

Bill 198

An Act providing a climate change adaptation program for Ontario

Co-sponsors:

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Private Members' Bill

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2nd Reading

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Royal Assent





EXPLANATORY NOTE

The Bill enacts the *Ontario Climate Change Adaptation and Resilience Act, 2024*. The Act provides that the Minister of Environment, Conservation and Parks or such other member of the Executive Council as may be assigned the administration of this Act under the *Executive Council Act* shall develop and publish a strategic action plan that aims to ensure that Ontario citizens, communities, infrastructure and natural environment are protected from the risks and impacts of climate change. The Act also requires the Minister to establish an arm's length Ontario Climate Adaptation Fund to support the implementation of adaptation and resilience activities included in the strategic action plan. The Minister is also required to establish the Ontario Climate Change Adaptation and Resilience Resource Centre. The Lieutenant Governor in Council is required to establish a Whole-of-Government Climate Adaptation Co-ordination Secretariat that, among other things, will co-ordinate and assist with the implementation of science-aligned climate adaptation plans for all government ministries and agencies, including formulating and implementing policy, legislation and regulations.

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Preamble

Every day brings new reports of storms, floods, heat waves, droughts and wildfires that are unprecedented in scale and intensity and that are clearly attributable to climate change. Slower-onset effects are also obvious: changing seasons and rainfall patterns, disappearing snowpack, warmer lakes and rivers, more frequent freeze-thaw cycles, expanding pest populations and worsening air quality. As the Provincial Climate Change Impact Assessment shows, there are growing impacts in every region and sector that threaten our health and security, our homes, our forests and wildlife, our electricity network, our roads and our water supply.

While our government must act decisively to reduce the carbon emissions that are the root cause of these catastrophic events, it is also our responsibility to protect our citizens and safeguard our communities and natural ecosystems from the effects of these events now and in the future. We do this through comprehensive, transparent and collaborative adaptation planning and implementation, prioritizing the protection of our most vulnerable citizens and ecosystems.

Therefore, His Majesty, by and with the advice and consent of the Legislative Assembly of the Province of Ontario, enacts as follows:

Definitions

1 In this Act,

Appropriation required

- 2 The following provisions do not apply unless money has been appropriated by the Legislature for the purpose of those provisions:
 - 1. Section 4.

[&]quot;adaptation" means actions taken to understand and reduce the negative effects of climate change on people, communities and nature; ("adaptation")

[&]quot;Minister" means the Minister of Environment, Conservation and Parks or such other member of the Executive Council as may be assigned the administration of this Act under the *Executive Council Act*; ("ministre")

[&]quot;resilience" means the capacity to prepare for, withstand and recover from disruptive patterns and events. ("résilience")

- 2. Subparagraph 1 vi of section 9.
- 3. Paragraph 10 of section 9.
- 4. Paragraph 4 of section 10.
- 5. Paragraph 5 of section 12.
- 6. Paragraph 8 of section 14.
- 7. Paragraph 6 of section 15.
- 8. Paragraph 7 of section 15.

Strategic action plan

3 (1) On or before the day that is two years after the day this section comes into force, the Minister shall develop and publish a strategic action plan that aims to ensure that Ontario citizens, communities, infrastructure and natural environment are protected from the risks and impacts of climate change, including floods, intense storms, extreme heat, droughts and wildfires, as well as more slowly developing climate hazards.

Same

- (2) In developing the strategic action plan, the Minister shall,
 - (a) draw on reports concerning climate change adaptation prepared for the government by the former Environmental Commissioner of Ontario, the Auditor General, the Advisory Panel on Climate Change and the Provincial Climate Change Impact Assessment and Adaptation Best Practices report; and
 - (b) conduct an open and intensive process of engagement and consultation with Indigenous partners, municipal and regional governments, conservation authorities, existing Ontario adaptation institutes and experts, public health agencies and community-based and non-governmental organizations.

Ontario Climate Adaptation Fund

4 (1) On or before the day that is two years after the day this section comes into force, the Minister shall establish an arm's length Ontario Climate Adaptation Fund to support the implementation of adaptation and resilience activities included in the strategic action plan developed and published under section 3.

