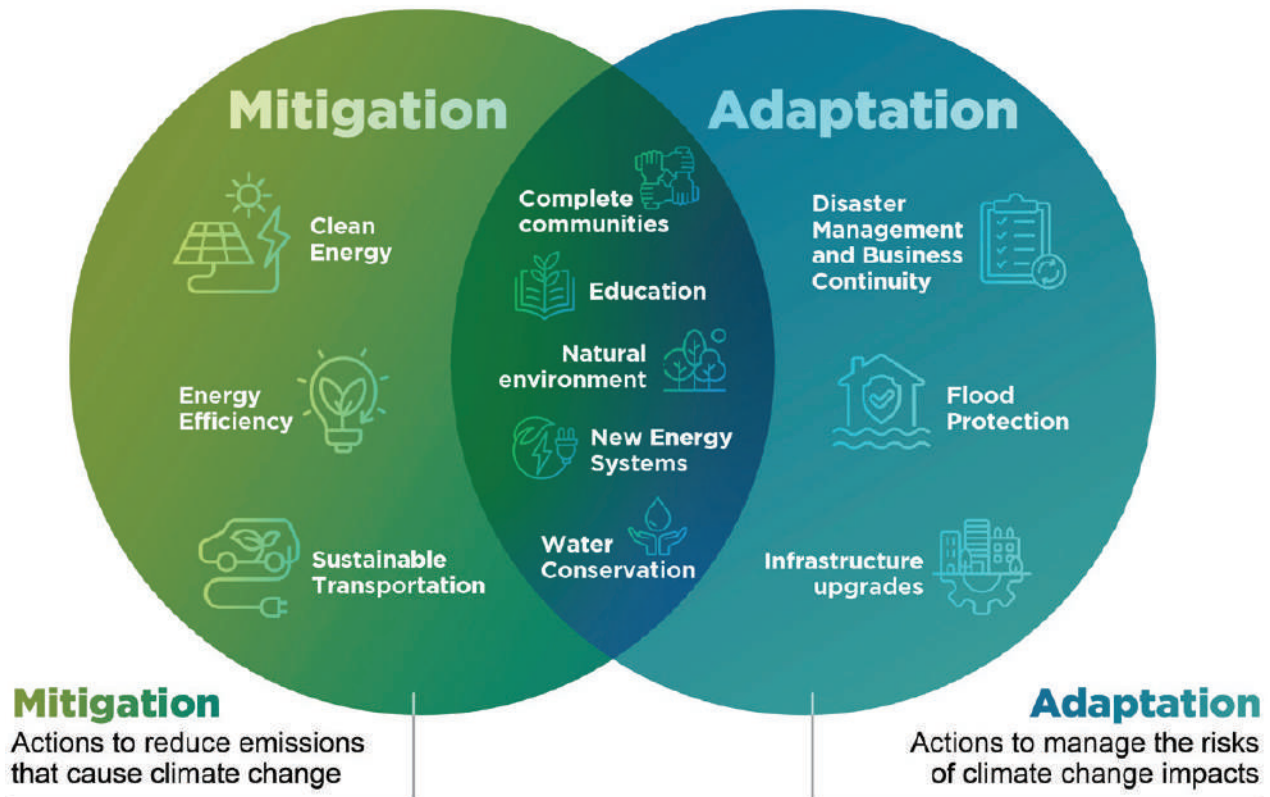


Timeline of County initiatives

The *Future Oxford Community Sustainability Plan* was a significant undertaking that included robust community engagement and a multi-criteria assessment tool. One of the goals in that plan was to “*create a region-wide plan for adaptation to climate change,*” so climate action has been part of the County’s vocabulary for over a decade.

However, our community is very different than it was in 2015, as are the broader policies impacting municipalities, the economy and the environment. It’s important to acknowledge the connections between where we were, where we are now, and where we want to go as we reflect on Oxford and the people that call it home.

