



Sunshine Coast  
Regional District



# EXTREME HEAT PLAN

FEBRUARY 2024



## **1.0 PLAN REGULATION**

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### **1.1 PLAN AMENDMENTS**

This Extreme Heat Plan, hereinafter referred to as the “the Plan”, is considered a living document and is subject to changes to ensure accuracy and timeliness. The user of this information accepts full responsibility for any errors or omissions contained therein.

### **1.2 NOTE TO THE READER**

Please ensure you have the most current copy of the plan. The most current electronic version resides with the EPC.



## 1.4 PLAN DISTRIBUTION

### 1.4.1 Internal Plan Distribution

Version # or Date	Format	Recipient	Location	Date
	Electronic PDF	Electoral Area A: Egmont/Pender Harbour		
	Electronic PDF	Electoral Area B: Halfmoon Bay		
	Electronic PDF	Electoral Area E: Elphinstone		
	Electronic PDF	Electoral Area F: West Howe Sound		
	Electronic PDF			
	Electronic PDF			
	Electronic PDF			

### 1.4.2 External Plan Distribution

Version # or Date	Format	Agency	Date
	Electronic PDF	EMCR	
	Electronic PDF	District of Sechart	
	Electronic PDF	Town of Gibsons	
	Electronic PDF	shíshálh Nation Government District	

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## 2.0 PLAN OVERVIEW

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Extreme Heat Events (EHEs) are prolonged periods of elevated temperatures with wide-ranging implications for public health and well-being. The catastrophic 2021 “heat dome” event in British Columbia demonstrated the severe consequences of extreme heat, leading to 619 heat-related deaths, primarily among individuals with chronic health conditions, limited social connections, and insufficient access to cooling resources.

The Plan emphasizes the critical role of local government, community partners, and regional collaborators in supporting heat-vulnerable populations, encompassing individuals and groups at heightened risk during EHEs. Developed in collaboration with regional and local community partners, the Plan aligns with the [2022 BC Provincial Heat Alert and Response System \(BC HARS\)](#). Community partners are integral in comprehending local heat-related challenges, enhancing communication strategies, and optimizing available support resources available.

The basis of the Sunshine Coast heat-risk assessment integrates information gathered through the 2021 Canada Census Report, climate prediction scenarios, and extensive engagement with Sunshine Coast staff, regional and community partners. This information helps inform our understanding of the local extreme heat-health risks and the effectiveness of the heat-risk reduction resources currently available. These findings guide the list of heat risk reduction community best practices for community leadership to consider.

The Plan serves as a guiding framework for community EHE preparedness and response activities. It is intended to be adaptable, with periodical updates in line with the latest information and best practices. The Plan provides an up-to-date overview of the current community EHE risks, available cooling resources, recommended best practices, and longer-term community heat adaptation strategies.

Small and rural communities, like the communities in the Sunshine Coast, often face limitations in emergency management capacity and resources. Therefore, the extreme heat response strategies need to be strategic, collaborative, and self-empowering in nature. Given the ongoing effects of climate change, the growing likelihood of EHEs, and their potential to pose significant risks to public health, cannot be underestimated. It is important that communities begin proactive planning and preparations to safeguard public health and safety in the face of these evolving challenges.

## 2.1 INTRODUCTION

Everyone is impacted by EHEs, but the degree of impact will vary according to factors such as pre-existing health conditions, extent of social connections, ability to access cooling resources, and the ability to access cool public spaces. People who are healthy and have access to resources and spaces to keep themselves cool might only experience minor inconveniences during an EHE, whereas individuals with chronic health

conditions and limited options to cool themselves down often endure significant hardships and bear disproportionate consequences. The “heat dome” event in 2021 was an unfortunate example of such disparities.

In late June 2021, British Columbia experienced an EHE with unusually high temperatures. Records were broken across BC; in some areas, temperatures soared as much as 20 °C above seasonal norms. High overnight temperatures and the early summer timing made it even more challenging for people to adapt to the extreme heat. While the EHE lasted only one week, a total of 619 heat related deaths were reported by the BC Coroners Service with 145 of those deaths recorded in the Vancouver Coastal Health Authority (VCHA) region. This event is currently the deadliest extreme heat event recorded in Canada, followed by 280 deaths in Quebec in 2010 and 156 deaths in BC in 2009.

In the weeks following the 2021 heat dome, the BC Chief Coroner assembled a panel of experts to review the 619 deaths with the purpose of preventing a similar tragedy from occurring again. Findings from the dome review concluded that most of the heat-related deaths took place indoors and decedents were 65 years of age or older, lived alone, lived in urban areas without adequate cooling resources, or had chronic health conditions such as physical or cognitive challenges, hypertension, schizophrenia, depression, and substance use disorders. (BC Coroners Report, 2022, p.5)

The Plan strives to support the populations that are most heat vulnerable and most likely to face life-threatening circumstances during EHEs, but it does not assume responsibility for total care. The Plan focuses on identifying, establishing, and strengthening relationships with local organizations who interact with known vulnerable populations and provide them with resources and services. The Plan also functions to better understand support needs, leverage pre-existing communication networks/ business processes, and help coordinate a more integrated and cohesive community response. The Plan’s primary goal is to enhance community resilience and promote a more coordinated response to EHEs, recognizing that this framework can also support other emergency activities including community evacuations.