Functions

- (2) The Ontario Climate Adaptation Fund carry out the following functions:
 - 1. The Fund shall dispense public funds independently of the government, but shall be accountable to the Legislative Assembly for its operations and decisions.
 - 2. The Fund shall provide financial support to the strategic action plan through direct financing of adaptation and resilience activities and through the administrative and financial backing of innovative adaptation funding initiatives such as green revolving funds.

Ontario Climate Change Adaptation and Resilience Resource Centre

- 5 On or before the day that is one year after the day this section comes into force, the Minister shall establish the Ontario Climate Change Adaptation and Resilience Resource Centre to perform the following functions:
 - 1. Collaborate with existing climate change adaptation institutes and resource centres in Ontario to provide a comprehensive source of information on climate change impacts, adaptation and resilience for provincial actors including government ministries, municipalities, concerned sectoral and non-governmental organizations and the public.
 - 2. Create one-window access to,
 - i. regional and local climate and hydrological data, and
 - ii. monitoring of regional climate change impacts and adaptation strategies for Ontario communities and sectors.
 - 3. Aid in the practical application of research knowledge by providing synthesis, interpretation and translation of scientific information for stakeholders and the public.
 - 4. Revive the initiative for an Ontario Association of Adaptation Practitioners to support collaboration among adaptation researchers and practitioners in government, academia, existing adaptation institutes, conservation authorities, municipalities and non-governmental organizations in the province.
 - Host communities of practice that share information and strategies on adaptation action in specific sectors, regions or communities.
 - 6. Assist governments and government departments with adaptation planning and solutions by undertaking risk and opportunity assessments, conducting demonstration and pilot projects and providing direct programming, such as the

- provision of planning and delivery of services, to those communities with limited capacity and resources to address climate risks on their own.
- 7. Assist with capacity building, engagement and public awareness, including by undertaking case studies, training, workshops, webinars and tutorials for adaptation planning.
- 8. Advise the province, municipal governments, business associations and other associations on adaptation policies, regulations, investments and incentives which can increase climate resilience.
- 9. Evaluate and report annually to the Legislative Assembly on adaptation progress in the province.

Ontario Whole-of-Government Climate Adaptation Co-ordination Secretariat

6 (1) The Lieutenant Governor in Council shall establish a Whole-of-Government Climate Adaptation Co-ordination Secretariat.

Functions

- (2) The Whole-of-Government Climate Adaptation Co-ordination Secretariat shall perform the following functions:
 - 1. Co-ordinating and assisting with the implementation of science-aligned climate adaptation plans for all government ministries and agencies, including formulating and implementing policy, legislation and regulations as required.
 - 2. Engaging and consulting with the Ontario Climate Change Adaptation and Resilience Centre, including by drawing on the climate adaptation expertise available from the Centre.
 - 3. Performing research as needed to advance co-ordination of adaptation plans.
 - 4. Reporting to the Legislative Assembly on the progress of all government ministry and agency adaptation plans.
 - 5. Engaging and consulting with relevant federal and municipal climate adaptation bodies.
 - 6. Engaging and consulting with external experts, including those from civil society and Indigenous communities.

Review of strategic action plan

7 (1) On or before the day that is four years after the day this section comes into force, and every two years thereafter, the Legislative Assembly shall review the strategic action plan and make any changes to the plan that it considers necessary to ensure that the plan best meets its stated aims.

Strategic action plan made public

(2) The Minister shall ensure that the strategic action plan and any amended plan are published on a website of the Government of Ontario.

Contents of strategic action plan

8 The strategic action plan shall include the following:

- 1. Acknowledgement of key risks to Ontarians caused by the impacts of climate change, as illustrated by the Provincial Climate Change Impact Assessment dated January 2023.
- 2. Identification of communities and populations that are particularly vulnerable to the risks acknowledged under paragraph 1.
- 3. Expansion and enhancement of flood management and protection programs, including through the measures set out in section 9.
- 4. Improvement of extreme heat preparedness and resilience, including through the measures set out in section 10.
- 5. Providing protection from the impacts of intense storms and extreme weather, including through the measures set out in section 11.
- 6. Providing protection from wildfires, including through the measures set out in section 12.
- 7. Increasing the resilience of infrastructure such as housing, public buildings, stormwater and wastewater systems and energy and transportation infrastructure, including through the measures set out in section 13.
- 8. Increasing the resilience of agriculture and enhancing food security, including through the measures set out in section 14.
- 9. Strengthening the resilience of the natural environment and ecosystems, including through the measures set out in section 15.
- 10. Establishment of an Ontario Youth Climate Corps to give young Ontarians the opportunity to get hands-on experience in activities such as the following while gaining knowledge, skills, a fair wage and assistance with the costs of post-secondary education:

- i. Restoring and enhancing Ontario's natural landscape.
- ii. Wildfire risk reduction.
- iii. Resilient home retrofits in vulnerable communities.

Flood management and protection programs

9 The measures referred to in paragraph 3 of section 8 are the following:

- 1. Preparation of annual reports on the implementation of commitments set out in Ontario's flooding strategy, including,
 - i. the work of the Multi-agency Flood Mapping Technical Team,
 - ii. the work of the Urban Flooding Work Group,
 - iii. enhanced flood forecasting and early warning,
 - iv. enhanced emergency response activities,
 - v. disaster recovery assistance, and
 - vi. funding for flood risk reduction.
- 2. Prioritization of the work of the intra-governmental working group on urban flooding, and requiring that the working group provide a report and strategy to the Legislative Assembly no later than December 1, 2025.
- 3. Expanding support for conservation authorities, municipalities and Indigenous authorities to prepare or update fluvial and pluvial flood risk maps, prioritizing areas of the province where these maps are currently lacking and which are determined to be at significant risk of flooding based on historical data and experience and projections for the future.
- 4. Making flood-risk maps and property-level flood risk information, including information on historic and projected flood damage, available to the public on a user-friendly online portal that can be accessed free of charge.
- 5. Restoring the mandate and powers of conservation authorities to safeguard Ontario's water resources, protect life and property from flooding and protect and restore Ontario's woodlands, wetlands and natural habitat.
- 6. Implementing recommendations from Ontario's Wetland Conservation Strategy including programs to identify, protect, restore and create wetlands and to protect shorelines and upland forests that reduce the impacts of intense precipitation and help control flooding.
- 7. Completing and issuing Ontario's Low Impact Development Stormwater Management Guidance Manual no later than December 1, 2024.
- 8. Adopting nationally-recognized best practices in current CSA standards for flood resilience and risk reduction, including CSA W204 (Flood Resilient Design of New Residential Communities), CSA Z800 (Guidelines on Basement Flood Protection and Risk Reduction), CSA W210 (Prioritization of Flood Risk in Existing Communities), CSA W211 (Management Standard for Stormwater Systems), CSA W200 (Design of Bioretention Systems), CSA W201 (Construction of Bioretention Systems) and CSA PLUS 4013 (Technical Guide: Development, Interpretation and Use of Rainfall Intensity-duration-frequency (IDF) Information: Guideline for Canadian Water Resources Practitioners).
- 9. Providing funding for municipal grants and incentives for homeowners to install flood protection measures in areas at higher risk of flooding.
- 10. Working with the federal government to designate areas at highest risk of flooding as federal flood hazard areas in order to prioritize infrastructure and relocation investments for homes at high risk of flooding.
- 11. Requiring new developments or redevelopment projects to capture and infiltrate the first 1 or 1.5 inches of rain from any impervious portion of the development site.
- 12. Conducting a province-wide information campaign on home flood protection, as recommended by the Advisory Panel on Climate Change in its 2021 report.
- 13. Ensuring flood forecasting and alert systems are in place across the province, and providing sufficient notice for deployment of flood protection measures in case of a flood emergency.

Extreme heat preparedness and resilience

10 The measures referred to in paragraph 4 of section 8 are the following:

- 1. Conducting extreme heat risk mapping to identify vulnerable areas and populations at elevated risk from extreme heat events.
- 2. Developing and implementing a system for identifying and publishing timely data on heat-related deaths and illnesses in the province.
- 3. Requiring that official plans incorporate strategies to assess and reduce urban heat islands.