Climate mitigation vs. adaptation

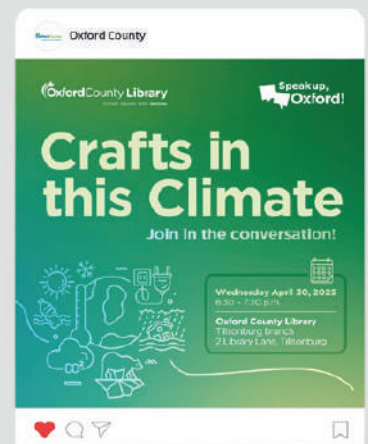


Most of the initiatives undertaken to date are cost-saving climate mitigation measures and in that way, Oxford County has been a leader, including early adoption of a renewable energy target and procuring Canada’s first Compressed Natural Gas snow plows. Climate adaptation, though, is a focus area that will be the primary motivation for this Plan, as it will aid in preparing the community for the inevitable warming world by building resiliency into our infrastructure and service delivery.

Furthermore, this Plan is intended to complement the ongoing efforts of the Asset Management Plan and the well-founded principle that investing in climate adaptation today will save money in the future. The cost of doing nothing is predicted to be exorbitant compared to the initiatives that are well within our reach. It’s also important to consider the multiple crises individuals are facing that are being addressed at the municipal level: a housing crisis, an affordability crisis *and* a climate crisis - the latter of which will exacerbate the others.

For example:

A family who lives in a flood-prone area and can’t afford to move elsewhere may be pushed into poverty the next time their basement floods. Unable to properly remediate the basement, the family becomes ill and is forced to move in with relatives. Using this as a possible example, it’s easy to see how problems can start to compound.



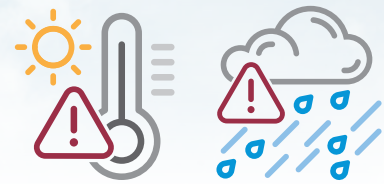
Summary of engagement

Findings

The goal for the creation of the Climate Action Plan was to have a robust engagement strategy that involved the community in the process. This included continuous dialogue with internal departments as well as engagement with a range of community partners: Smart Energy Oxford, Zero Waste Oxford, Woodstock Environmental Advisory Committee, Southwestern Public Health, and the People and Belonging Action Coalition.

In addition, staff engaged with over 125 individuals at the Woodstock General Hospital Earth Day event on possible projects to be implemented within this Plan.

A community-wide survey was promoted and received almost 700 responses. Furthermore, questions related to climate change were intentionally included in the Canadian Index of Wellbeing survey for additional feedback.



Future projections of local hazards

Climate change is one of the biggest threats of our time and will put a significant burden on both local governments and individuals. The Federation of Canadian Municipalities estimates that climate change impacts – such as flooding, fires and drought – will cost municipalities \$5.3 billion annually. Furthermore, weather-related disasters will have a direct negative impact on national GDP by mid-century.



An independent Climate Hazard Assessment was completed for the County in 2026 with financial assistance through the Green Municipal Fund. This exercise included a review of historical weather events, future climate projections, and a summary of anticipated impacts to systems. This provides the local context needed to make informed decisions on climate action. The 2026 Climate Hazard Assessment identified the three biggest local threats as: **extreme heat, extreme precipitation and freeze/thaw events**; all of which are already being experienced and are expected to intensify under both moderate and high-emissions scenarios.

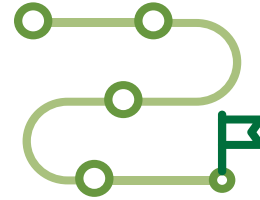
It is anticipated that there will be significant local impacts to infrastructure performance, agricultural operations, ecosystem health and community wellbeing. However, these impacts are not uniform across the County's geography, with the settlement areas of Woodstock, Tillsonburg and Ingersoll, as well as portions of Norwich, showing the strongest overlap between increasing climate exposure and social vulnerability, suggesting that some communities may face more difficulty in recovering from certain conditions. Furthermore, this indicates that a "one-size-fits-all" approach to climate action would not be suitable for Oxford's unique urban/rural makeup.

Climate change has already been identified as a significant risk via the Asset Management Plan. This, coupled with the Climate Hazard Assessment, helps to identify key areas of concern that require action.



02
How we'll get there

A climate action roadmap



This Plan will act as a roadmap for the County's climate-related initiatives for the next five years and, like any roadmap, is subject to change based on conditions. These initiatives are focused on resiliency and preparedness, as climate action is about far more than greenhouse gas emissions. For this reason, reducing greenhouse gas emissions is not the primary motive for any of the items listed in the following pages. Emissions reductions are already being achieved via Council-approved initiatives, including the Fleet Plan and the Renewable Energy Action Plan. While these initiatives have been proven to be cost-effective and meaningful, this is the first document devoted to climate **adaptation** and **preparedness**.