## **2.2 PLAN GOAL, PURPOSE, AND OBJECTIVES**

The goal of the Plan is to reduce heat-related morbidity and mortality within the Sunshine Coast. The purpose of the Plan is to provide decision making guidance to Sunshine Coast staff when planning, preparing, and responding to EHEs. To achieve this goal, the following objectives have been identified:

- » To alert the public and community partners to extreme heat risks.
- » To increase public awareness regarding extreme heat preparedness and heat health safety.
- » To validate extreme heat response measures and identify opportunities to improve.

## **2.3 STRATEGIES**

The Plan aims to reduce extreme heat-related morbidity and mortality within the community by helping facilitate a coordinated, efficient, and effective EHE response through the following strategies:

- » Establish clear extreme heat alert protocols and procedures.

- » Identify groups of people at greatest risk to an EHE to better inform heat risk reduction strategies.
- » Promote heat health awareness and preparedness to empower residents to protect themselves from EHEs.
- » Engage and promote connections among extreme heat community partners to support those at greatest risk.
- » Implement and support effective community heat risk reduction strategies for the most vulnerable populations during EHEs.

## 2.4 PROJECT SCOPE

The Plan is designed to be utilized by both Sunshine Coast staff and EOC personnel to facilitate the planning, preparedness, and coordination of response activities for extreme heat weather events within the regional district boundaries.

### 2.4.1 Area Of Interest

The area of interest is the Sunshine Coast with the Sunshine Coast Regional District (SCRD), located on the southern mainland coast on the traditional territories of the shíshálh and Sk̓wxwú7mesh Nations. The SCRCD is approximately 3,769 km<sup>2</sup> in size and encompasses three municipal entities: District of Sechelt, Town of Gibsons, and the shíshálh Nation Government District. In addition, it includes five electoral areas: electoral area A: Egmont/Pender Harbour, electoral area B: Halfmoon Bay, electoral area D: Roberts Creek, electoral area E: Elphinstone and electoral area F: West Howe Sound.

## 2.5 PLAN LIMITATIONS

The main limitation of the development of this Plan was limited access to accurate spatial heat health vulnerability data, which is readily accessible for larger, urban communities like the City of Vancouver and the City of Nanaimo through the VCHA but lacks applicability to rural communities. To address this limitation, the Plan relied on a combination of comprehensive online research and qualitative insights gathered through the community partner engagement. See Section 5.0 Community Extreme Heat Assessment for more information.

The Plan does not address the following components:

- » Heat response procedures for municipal departments, facilities, and co-owned facilities.
- » Heat response plans and procedures for local businesses and organizations.

Additionally, the Plan does not assume the total care of persons during an EHE.

### 2.5.1 Business, Industry, and Public Sector

As per the Workers Compensation Act, employers are responsible for ensuring employee health and safety. Basic considerations include:

- » A heat stress assessment and exposure plan as per the Workers Compensation Act Section 4.2.4 Non-Government Organizations – National, Provincial, and Regional.
- » Worker safety communication procedures.
- » Contingency plans for competing priorities (e.g., power outage, poor air quality, and evacuation).
- » Supplies (e.g., first aid and water).
- » Resources (e.g., air conditioners, generators, transportation, and additional staff).
- » Employee heat risk awareness training (e.g., signs and symptoms of heat exhaustion and heat stroke, and preventative measures).
- » A business continuity plan.

For more information on WorkSafe BC roles and responsibilities see Section 4.2.4 Non-Government Organizations – National, Provincial, and Regional.

## 2.6 ASSUMPTIONS

The Plan makes the following assumptions:

- » The Plan is regularly reviewed and exercised.
- » There is one person in the organization who is accountable for version control and ongoing maintenance of this Plan.
- » There is ongoing commitment from elected officials to support the Plan.
- » There is a Business Continuity Plan in place that identifies the continuity of essential business services during an EHE.
- » EOC response to extreme heat events will follow the Incident Command System (ICS) and British Columbia Emergency Management (BCEMS) goals to guide decision makers in prioritizing response activities.
- » Organizations with a fiduciary and/or legal duty to provide care for the people within their systems have their own extreme heat response plan and procedures.
- » Local businesses and organizations have their own extreme heat plan and procedures.
- » People are responsible for their own personal safety and encouraged to ensure the safety of other vulnerable persons who are unable to protect themselves from an EHE.

## 2.7 INTEGRATION WITH OTHER PLANS AND DOCUMENTS

Currently, the Plan is linked to the SCRD Emergency Response Plan and the SCRD Community Change Action Plan (in draft as of Dec 2023). No agency linked plans have been shared.

It is recommended the following plans be developed and/or integrated:



- » SCRD Business Continuity Plan
- » SCRD Evacuation Plan

These plans provide detailed guidance on specific community emergency management functions, activities, and procedures. Plans or agreements from other agencies or adjacent communities which would assist in a coordinated, joint, or unified response should also be annually reviewed for alignment. Linking these documents will serve to identify how plans operate with respect to one another as well as assist users in finding relevant information quickly.

## 2.8 NAVIGATING THE EXTREME HEAT PLAN

The Plan is structured for user convenience with three components: the base plan, the appendices, and the annex as shown in Table 2-1. It is the responsibility of staff to understand and familiarize themselves with the content in each plan component.