- 4. Providing funding for municipalities to plan and implement urban cooling strategies including cool and green roofs, cool pavements and parking lots, green corridors, expansion of tree canopies, green spaces and parks in nature-deprived areas and the provision of shade structures.
- 5. Assessing the need for cooling in schools, childcare centres, hospitals and nursing homes and developing a strategy with targets and dates to reduce heat loads and provide cooling during extreme heat events.
- 6. Amending the Residential Tenancies Act, 2006 to set a maximum temperature requirement for rental units.
- 7. Providing to the owners of rental properties that currently lack cooling systems grants and incentives for retrofits, including heat pumps for individual units, that reduce heat loads or provide cooling and allow compliance with the maximum temperature requirement referred to in paragraph 6.
- 8. Conducting an annual province-wide awareness campaign about the risks of extreme heat and how to stay safe, using messaging modes most likely to reach people at elevated risk.
- 9. Passing and enforcing regulations related to heat stress under the *Occupational Health and Safety Act* to protect workers whose work exposes them to hot conditions, such as roofing, road paving and agriculture.

Protection from impacts of intense storms and extreme weather

- 11 The measures referred to in paragraph 5 of section 8 are the following:
 - 1. Providing provincial support for investigation into the incidence and intensity of thunderstorms and associated winds, tornadoes, blizzards, ice storms, freezing rain and hail in Ontario as climate change increases, and for organizations which undertake such investigations, such as the Northern Tornadoes and Northern Hail projects.
 - 2. Assessing and improving the system for issuing timely severe weather warnings and alerts for Ontario in order to ensure that vulnerable populations receive alerts, pre-evacuation notices and other important information.

Protection from wildfires

12 The measures referred to in paragraph 6 of section 8 are the following:

- 1. Assessing Ontario's increased susceptibility to wildland fires in light of recent fire seasons and factors such as increasing pest infestations, identifying communities and regions at particular risk and providing a report to the Legislative Assembly no later than December 1, 2025.
- 2. Updating the *Forest Fires Prevention Act* and the regulations made under that Act to, at minimum, extend the fire season in recognition that wildfires are occurring earlier than April 1 and ending later than October 31 each year.
- 3. Expanding to a year-round operational model for Ontario Wildfire Management, with a permanent workforce that is recruited, trained and paid at a level consistent with the skills and knowledge required for the work and the dangers encountered in performing the work.
- 4. Assessing and developing a program to improve the retention of experienced fire rangers and crew leaders.
- 5. Funding community-level FireSmart programs for communities in the wildland-urban interface to reduce the risk and impacts of wildfire.
- 6. Reinstating environmental assessment and requiring climate change impact assessment of logging and timber management to ensure that forestry industry practices do not increase wildfire risk.
- 7. Incentivizing more active forms of forest management, including tree thinning, deadwood removal and burning practices to promote healthy and resilient forests which help reduce wildfire fuels and prevent wildfire propagation as prescribed by regulation.
- 8. Modifying reforestation requirements after logging and guidelines to encourage regenerative forestry and more diverse, resilient and ecologically functional forest landscapes.
- 9. Developing a strategy for remediation of areas of forest burned by wildfires to ensure their return to productive ecosystems.

Resilience of infrastructure

13 The measures referred to in paragraph 7 of section 8 are the following:

- 1. Developing guidelines on incorporating climate change into risk management and asset planning, building on guides and standards already available in Canada including adaptation guides prepared by the National Research Council's Climate Resilient Buildings and Core Public Infrastructure programs, CSA Standards for durability in buildings, bridge design and wastewater treatment plants and the Canadian Electricity Association's climate adaptation guide.
- 2. Implement regulatory obligations on operators of critical infrastructure, including energy and utilities, communications, transportation, water and stormwater to incorporate and, where necessary, disclose climate change risks in their strategic and operational plans.

- 3. Requiring that infrastructure planning and design factor in climate change scenarios for all major repairs, replacements or new infrastructure in the province, including electricity generation, transmission and distribution, as well as roads, bridges, culverts, ports infrastructure and stormwater management.
- 4. Updating on an urgent basis the Ontario Building Code to incorporate climate change resiliency requirements that take more severe climate conditions and events into account and ensure new buildings and buildings undergoing major retrofits can better withstand severe winds, heavy rainfall, snow loads and wildfires.
- 5. Requiring annual reports from the Ontario Critical Infrastructure Assurance Program that include,
 - i. the makeup of sector working groups,
 - ii. assessment of sector vulnerabilities related to climate change,
 - iii. assessment of the risk of cascading failures due to climate-related events,
 - iv. recommendations to decrease vulnerability to the impacts of climate change, and
 - v. progress reports on the implementation of agreements and procedures to ensure the resilience of Ontario's infrastructure with respect to the impacts of climate change.
- 6. Following procedures to recover from infrastructure failures after extreme weather events.