Some of the proposed measures in this Plan are already being undertaken at a smaller scale and could benefit from broader support. Others are new, but necessary. All of these initiatives, though, are indicative of sound planning and good governance.

Items listed in this document are deemed to be suitable for the County's present state and feasible within the next five years. Further, these projects are in response to the dynamic conditions and diverse perspectives in Oxford and are a local approach to a broader problem. At the five-year mark, progress will be evaluated and will inform the next iteration of the Plan. If a project is at any point deemed no longer feasible or unnecessary, it will not be pursued. Moreover, projects will be assessed and prioritized on an annual basis based on factors that may influence their effectiveness, i.e. budget impacts, legislation, resources, etc. Each of these projects are intended to have a meaningful and lasting impact.

The Climate Action Plan is intended to create a culture of preparedness in our community that will extend beyond the services we deliver.

Many of these projects will only require operational support, while others may require funding via the Business Plan and Budget process. Staff will continue to actively seek external funding sources as the first step in implementing a project. Each project requiring County funding will be brought forward in that budget year for consideration and will be subject to Council's approval at that time.



03

The next five years



Heat response strategy

Adaptation

Local health experts at Southwestern Public Health and Oxford County Paramedic Services agree that heat is and will continue to have impacts on the health of the community and will be most severe for those with underlying health conditions as well as marginalized populations including: immigrants, international agricultural workers, and individuals at risk of or experiencing homelessness. ***Moreover, through the climate survey, 32% of respondents self-identified as having a health condition that is exacerbated by heat.***

The Climate Hazard Assessment found extreme heat conditions will significantly increase in frequency this century, with compounded risk most prevalent in Oxford County's urban areas. This will directly impact the people of the community, including both physiologically (i.e. heat exhaustion; heat stroke; kidney strain; worsening cardiovascular, respiratory and chronic disease, etc.) and psychologically (anxiety; depression; increased aggression, etc.) Furthermore, a key consideration found in the report was public health and community awareness:

“Increasing heat events... underscore the need for preparedness measures such as cooling strategies, emergency response coordination and targeted outreach to vulnerable populations.”



A heat response strategy would evaluate all areas of County services and consider suitable, proactive enhancements to service delivery for when a heat event is declared. This will require collaboration with community partners to identify and fill service gaps. The first step will be a heat response exercise in 2026 supported by Southwestern Public Health. Following this exercise, staff will explore the feasibility of interventions such as:

- Ensuring cooling spaces are available within our social housing portfolio
- Providing additional support to socially isolated or otherwise vulnerable individuals during heat events
- Continuing staff training on heat interventions
- Installing signage educating about heat risk in high-traffic urban areas
- Expanding the distribution of cooling kits for those experiencing homelessness or poverty
- Creating communications plans in relation to heat, with specific messaging for target audiences including new immigrants, tourists, outdoor farm workers, etc.



How this connects to **Safe and Well Oxford**

Southwestern Public Health studies have shown that heat stress leads to both poorer mental health outcomes and increased rates of domestic violence. Through the suggested interventions, we can support the goals of Safe and Well Oxford via two priority risk areas: Mental Health and Well-being and Gender-Based Violence. Further, Safe and Well Oxford partners will be instrumental in the collaboration required to best maximize the effectiveness of these initiatives.

Strategic plan engagement links





Safe salt strategy

Mitigation

Adaptation

As the weather patterns continue to change, it is expected that the winter season will become more temperate, with fewer extreme cold days. However, the Climate Hazard Assessment found that with more days expected to hover around 0 degrees and more variability in how winter precipitation falls, the freeze/thaw cycle will continue to produce icy and slippery surfaces. Significant salt application to manage these surfaces poses increasing risks to the groundwater that acts as Oxford's only drinking water supply. In addition, excessive salt application is an increasing threat to our ecosystems, including our wetlands and rivers.