**Table 2-1 Summary of the Plan Components**

PLAN COMPONENT	PURPOSE	INTENDED USE	KEY POINTS
<b>Base Plan</b>	Assist with preparedness efforts and educate new Plan users and	<ul style="list-style-type: none"> <li>Document and summarize guiding principles and current best practices</li> <li>Provide background information for education and training purposes</li> </ul>	<ul style="list-style-type: none"> <li>To the extent possible, key information and best practices have been highlighted using the following icons:</li> </ul> <p> <b>Best Practice</b></p> <p> <b>Key Information</b></p>
<b>Appendices</b>	House operational guidance and Plan reference information	<ul style="list-style-type: none"> <li>Guide municipal staff and EOC personnel during an EHE</li> <li>House operational material that may be referenced during an EHE EOC activation</li> </ul>	<ul style="list-style-type: none"> <li>Appendix 1 – 7 contain phase/alert specific checklists, key messages, and media templates</li> <li>Appendix 8 – 13 contain operational reference material</li> <li>Appendix 15 – 17 contain Plan reference information</li> <li>A heat warning may not always be preceded by a pre-heat warning and an extreme heat emergency may not always be preceded by a heat warning</li> </ul>
	Extreme Heat Community Partner Playbook	<ul style="list-style-type: none"> <li>Support document for community partners</li> </ul>	<ul style="list-style-type: none"> <li>Guidance for community partners during all phases of an extreme heat emergency including planning, preparedness, and response actions.</li> </ul>
	Quick Reference Guide	<ul style="list-style-type: none"> <li>Guide for municipal</li> </ul>	<ul style="list-style-type: none"> <li>A guide and reference</li> </ul>

		staff and EOC personnel during an EHE.	document for all phases of extreme heat emergencies. The Quick Start Guide should be used in conjunction with the emergency management plan and the Extreme Heat Plan.
<b>Annexes</b>	Provide community-specific preparedness and response considerations	<ul style="list-style-type: none"> <li>Document community-specific information that may assist with EHE preparedness and response efforts</li> </ul>	<ul style="list-style-type: none"> <li>Annexes are organized by region and electoral areas</li> </ul>

## 2.9 PLAN EXERCISING AND FAMILIARIZATION

### 2.9.1 Exercising

Regularly exercising the Plan will ensure staff and supporting agencies are familiar with extreme heat response procedures when temperature thresholds are reached. Exercising the Plan can be combined with a regular meeting of the Sunshine Coast Emergency Planning Committee. For example, if this committee meets quarterly for two or three hours, a standing agenda may include a short tabletop exercise of this Plan. Members may include representatives from elected officials, lead government agencies, non-government organizations, government ministries, and any community partner groups who may require EOC support.

### 2.9.2 Familiarization

Familiarization with some or all the Plan by the below groups will help reduce response times and increase community resiliency. Familiarize the Plan with the following groups:

- » Elected officials
- » Local government, EOC staff, and volunteers
- » Senior government ministries, agencies, commissions, and corporations
- » Neighbouring municipalities
- » Neighbouring Regional Districts
- » Non-government organizations
- » Community partners who provide or need support

## 3.0 PLAN MAINTENANCE

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The Plan is a dynamic, working document that requires regular review and may need amendments to align with current information and evolving best practices. The EPC is responsible for this process. Where there is no EPC, the responsibility then rests with the Chief Administrative Officer (CAO).

The EPC will:

- » Initiate and administer the review and revision process
- » Solicit updates
- » Maintain the extreme heat emergency plan content and ensure it is up to date
- » Initiate and administer the review and revision process

The Plan should be reviewed and updated annually at a minimum; updates should occur whenever:

- » There are changes in provincial policy and/or legislation
- » There are notable changes in community demographics, health status, exposure to extreme health events, or access to health and social services
- » Gaps or improvements in policy and/or procedures have been identified from program activities such as:
  - » An operational / tabletop exercise or an extreme heat event
  - » Ongoing consultation with community partner groups including community members, first responders, partnering communities and regional districts, and any relevant regional/provincial agencies established in the area
  - » A heat response activation, debrief or after-action-review (AAR)
  - » A vulnerability assessment

### 3.1 CONTINUOUS IMPROVEMENT

Continuous improvement serves as a guiding principle within the framework of the Plan. The Plan offers an approach centered on collaborative efforts with community partners aimed at evaluating the Plan and improving the community's response to EHEs, even when confronted with constraints such as limited resources and emergency management capacity. For more information see Section 7.2 Implement a Community Partner Engagement Plan. By actively engaging community partners, the Sunshine Coast can enhance its understanding of the community's needs, assess the effectiveness of current strategies and redirect efforts toward potentially more impactful approaches. This proactive approach ensures that the Sunshine Coast remains agile in adapting to the evolving climate, safeguarding the health and safety of the residents.

#### 3.1.1 Plan Evaluation Strategies

The Plan emphasizes frequent and meaningful engagement with extreme heat community partners during EHEs to evaluate plan effectiveness, refine the Plan, and re-focus efforts. Establishing clear indicators and defined business practices to measure plan success can provide plan users with insights into its strengths

and identify areas that warrant improvement. Table 3-1 outlines potential plan evaluation strategies to consider implementing.

