#### **South Huron's Climate Change Adaptation Strategy**

Identified Action Items for South Huron (as of February 28, 2020)

# Goal 1: Integrate climate change adaptation into municipal planning, asset management and operations

IDENTIFIED ACTION ITEMS	DESCRIPTION
1.1 Include climate change consideration section in staff reports to Council	This action item would include a heading within reports to council whether or not the staff report has considered climate change.  Outcome may lead into the requirement to complete action item 1.2.
1.2 Develop a qualitative climate lens tool to guide staff and Council decision making.	This action item would be a high level, qualitative tool to ensure that a climate lens is applied to all projects, policies, plans and procurement considerations within the Municipality. The tool will contain questions related to the identified impacts from climate change (temperature, precipitation, seasonal changes and extreme weather).
1.3 Develop a process to ensure climate change adaptation is considered during review of existing and development of new policies and plans for South Huron.	This action item would be implemented during review of existing and during the development of new policies/plans to ensure climate change adaptation is considered.
1.4 Explore the potential to integrate climate change projections into asset management planning.	This action item would involve an evaluation of the consideration of climate change into South Huron asset management planning and what steps are required for complete integration.
1.5 Continue to lobby provincial and federal governments to support adaptation initiatives at the municipal level.	This action item would involve South Huron Council members to continue to lobby provincial and federal government support through various conferences and meetings. This action item should also ensure regular updates are provided to the community through Regular Council meetings.

### **Goal 2: Support municipal and community resilience awareness**

IDENTIFIED ACTION ITEMS	DESCRIPTION
2.1 Initiate community-wide conservation to provide information to the entire community (residents, business) about relevant climate change topics to provide the tools required to incorporate resilience on a community-wide scale.	This action item will involve initiating community wide conversations focused around climate change. The purpose will be to bring together relevant information that the community should know in order to be resilience. Information related to climate change science, impacts, actions, industry, innovated technology will be included.
2.2 Develop information briefing program to be regularly sent to staff and Council to inform on current climate change information.	This action item will involve communicating the most up to date information regarding climate change to staff and Council. Information related to climate change science, impacts, actions, industry, innovated technology will be included.
2.3 Create and promote regularly scheduled climate change themed challenges for the community to showcase their resilience.	This action item will involve identifying scheduled themes and promoting (potentially with small incentives) the community to showcase their resilience (ex. for the month of April show us your natural gardens, for the month of October show us your permeable pavement solutions).
2.4 Develop communication strategy to showcase municipal initiatives to the community that are related to adaptation and resilience.	This action item will involve utilizing various communication tools to showcase the action items (as outlined in the climate change adaptation strategy) as well other initiatives related to climate change adaptation and resilience that the municipality is undertaking.

# Goal 3: Ensure community readiness and coordinated responses to extreme weather events

IDENTIFIED ACTION ITEMS	DESCRIPTION
3.1 Investigate tools to expand municipal communications during extreme	This action item would accompany existing communication pathways.  It is anticipated that this action will involve the municipality
weather events to ensure information is convenient, accurately	investigating the potential to enter into an agreement with a provider (ex. Municipal511, an online comprehensive map-based services) to store municipal information regarding disruptions during major events

### **South Huron's Climate Change Adaptation Strategy**

Identified Action Items for South Huron (as of February 28, 2020)

communicated and regularly updated to inform the public.	such as flooding, fires, and available shelters. This action item would also improve communication outside of the identified impacts from climate change and identify other disruptions provide an overall benefit to the community through enhanced communication (ex. construction, load restrictions, no winter maintenance roads).
3.2 Develop a public awareness campaign to enhance community preparedness before an extreme weather event occurs.	This action will focus on emergency preparedness awareness campaign for the community. Information about what is available for supports in our community during an extreme weather event (such what you should do to prepare, what not to do during an extreme weather event, who to contact if you need assistance, where to find the most accurate information. The aim of this action item is to equip the community with this information and resources before an event occurs.
3.3 Identify potential partnerships and explore options to create a "Check in with your neighbour" program within South Huron.	This action item will focus on creating community partnerships around developing a voluntary, self-identified program where vulnerable populations who lack support in the community have support from someone/organization in the community during an extreme weather event. It is anticipated that this action would be voluntary, self-identified model.
3.4 Conduct vulnerability assessment of critical infrastructure within municipal facilities.	This action item will focus on identifying the vulnerabilities of municipal infrastructure. This action item may include assessment of condition, back-up generation capabilities, reliance on outside fuel sources, and any other limitations of the infrastructure. This action will identify potential upgrades that may be required to address the findings of the vulnerability assessment.
3.5 Develop an internal training program for all municipal staff for coordination during extreme weather events to ensure service continuity.	This action item will focus on informing all municipal staff (outside of Managers) with the information required during an extreme weather event. Overview of sequence of events, point of contacts to be the focus.