A safe salt strategy would explore salt application undertaken by County operations (Facilities and Transportation) and County contractors (i.e. snow removal contracts) but also explore solutions for the other ways in which salt could be getting into our water sources, including residential water softeners and excessive application on private parking lots. Led by Source Water Protection staff, this will include:

- Reviewing salt usage by operational staff
- Ensuring Smart About Salt language is included in snow removal contracts
- Promoting safer salt usage with residents

Strategic plan engagement links





How this connects to **Safe and Well Oxford**

Poor air quality negatively impacts overall health - including both physical and mental health - for certain groups, including young children, older adults, and those experiencing homelessness. Through the suggested initiatives, we can help mitigate the Mental Health and Well-being priority risk area identified in Safe and Well Oxford by providing early interventions for people who may need support during an air quality event.

Air quality response

Adaptation

In recent years, we have experienced poor air quality due to non-local forest fires. This is a fairly new phenomenon for municipalities, as air quality statements have historically been linked to smog, yet are increasingly related to the hotter, drier conditions that are producing more intense wildfires. In 2023, for example, there were seven air quality advisories issued for southwestern Ontario. More recently, special air quality statements were issued locally due to forest fires in the prairies multiple times in the summer of 2025.

As the severity and unpredictability of forest fires increases, so too does the negative impacts on the air we breathe. This can have a detrimental impact on those with asthma and COPD, CHF and hypertension and the elderly, which leads to an increased burden on Paramedic Services as it experiences higher rates of respiratory-related calls where they need to administer supplemental oxygen or transport patients. Furthermore, a 2024 report from Health Canada stated that there is strong and consistent evidence linking wildfire smoke exposure to premature mortality. Typically, the response for air quality alerts issued by the health unit varies by community, but air quality doesn't abide by local borders. It is recommended that a County-wide strategy in partnership with Southwestern Public Health be created to ensure a clear workflow of response, consistent messaging, a broader network of support and collaboration amongst municipal partners. Furthermore, it is essential that the services we provide can appropriately respond to poor air quality from both a service delivery and internal human resource perspective. This would include:

- Creating communications plans in relation to air quality, with specific messaging for target audiences, including those with underlying health conditions, children and the elderly
- Exploring the feasibility of designated “clean air spaces”
- Expanding PPE supply for staff working outdoors
- Collaborating with community partners to ensure PPE is accessible to those most vulnerable, including the elderly, those with health conditions, and those experiencing homelessness

Strategic plan engagement links





Sustainability checklist

Mitigation

Adaptation

Sustainability checklists are a voluntary tool that can help inform, measure and evaluate the sustainability performance of new development. Measuring progress and incorporation of alternative and more resilient technologies and designs can help us understand how to better manage rapid growth, climate impacts and health outcomes of the community.

A sustainability checklist recognizes development techniques that are a part of the individual proposals and can include topic areas like protecting and conserving water, enhancing and restoring natural spaces, managing energy and emissions, reducing waste, as well as the design of the built environment and inclusion of mobility elements. Having developers explicitly say which sustainable practices they are or are not incorporating creates a standardized framework and an additional layer of transparency for the public and for Council while also supporting growth and development. A sustainability checklist – while voluntary – creates a more consistent dialogue regarding sustainable choices and ‘green’ development across the various types of development applications dealt with by the County and Area Municipalities via Community Planning functions. It is recommended that this be piloted with a single Area Municipality to determine feasibility and impact.

Strategic plan engagement links





Pollinator preservation

Mitigation

Adaptation

Oxford County is located within the Mixedwood Plains ecozone. While this may be the smallest terrestrial zone in all of Canada, this area is also one of the most productive. With reduced biodiversity identified as a risk in the Climate Hazard Assessment and a strong agricultural sector to consider, it's important that Oxford's natural systems be protected. A critical part of this natural system is ensuring our pollinator species have a bountiful corridor of both food and habitat via native plants. In an effort to foster biodiversity and support pollinators, plantings should be intentional and sustainable. By taking steps to protect pollinator species, we are protecting our unique agricultural landscape. This includes:

- Considering biodiverse and native plantings on County-owned properties: garden beds, wild areas, etc., ensuring decisions are driven by ecology and not just aesthetics
- Creating a standard for all County-led road rehabilitation projects, where appropriate seed mixes and/or species lists would be explored
- Promoting a "leave the leaves" initiative to provide refuge for pollinator species during the winter months