**Table 3-1** Plan Evaluation Strategies

EHE STAGE	STRATEGY
<b>PRE HEAT SEASON</b>	<ul style="list-style-type: none"> <li>• Conduct surveys to assess community's knowledge, attitudes and behaviors related to extreme heat</li> <li>• Compare survey results before and after implementing plan strategies to determine changes in awareness, preparedness, and adaptive behaviors</li> </ul>
<b>DURING HEAT SEASON</b>	<ul style="list-style-type: none"> <li>• Conduct frequent extreme heat community partner coordination calls to better understand extreme heat challenges</li> </ul>
	<ul style="list-style-type: none"> <li>• Conduct community outreach in the form of wellness checks with vulnerable populations in conjunction with community partners.</li> </ul>
	<ul style="list-style-type: none"> <li>• Monitor recorded first aid cases at public cooling facilities and designated cooling centre</li> </ul>
	<ul style="list-style-type: none"> <li>• Monitor media coverage and public sentiment regarding EHEs and the community's response</li> </ul>
<b>POST EHE EOC ACTIVATION</b>	<ul style="list-style-type: none"> <li>• Conduct post EHE interviews, focus groups, hotwashes, and debriefs</li> </ul>
<b>POST HEAT SEASON</b>	<ul style="list-style-type: none"> <li>• Conduct an extreme heat season AAR if appropriate</li> <li>• Conduct a cost benefit analysis to evaluate the economic impact of the Plan</li> </ul>

 **Best Practice: Engage people with lived experience of vulnerability to extreme heat to provide feedback on heat risk reduction strategies and communications.**

### 3.1.2 Hotwashes and Debriefs

Hotwashes and debriefs offer opportunities for feedback to improve future response opportunities. A hotwash is an informal discussion to collect immediate comments and identify challenges to steer future responses and is recommended following every EOC activation and operational period. A debrief is typically a more formal discussion that takes place at the end of an operational period, before people are released from the EOC, or before the EOC is deactivated. A debrief captures the successes, challenges, and lessons learned during the event, which informs future emergency planning.

 **Best Practice: Conduct a debrief every time the EOC is activated and a hotwash after every operational period**

### 3.1.3 After-Action Reviews (AARs)

The scope and scale of the EHE will determine the need to conduct an after-action review (AAR). They are generally done following a major event or a lengthy activation. An AAR is a more formal discussion inviting representatives from response agencies and supporting organizations to participate. An AAR creates an opportunity for the community to:

- » Improve EHE mitigation, planning, response, and recovery activities
- » Assess the effectiveness of prevention, mitigation, and preparedness efforts
- » Document these lessons in the Plan to improve the effectiveness of future emergency management activities.

## 4.0 EXTREME HEAT OVERVIEW

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A common misconception surrounding EHEs is that they fall solely under the purview of regional health authorities and are primarily a public health emergency. It is important to understand that an EHE is a climate-caused emergency affecting the entire community, requiring the collaboration of numerous community partners.

### 4.1 LEGISLATION TO MANAGE EXTREME HEAT EVENTS

The Emergency and Disaster Management Act (EDMA) and the Public Health Act (PHA) provide legislative authority for the Province as well as local authorities and treaty First Nations in British Columbia to manage EHEs.

The Emergency and Disaster Management Act (EDMA):

- » Enables the minister or the Lieutenant Governor in Council to declare a Provincial State of Emergency.
- » Enables local authorities to declare a State of Local Emergency (SOLE).

The Public Health Act (PHA):

- » Enables Health Officers to declare a public health emergency and make public health orders to protect the public from a specific health hazard



**Note: A declaration of a SOLE is NOT required for a local authority to activate its Emergency Operations Centre (EOC) and to engage in heat warning and extreme heat emergency planning and response activities.**

## 4.2 EXTREME HEAT ROLES AND RESPONSIBILITIES

Understanding everyone’s roles and responsibilities will improve community response cohesion, reduce heat-related impacts, and increase resilience to EHEs by:

- » Understanding expectations in advance
- » Supporting individuals and organizations to focus on their assigned tasks
- » Ensuring critical steps are not overlooked or duplicated
- » Reducing response time
- » Integrating multiple jurisdictions in a seamless manner

In this section, the roles and responsibilities of community partners are outlined in the context of the extreme heat emergency planning and preparedness. Table 4-1 summarizes the roles and responsibilities of the local authority in an EHE.

### 4.2.1 Local Authority

The local authority refers to the main decision makers who play a role in extreme heat emergency preparedness and response activities. Table 4-1 summarizes the roles and responsibilities of the local government during an EHE.

**Table 4-1** Local Authority Extreme Heat Roles and Responsibilities

POSITION	ROLES & RESPONSIBILITIES
<b>Policy Group</b>	<ul style="list-style-type: none"> <li>• Supports the community extreme heat emergency plan and ensures it is current and relevant to the community needs</li> </ul>
<b>Director and Board</b>	<ul style="list-style-type: none"> <li>• Supports extreme heat risk mitigation, preparedness, response, and recovery for their community</li> <li>• Responsible for knowing and understanding community extreme heat key messaging to help inform constituents</li> <li>• Not involved in EOC operations</li> </ul>
<b>Chief Administrative Officer (CAO)</b>	<ul style="list-style-type: none"> <li>• Responsible for ensuring there is a community plan for EHEs in place</li> <li>• Communicates extreme heat situational awareness to Director and Board as well as other departments as necessary</li> <li>• Ensures business continuity planning is in place</li> </ul>
<b>Emergency Program Coordinator (EPC)</b>	<ul style="list-style-type: none"> <li>• Encourages staff and community partners to develop and implement heat response strategies</li> <li>• Reviews, maintains, and exercises the Plan</li> <li>• Ensures extreme heat is considered and integrated into existing emergency response plans</li> <li>• Identifies and requests the support from various agencies that can provide assistance</li> <li>• Engages community partners in extreme heat response planning</li> </ul>
<b>Emergency Operations Centre (EOC)</b>	<ul style="list-style-type: none"> <li>• Gathers situational awareness (e.g., monitors local weather conditions, updates from ECCC, guidance from IHA, and local heat-health vulnerabilities)</li> </ul>