# Goal 4: Reduce risks to buildings, properties and people from flooding

IDE	NTIFIED ACTION ITEMS	DESCRIPTION
4.1	Undertake a Stormwater Master Plan for all settlement areas within the Municipality.	This action item will focus on undertaking a Stormwater Master Plan in order to manage stormwater within existing development areas and to accommodate future growth. The aim of this action item is to create a holistic plan for stormwater management within the Municipality and identify potential capital improvement projects to improve stormwater management.
4.2	Support updating floodplain mapping for core development areas within the municipality.	This action item will focus on ensuring that floodplain mapping for the Ausable Bayfield and Upper Thames Conservation Authorities is updated to reflect existing conditions.
4.3	Develop procedure for regularly updating rain Intensity-Duration-Frequency (IDF) curves to reflect changing climate variables to inform design of all municipal infrastructure.	This action item will focus on developing a procedure for providing an update to IDF for the municipality and ensuring that the information is utilized within decision making for municipal infrastructure, in particular for stormwater and bridge/culvert infrastructure sizing.
4.4	Develop awareness program and investigate the potential for incentives to encourage lot level stormwater controls for private property.	This action item will focus on providing information and incentives for private property owners to utilize LID strategies (e.g. rain barrels, rain gardens, permeable surfaces, bioretention, and natural infrastructure).
4.5	Investigate grading control measures to be implemented for infill lots designated for development.	This action item will focus on investigating various measures to be implemented related to ensuring the finish grade for infill lots is adequate based on adjacent overland flow routes.
4.6	Incorporate low impact development (LID) strategies into lot design of municipal facility upgrades and new municipal facilities.	This action item will focus on the incorporation of LID strategies to ensure lot level stormwater management is considered when upgrading existing or designing new municipal facilities. This action item to include measures such as permeable pavements, vegetation filter strips, and enhanced grass swales.
4.7	Investigate the feasibly of voluntary sewage backflow value and sump pump program.	This action item will focus on investigating the feasibility of a voluntary sewage backflow value and sump pump program, specifically targeting properties in low lying areas.

#### **South Huron's Climate Change Adaptation Strategy**

Identified Action Items for South Huron (as of February 28, 2020)

4.8	Develop a guide for public to provide information to them when they inquire about what to do when private property buildings are flooded.	This action item will focus on providing private property owners with the information they need to know when addressing flooded buildings.
4.9	Encourage developers to utilize best practices within site plan design to ensure risk of flooding within new developments is reduced.	This action item will focus on indorsing the draft <i>Huron County Site</i> Plan Development Technical Servicing Guide with a focus on communication between the municipality and the developer to recognize their responsibilities during site plan design.

### Goal 5: Minimize disruption to municipal service delivery

IDE	NTIFIED ACTION ITEMS	DESCRIPTION
5.1	Enhance communication pathways between departments to ensure efficient response to and recovery from disruptions to services.	This action item will focus on improvement of communication pathways and between departments.
5.2	Identify critical services; develop, document and train on contingency procedures.	This action item will include identifying escalation thresholds for triggering contingency procedures for each service.

# Goal 6: Reduce health and safety risks to municipal workers and community members from extreme temperatures

IDE	NTIFIED ACTION ITEMS	DESCRIPTION
6.1	Establish municipal facility locations and operating parameters to function as temporary warming and cooling centres for community members.	This action item will focus on developing operating parameters which may include threshold to trigger operation of warming/cooling centre, hours of operation, staffing requirements, security measures, and maximum capacity for each facility.
6.2	Develop a public awareness campaign to provide education to the community on how to stay safe during an extreme temperature events.	This action item will focus on providing education to the public on the including recognizing health impacts and what options are available during these events for relief.
6.3	Develop extreme temperature training program for municipal staff.	This action item will focus on providing training to municipal staff related to extreme temperatures. The training will including recognizing threshold limit values, temperature related symptoms, appropriate personal protective equipment, scheduling of outdoor work for maximizing productivity during events, and ensuring appropriate reliefs and breaks are identified.
6.4	Establish tree planting guidelines to assist in mitigating the effects of extreme heat, particularly within urban boundaries. (related to action item 7.1)	This action item will include identifying a strategic approach to tree planting within urban boundaries that will not have a negative impact on private and municipal infrastructure. The action will include tree planting best practices including preferred species that are resilience to the changes in climate, minimum distance and site considerations.
6.5	Increase public education and communication related to fire risk during extreme heat events.	This action item will include education about fire risk during extreme heat events and increased communication during an extreme heat event relating to fire bans/by-laws in place.

### Goal 7: Protect and enhance the natural landscape to mitigate impacts

IDENTIFIED ACTION ITEMS	DESCRIPTION
7.1 Development of a municipal wide forest strategy.  (related to action item 6.4)	This action item will identify municipally owned property that present the opportunity for naturalization. The focus will be to gather baseline data on the canopy cover in the municipality. Also included in this action will be tree planting guidelines and best practices; see action item 6.4 for description.

South Huron's Climate Change Adaptation Strategy Identified Action Items for South Huron (as of February 28, 2020)

7.2	Develop a naturalization strategy focused on riparian areas located on municipal properties.	This action item will identify riparian areas located on municipally owned property that provide an opportunity for naturalization. The focus of this action item will be to utilize natural infrastructure to protect watercourses from erosion and sedimentation. Included in this action item may be consideration of property usage and potential enhancement to encourage synergies between public usage and ecological function.
7.3	Develop awareness and investigate an incentive program to encourage naturalization and environmental stewardship on private property.	This action item will provide property owners the information on the benefit and importance of natural features on private property.  Investigation of potential incentive programs (ex. Huron Clean Water Project) to be included in this action item.
7.4	Investigate the feasibility of integrating municipal natural infrastructure into asset management.	This action item will investigate the feasibility of integrating municipal natural assets into the municipality's asset management plan. The action item will include steps required to fully integrate natural infrastructure and may include identification and valuation of natural assets.

# Goal 8: Strengthen the resiliency of municipal infrastructure and facilities

IDE	NTIFIED ACTION ITEMS	DESCRIPTION
8.1	Incorporate climate change impacts into inspection process and identified deficiencies related to municipal infrastructure and facilities are completed and remediated on a regular basis.	This action item will include incorporating climate change impacts into inspection processes.
8.2	Provide municipal staff information on green infrastructure (natural) as a means to provide support to grey infrastructure (human engineered) within municipal projects.	This action item will include providing information to staff on current and relevant green infrastructure projects that will provide support (and reduce impact on) grey infrastructure.