[Strategic plan engagement links](#)





Flood resiliency measures

Adaptation

Flooding is the costliest natural hazard in Ontario and is already the most frequent and persistent climate hazard in Oxford, as identified in the Climate Hazard Assessment. Further, climate projections indicate that rainfall events are expected to increase in frequency, particularly the short-duration, high-intensity rainfall that can cause flooding. Not only does it pose significant risks to County assets (bridge, stormwater infrastructure, etc.), as identified in the Asset Management Plan, but it is also costly to homeowners. For example, for every dollar of loss covered by insurers, another \$3-4 is borne by governments, homeowners and business owners.

The Climate Hazard Assessment identified Oxford's urban areas (Woodstock, Tillsonburg and Ingersoll) as more exposed to the impacts of intense rainfall, primarily due to the increased flood sensitivity associated with drainage systems, transportation routes and higher-density housing. Further, the climate survey found that nearly 20% of respondents didn't know if their home was at risk of flooding.

Flooding also puts pressures on our natural assets, as extreme rainfall can lead to altered soils, vegetation damage and water quality degradation. Using available data, the flood resiliency strategy will continue to identify risk areas and work with staff, residents, Conservation Authorities and businesses to develop plans, processes and programming to reduce the likelihood of urban flooding in areas that are at risk while also enhancing natural assets and would explore possible supports, including:

- Education and promotion of low-impact development techniques such as rain gardens, rain barrels and cisterns, swales, etc.; reducing paved and impervious areas;
- Identifying opportunities to increase our natural assets to help restore and enhance natural flood control infrastructure.

It is important to note that Public Works staff actively address inflow and infiltration via updated engineering design guidelines. To strengthen the resiliency of existing infrastructure, funding opportunities that would support capital stormwater projects will be explored.

[Strategic plan engagement links](#)





Enhancing the Water Conservation Program

Mitigation

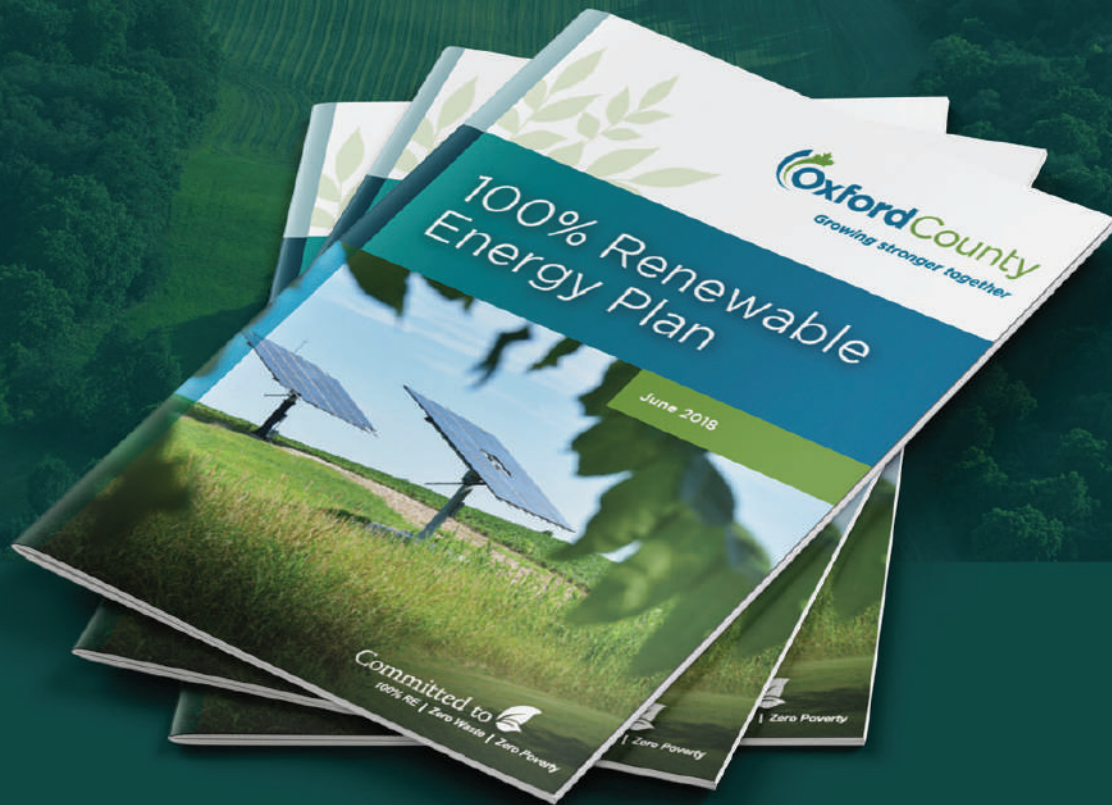
Extreme precipitation is not the only way that a flood in a home can occur. Water can also get into the home via the water and wastewater service lines, whether that be a leak or a line failure. This puts stress and unforeseen costs onto the homeowner and, in addition, leads to higher energy costs on the water/wastewater treatment side of the pipe. Furthermore, with a groundwater source for all of our drinking water, every lost drop matters, especially in the context of a changing climate where precipitation patterns are likely to become more unpredictable and irregular.