	<ul style="list-style-type: none"> <li>• Encourages community partners to activate their extreme heat response plans and conduct outreach to members within their organizational mandate</li> <li>• Connects local partners</li> <li>• Activates appropriate heat risk reduction strategies as needed</li> <li>• Disseminates updates and key messaging to municipal staff, community partners, and residents/public</li> <li>• May not always require activation or full activation and may be dependent on incident-specific conditions</li> </ul>
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4.2.2 Lead Government Agencies

The following government agencies listed in Table 4-2 may play a lead role in responding to an extreme heat event (EHE).

**Table 4-2** Government Extreme Heat Roles and Responsibilities

AGENCY	ROLES AND RESPONSIBILITIES
<b>ECCC</b> Environment and Climate Change Canada	<ul style="list-style-type: none"> <li>• Is the lead federal ministry responsible for issuing heat warnings, extreme heat emergencies, and de-escalation alerts when criteria levels are met</li> <li>• Works closely with the Meteorological Service of Canada and provides 24/7 monitoring and forecasting of hot weather effects for BC</li> <li>• Notifies public via the ECCC <a href="#">weather alerts webpage</a> and the <a href="#">WeatherCAN app</a></li> <li>• During extreme heat emergency events, will prompt the Provincial Health Duty Officer (PHDO) to coordinate a call with the BC HEAT Coordination Committee (BC HEAT) to discuss issuing an extreme heat emergency and de-escalation alerts</li> </ul>
<b>EMCR</b> Emergency Management and Climate Readiness (formerly EMBC)	<ul style="list-style-type: none"> <li>• Is the lead coordinating agency for provincial government support to community response to the non-health related impacts of EHEs</li> <li>• Follows recommended actions as listed in the BC HARS policy</li> <li>• Supports communities by issuing EMCR task numbers</li> <li>• Reimburses communities through the Expenditure Authorization Form (EAF) process (as appropriate) for heat warnings and extreme heat emergencies declared by ECCC (See the SCRDC emergency management plan for more information on EAFs)</li> </ul>
<b>MoH</b> Ministry of Health	<ul style="list-style-type: none"> <li>• Is the lead provincial response agency for the public health impacts of an EHE</li> <li>• Provides heat health communication resources</li> <li>• Provides EM preparedness and response guidance to health care providers</li> <li>• Operates from the BC HARS policy</li> </ul> <p><b>Heat warning actions:</b></p> <ul style="list-style-type: none"> <li>• Convenes the BC HEAT coordinating committee if, as determined by ECCC and SMEs, the event looks likely to progress into an extreme heat emergency</li> </ul>

	<ul style="list-style-type: none"> <li>• Issues heat health messages in line with the BC HARS document key messaging</li> <li>• Amplifies heat warnings as appropriate to residents, schools, daycares, recreational groups, volunteer support groups, transient populations, and sporting events</li> </ul> <p><b>Extreme heat emergency actions:</b></p> <ul style="list-style-type: none"> <li>• May issue an emergency order under the EPA and/or PHA</li> <li>• Activates the Emergency Coordination Centre (ECC) or District Emergency Operations Centre (DEOC)</li> <li>• Participates in the Provincial Emergency Operations Centre (PREOC) and Provincial Emergency Coordination Centre (PECC), liaising with Ministry of Health Emergency Coordination Centre, EMCR, Police and Fire</li> </ul>
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### 4.2.3 Government Support Agencies

Each government agency listed in Table 4-3 have either a mandate to support public safety, and/or provide services that may assist with community response to an extreme heat event.

**Table 4-3** Government Extreme Heat Roles and Responsibilities

AGENCY	ROLES AND RESPONSIBILITIES
<b>BCEHS</b>  BC Emergency Health Service <i>(Formerly BC Ambulance Service)</i>	<ul style="list-style-type: none"> <li>• Participates in the Provincial Response Operations Centre (PREOC) and Provincial Emergency Coordination Centre (PECC), liaising with Ministry of Health Emergency Coordination Centre, EMCR, Police, and Fire</li> <li>• Ambulance attendants can inform residents about local extreme heat risk reduction services available</li> <li>• Is legally mandated to provide Vancouver Coastal Health Authority patient transport</li> <li>• May provide an agency representative to the EOC if requested</li> </ul>
<b>BC Housing</b>	<ul style="list-style-type: none"> <li>• Supports non-profit housing sector through educational activities (e.g., communication methods, tools, and templates, and resources such as cooling equipment<sup>1</sup>)</li> <li>• Requires extreme heat preparedness plans for non-profit housing partners</li> </ul>
<b>BC Parks</b>	<ul style="list-style-type: none"> <li>• Follows the BC HARS recommendations for provincial agencies</li> </ul>
<b>BC Transit</b>	<ul style="list-style-type: none"> <li>• Provides mass transportation options by request through EMCR and may be regionally/provincially prioritized</li> <li>• May provide an on-call public transportation line for direct pick-up and drop-off to cooling centres and cool public spaces</li> </ul>
<b>FNHA Health Emergency Management</b>	<ul style="list-style-type: none"> <li>• Communicates health risks from heat events in a timely, appropriate, and effective way to First Nations populations</li> </ul>