Agriculture and food security

14 The measures referred to in paragraph 8 of section 8 are the following:

- 1. Committing to and prioritizing the protection of prime agricultural land from urban expansion in land use planning and policy.
- 2. Revising Grow Ontario to incorporate the following:
 - i. Consideration of climate impacts and adaptation in Ontario agriculture.
 - ii. Greater emphasis on the production of vegetables, fruits and grains for human consumption to reduce dependence on imports.
 - iii. Increased support for smaller-scale producers, including investments in local markets, regional food hubs for storage and local distribution and appropriately-scaled localized processing facilities.
- 3. Developing a strategy to identify and invest in the implementation of on-farm climate change adaptation practices including through the following:
 - i. Diversification of crops and livestock.
 - ii. Maintenance of existing and creation of new windbreaks and buffer strips.
 - iii. Retrofitting farm infrastructure for climate resilience and for the purpose of protecting and enhancing on-farm natural infrastructure, water storage and supply programs.
- 4. Expanding the Environmental Farm Plan to include climate change-based risk assessment support.
- Reactivating and updating Ontario's Agricultural Soil Health and Conservation Strategy (2017) and Soil Health Working
 Group to guide collaborative soil health research, investments and activities to ensure the climate resilience of
 agricultural soils in the province.
- 6. Supporting research into and trials of crop varieties resilient to extreme heat and drought.
- 7. Incentivizing the development and expansion of regional and on-farm water storage, expansion of irrigation systems and capacity and expansion of pumping capacity to help with increasing incidence of drought.
- 8. Reviving the Water Resource Adaptation and Management Initiative which funded demonstration and pilot projects to help Ontario farmers be better prepared for drought and adapt their water use practices to deal with the growing impacts of climate change.
- 9. Investigating the potential for agriculture-specific local weather forecasting to aid in day-to-day field activity planning, prepare for severe weather and, with medium-term and longer-term forecasts, to help with planning.

Resilience of the natural environment and ecosystems

15 The measures referred to in paragraph 9 of section 8 are the following:

- 1. Providing an action plan for the implementation of Naturally Resilient MNRF's Natural Resource Climate Adaptation Strategy (2017-2021).
- 2. Investing in improved technology to identify and map Ontario's natural assets and prepare a public inventory and assessment of the current condition of Ontario's natural infrastructure.

- 3. Developing a program to maintain, promote and enhance ecosystem connectivity and for the protection and management of climate refugia for species threatened by climate change.
- 4. Providing a plan to conserve peatlands and other carbon-dense ecosystems as globally important ecosystems.
- 5. Providing guidance and resources for conservation authorities and municipalities to,
 - inventory natural assets such as wetlands, forests, meadows, parks, soils, urban trees and naturalized stormwater ponds,
 - ii. assess the condition of these natural assets, and
 - iii. implement a plan to increase and integrate such assets into infrastructure asset management.
- 6. Reinstate provincial funding for planting of native trees as well as shrubs and vegetation on public and private lands in southern and central Ontario, with a focus on lowland and wetland sites and along roadsides in southern Ontario.
- 7. Restore the powers of conservation authorities as they existed before 2019 and ensure funding adequate to their core mandate of ensuring the conservation, restoration and responsible management of Ontario's water, land and natural habitats, safeguarding our watersheds, protecting people and property from flooding and other natural hazards and protecting our drinking water.

Regulations

16 The Lieutenant Governor in Council may make regulations,

- (a) defining terms for the purposes of paragraph 7 of section 12;
- (b) establishing an incentivization scheme for the purposes of paragraph 7 of section 12.

Commencement

17 This Act comes into force on the day it receives Royal Assent.

Short title

18 The short title of this Act is the Ontario Climate Change Adaptation and Resilience Act, 2024.