This initiative will support the ongoing efforts led by the Water and Wastewater teams and will explore the feasibility of:

- Procuring advanced metering infrastructure (AMI) equipped with automated leak alarming software to be implemented at time of community-wide replacement;
- Lending out leak detection devices via the Oxford County Library

Strategic plan engagement links





Revisiting the 100% Renewable Energy Plan

Mitigation

Since the 100% Renewable Energy (RE) Plan was approved in 2018, one of the more challenging tasks is differentiating between the corporate goal and the community goal. The community goal has proven to be challenging and is more aspirational. Moreover, in the first iteration, the significant population growth our community has recently experienced was not predicted nor accounted for, as outlined in Oxford County's most recent growth forecasts.

Using available data and in consultation with Smart Energy Oxford, it is recommended that the 100% RE Plan be revisited to better reflect the current landscape, focusing on what we as a local government can achieve in the community: advocacy, education, outreach, etc. while still prioritizing our corporate goals that have been proven to be a cost-effective method of both climate mitigation and operational savings.

Strategic plan engagement links





Supporting awareness re: vector-borne disease

Adaptation

Southwestern Public Health has indicated that heat is a risk factor that will increase the prevalence of vector-borne disease in our region, including but not limited to West Nile and Lyme disease. Further, the Climate Hazard Assessment confirmed these findings and identified the emergence of new diseases as a potential consequence of shifting seasonal conditions. A collaborative approach in communicating risks and health promotion strategies will be most effective in protecting the health of our community.

Strategic plan engagement links



How this connects to Safe and Well Oxford

Certain vector-borne diseases - such as Lyme - can have a profound negative impact on mental health. Some individuals may be at greater risk, including outdoor farm workers and those experiencing homelessness. Through this initiative, we can support early, collaborative interventions to reduce the risk of transmission, which in turn helps mitigate the Mental Health & Well-being priority risk area and support the rural lens identified in Safe and Well Oxford.



Operational tracking of weather events

Adaptation

Oxford County has experienced its fair share of what would typically be considered “unusual” weather events that have an impact on operations. As these “unusual” weather events – whether it be extreme rain, winter melting, tornados, etc. – become more prevalent, an internal tracking mechanism should be created to have a better understanding of how the County is reacting to these events operationally and the impact that these events have from a resource perspective, helping to put a true cost on the impacts of climate change on our day-to-day services while identifying future resource needs. This data gap was initially identified during the background review phase of the Climate Hazard Assessment. Collaborating with all departments to utilize existing metrics, including GPS data, call volumes, water consumption, energy use, etc., we can more accurately depict the municipal capacity stressors in the context of the changing climate.

[Strategic plan engagement links](#)





Supporting staff-led sustainability and innovation

Mitigation

Adaptation

Staff are experts in their respective fields and are often filled with good ideas that just need a chance to flourish. As Oxford continues its work on climate action, tuning into the innovative thinking available internally may unlock tremendous potential. Encouraging innovation could lead to better staff buy-in on sustainability initiatives while also aligning with the goal of building a culture of innovation that is outlined in the Strategic Plan.

This model would include incentivizing staff to participate, building a broad team to review ideas, guiding staff on how to build a business case, testing out ideas and reporting on progress.

Strategic plan engagement links



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