<sup>1</sup> BC Housing. (2022, June). *Extreme Heat and Wildfire Smoke Action Plan*. <https://www.bchousing.org/sites/default/files/media/documents/Extreme-Heat-Response-Action-Plan+2022.pdf>

First Nations Health Authority	<ul style="list-style-type: none"> <li>• Supports the development of culturally safe public health guidance and messaging regarding extreme heat events <ul style="list-style-type: none"> <li>• Guidance includes self-care and caring for vulnerable populations including those who are marginally housed, people with pre-existing health conditions, elders, and young children</li> </ul> </li> <li>• Develops climate change policies and programming</li> </ul>
<b>FNHA Indigenous Climate Health Action Program</b>  First Nations Health Authority	<ul style="list-style-type: none"> <li>• Supports First Nations leadership in reducing climate change impacts on health</li> <li>• Funds community-driven climate action projects that focus on health and wellness outcomes (e.g., food security and food sovereignty, access to the land, mental health, traditional medicine, traditional harvesting, as well as water quality and quantity)</li> </ul>
<b>Health Canada</b>	<ul style="list-style-type: none"> <li>• Federal department responsible for national health</li> <li>• Produces educational, promotional, communications, and adaptive behavior materials on heat risks that can be accessed online and sent to communities by request</li> </ul>
<b>VCHA</b>  Vancouver Coastal Health Authority	<ul style="list-style-type: none"> <li>• Communicates information regarding extreme heat on their website, social media, and press releases</li> <li>• Issues pre-season public service announcements and key public health messages as required throughout the season</li> <li>• Supports community heat management planning and implementation</li> </ul>
<b>VCHA – Healthy Communities</b>	<ul style="list-style-type: none"> <li>• Works with communities and partners to improve the built social, economic, and environmental factors that impact health during EHEs</li> <li>• Can participate in community meetings, committees, and partnerships</li> <li>• Connects communities with other Vancouver Coastal Health teams</li> <li>• Works collaboratively and in partnership with local governments to support the creation of healthy community planning, policy, and action</li> <li>• Informs long range plans such as HARS, Official Community Plans, etc.</li> <li>• Can support extreme heat mitigation and planning efforts by providing relevant recommendations grounded in health evidence, circulating health information and data, sharing resources and best practices, and linking into other communities doing similar work</li> <li>• Can review public health messaging for community heat response communications</li> </ul>
<b>ISC</b>  Indigenous Services Canada	<ul style="list-style-type: none"> <li>• Has a legal mandate to support indigenous persons on reserve in emergency management</li> <li>• Provides response and planning support under the Emergency Management Assistance Program</li> <li>• Provides advice and support as requested by the affected indigenous populations and province/territory</li> </ul>
<b>MCFD</b>  Ministry of Children and	<ul style="list-style-type: none"> <li>• Follows the BC HARS recommendation for government agencies</li> <li>• Can be present during EMCR Regional and Provincial Coordination calls</li> </ul>

Family Development	<ul style="list-style-type: none"> <li>• Provides direct assistance to caregivers and contracted care providers in impacted areas</li> <li>• May provide an agency representative to attend EOC if requested</li> </ul>
<b>MECCS</b> Ministry of Environment & Climate Change Strategy	<ul style="list-style-type: none"> <li>• Responsible for effective protection, management, and conservation of BC’s water, land, air, and living resources</li> <li>• Provides leadership on climate preparedness and adaptation, leads plans to meet greenhouse gas reduction targets</li> <li>• May support communities through development and implementation of long-term climate adaptation strategies through the <a href="#">Climate Preparedness and Adaptation Strategy</a></li> </ul>
<b>Office of the Seniors Advocate BC</b>	<ul style="list-style-type: none"> <li>• Has a mandate to monitor senior services and report on systemic issues affecting seniors</li> <li>• May provide information and referral to seniors and their caregivers</li> <li>• Has a toll-free 24-hour information and referral call line <b>1-877-952-3181</b></li> </ul>
<b>PHSA</b> Provincial Health Services Authority	<ul style="list-style-type: none"> <li>• Works in partnership with the province’s health authorities and healthcare professionals to plan, coordinate and evaluate specialized services</li> <li>• HEMBC provides emergency management expertise, education, and leadership to provincial health authorities</li> <li>• Through BCEHS, oversee BC Ambulance Service and Patient Transfer Services</li> <li>• Communicates alerts and health safety key messaging to registered clients during heat events</li> <li>• May share/amplify Vancouver Coastal Health key messaging</li> </ul>
<b>RCMP</b>	<ul style="list-style-type: none"> <li>• If capacity allows, may provide assistance with wellness checks and/or request assistance from search and rescue if necessary</li> <li>• Can inform residents about local extreme heat risk reduction services available</li> </ul>
<b>SCRD</b> Sunshine Coast Regional District	<ul style="list-style-type: none"> <li>• Will assist with inter-agency and organization communications and coordination</li> <li>• May provide support in the form of support personnel or a joint EOC model</li> <li>• Can assist with amplifying extreme heat key messaging</li> </ul>
<b>SCHOOL DISTRICT 46</b>	<ul style="list-style-type: none"> <li>• May be able to provide facilities for cooling centres</li> <li>• May be able to provide school buses for rental use</li> </ul>

4.2.4 Non-Government Organizations – National, Provincial, and Regional

Table 4-4 summarizes organizations who have a mandate to provide resources or services that may provide assistance in an extreme heat weather event.

