



HEALTH, WELLBEING & CLIMATE CHANGE

Context

Climate Change is impacting people’s health and well-being, both physically and mentally. This fact sheet outlines climate change issues related to the health and well-being of Gabriolans.

Extreme Heat

- Climate change is projected to increase the number, intensity, and duration of heat waves in British Columbia (B.C.). (BC Government, 2022)
- From June 26 – 29, 2021 Gabriola experienced temperatures in the 40°C range.
- An investigation by British Columbia's chief coroner found that 55 people in the Vancouver Island region died as a result of the 2021 heat dome.
- Temperature forecasts for Gabriola based on business as usual:

| Temperature changes | 1970-2000 | 2040-2070 | 2070-2100 |
|-------------------------|-----------|-----------|-----------|
| Annual avg hottest day | 30°C | 33°C | 36°C |
| Days (avg) over 30°C | 2 | 10 | 27 |
| Frost days | 40 | 7 | 1 |
| Max 1 day total precip. | 41mm | 47mm | 50mm |

(Pinna Sustainability, 2020)

Storms, flooding, power outages, drought, forest fires

Gabriola is experiencing:

- more extreme storms resulting in tree damage, power outages, flooding and infrastructure damage.
- more extreme dry spells: drought and increased fire risks, reduced water supply, saltwater intrusion risk to groundwater.
- intense rain events: flooding, slope failures, impact on tree roots, etc.
- increased smoke from forest fires - forest fire smoke is a complex and dynamic mixture of gases and very small particles that can irritate the respiratory system and cause systemic inflammation (BC government, 2022)

Climate Grief

Grief is a form of love: we grieve the loss of what made us feel most deeply connected. With climate grief, it may be loss of the dream of a future for your grandchildren free of the challenges that are currently emerging. It can include the devastating loss of lives and property. Whatever the scope, level or intensity of the loss, the process of grieving evokes the same emotional phases. (Davenport, 2017)

How resilient are Gabriolans?

- Research has shown that when people are working towards solutions their anxiety is reduced.
- People from resilient communities feel they have a voice in issues that are important to them and are able to work together to meet common goals. They also feel that people would help each other out in the event of a natural disaster.
- In resilient communities there are enough health care resources to support the communities physical and mental health needs and there is an emergency plan in place.
- Resilient communities have organized reconciliation events and people feel that reconciliation is important and will make the community stronger.

Table Topics

What are local mitigation and adaptation actions our community can take related to the following areas?

| | |
|---|--|
| Extreme weather <ul style="list-style-type: none">• Heat-related mortality• Cold-related mortality• Heat-related illness and hospital visits• Mental health effects• Overheating in facilities | Climate grief and stress <ul style="list-style-type: none">• Increased worry about what is happening• Increased worry about what might happen• Inaction, loss of hope |
| Storms, flooding <ul style="list-style-type: none">• Injuries and mortality• Damage to facilities and infrastructure• Health service disruptions• Impacts to water quality | Drought <ul style="list-style-type: none">• Longer droughts• Depletion of groundwater sources• Impacts on food supply• Increased fire danger |
| Infectious diseases <ul style="list-style-type: none">• Increasing local risk of vector-borne diseases (e.g., Lyme disease)• Increasing exposure to other viral diseases | Forest fires <ul style="list-style-type: none">• Local fire danger• Strain on fire department, RCMP, local organizations• Threat to housing, businesses |
| Air quality, smoke inhalation <ul style="list-style-type: none">• Mortality, allergies, respiratory and cardiovascular disease• Mental health effects• Poor air quality in facilities• Closures, evacuation | Community resilience <ul style="list-style-type: none">• Neighbourhood cohesion, mutual aid• Knowledge & availability of local resources• Emergency planning |