**Table 4-4** Provincial Non-Government Organizations Extreme Heat Roles and Responsibilities

AGENCY	ROLES AND RESPONSIBILITIES
<b>BC211</b>	<ul style="list-style-type: none"> <li>• A 24hr service connecting communities with appropriate programs and services (e.g., basic needs (food and shelter), mental health and</li> </ul>

	addictions support, legal and financial assistance, and support for seniors)
<b>Better at Home Agency</b>	<ul style="list-style-type: none"> <li>• Provides support and services such as assisting with getting groceries, meals, or medication</li> <li>• Call 2-1-1 to connect</li> </ul>
<b>Canadian Disaster Animal Rescue Team (CDART)</b>	<ul style="list-style-type: none"> <li>• Disaster response services for domesticated animals</li> <li>• May deploy to a site or support remotely</li> </ul>
<b>Canadian Red Cross</b>	<ul style="list-style-type: none"> <li>• Will prioritize incidents in which residents are forced to evacuate from their homes (e.g., flood and wildfire events)</li> <li>• Depending on the situation, may provide services to support cooling centres</li> <li>• Typically requires an EMCR task number for volunteer expenses</li> </ul>
<b>Destination BC</b>	<ul style="list-style-type: none"> <li>• May disseminate heat health information to travelers and tourists through social media and visitor information centres</li> </ul>
<b>FNESS</b> First Nations Emergency Services Society	<ul style="list-style-type: none"> <li>• Its operating mandate is to support indigenous communities</li> <li>• May inform residents about local extreme heat risk reduction services available</li> <li>• May be able to source EOC support personnel internally and/or from other communities</li> <li>• May provide Emergency Support Service (ESS) program support and recovery plan development</li> <li>• Supports communities with financial recovery process support</li> <li>• May provide a liaison to attend EOC as required</li> </ul>
<b>Disaster Psychosocial HEMBC Duty Officer</b>	<ul style="list-style-type: none"> <li>• Provides psychosocial services upon request through EMCR</li> </ul>
<b>Salvation Army</b>	<ul style="list-style-type: none"> <li>• May provide volunteer services related to food &amp; hydration, spiritual care, and donations management</li> </ul>
<b>Search and Rescue</b>	<ul style="list-style-type: none"> <li>• May support RCMP with wellness checks in isolated areas</li> </ul>
<b>SPCA</b>	<ul style="list-style-type: none"> <li>• May provide supplies to cooling centres to support domestic animals</li> <li>• May provide emergency boarding of pets during EHEs</li> <li>• Provides pet food banks to provide pet food and supplies for low-income pet guardians and in cases of emergency</li> </ul>
<b>St. John Ambulance</b>	<ul style="list-style-type: none"> <li>• May provide first aid services and therapy dogs for Cooling Centres</li> <li>• May have some capacity around transportation of medically infirm but BCEHS should be consulted prior to engaging St. John's Ambulance for medical transport</li> </ul>
<b>United Way British Columbia</b>	<ul style="list-style-type: none"> <li>• Public foundation that serves the needs of local communities through programs such as the <b>Better at Home Program</b></li> <li>• The Better at Home program helps seniors with non-medical, day-to-day tasks so they can continue to live independently in their homes and remain connected within their community</li> <li>• Services may include transportation, grocery shopping, housekeeping, etc.</li> <li>• Fees based on income and may vary per region</li> </ul>
<b>Work BC</b>	<ul style="list-style-type: none"> <li>• May be able to pass on information (e.g., available heat risk reduction resources and supports) directly to clients and through the interagency group that meets monthly to discuss available resources for clients regionally</li> </ul>

<b>WorkSafe BC</b>	<ul style="list-style-type: none"> <li>• Requires businesses to have a heat stress mitigation plan in place and to conduct heat stress assessments as appropriate</li> <li>• Plans must provide education and training on identifying heat stress related signs and symptoms</li> <li>• <i>It is the employer's responsibility to implement measures to keep their employees safe</i></li> </ul>
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#### 4.2.5 Non-Government Organizations – Local

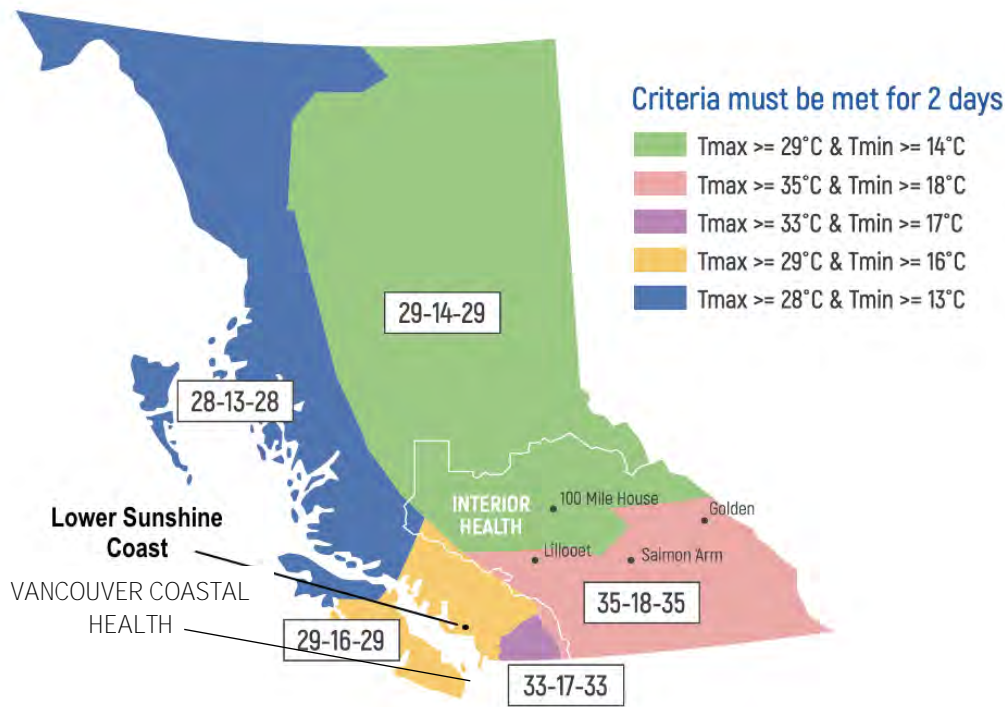
Community based non-government organizations (NGOs) can provide valuable support during an EHE in the form of outreach to vulnerable populations and reliable, accessible, and culturally safe spaces for those in need. Support local NGOs as best as possible so they can continue to operate during extreme heat weather events. Insufficient access to the following resources can affect the resilience of a NGO to EHEs:

- » An extreme heat plan and procedures
- » A business continuity plan
- » Adequate cooling and emergency resources and assets (e.g., bottled water, air conditioning units, back-up power generators)
- » Sufficient staff / volunteer capacity
- » Pre-existing relationships

See Appendix 10 – Community Partner Information for more information on the local organizations, their roles, and responsibilities, and how they may provide assistance during EHEs.

### 4.3 ECCC HEAT WARNING REGIONS

British Columbia is divided into five geographic heat regions with corresponding temperature-specific warning criteria as shown in Figure 4-1. It is important to note these regions do not necessarily coincide with provincial health authority regions.



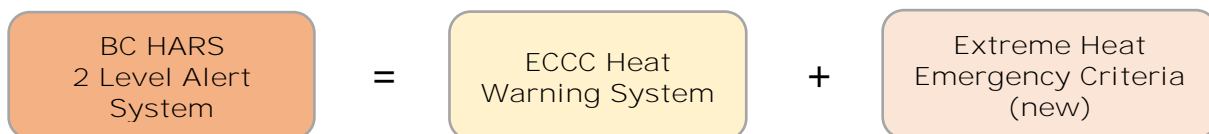
**Figure 4-1** Map of the ECCC Heat Alert Warning Regions and Regional Health Authority Boundaries  
 Source: BC HARS 2022

#### 4.3.1 Sunshine Coast Regional District Heat Warning Region

The Sunshine Coast is in the Southwest geographic heat region, identified by the yellow area on the map in Figure 4-1. This region also aligns with the Vancouver Coastal Health region.

### 4.4 BC HEAT ALERT RESPONSE SYSTEM

A BC heat alert system (HARS) was developed and implemented in 2022 following the BC Coroner inquest into the 619 heat-related deaths. The BC HARS uses a two-level alert system for warning the public of EHEs. This system uses the Environment Canada and Climate Change (ECCC) heat alert system and uses the following extreme heat emergency criteria.





**Best Practice: Always monitor weather events and forecasts to anticipate potential EHEs even though official notification will come through ECCC**

#### 4.4.1 Level 1 Heat Warning for the Southwest Region



### LEVEL 1 HEAT WARNING

≥2 days in which forecasted daytime maximum temperatures are ≥29 °C  
**AND** overnight minimum temperature are ≥16 °C

- A Moderate risk to public health (5% increase in mortality)
- Can expect approximately 1 – 3 events per summer season

A heat warning occurs when daytime and overnight temperatures are higher than usual but are not getting hotter every day. ECCC defines a heat warning as two or more consecutive days in which daytime maximum temperatures reach or exceed 29 °C AND overnight minimum temperatures do not drop below 16 °C. These heat warning alerts will be issued for the first three events in a heat season. If deemed necessary, the community may choose to:

- » Activate their EOC. See Figure 4-2 – Sample organizational chart for a level 1 heat warning.
- » Activate heat warning communications
- » Activate the EHE communications plan
- » Schedule a community partner coordination call
- » Consider activating an advance planning unit
  - » Prepare for an extreme heat event if necessary

See Appendix 3 – Level 1 Heat Warning for level 1 heat warning checklists, key messaging, and communication templates.

#### 4.4.1.1 Heat Warning Extension Criteria

In an effort to address heat warning fatigue and acknowledge behavioral and physical adaptations during the heat season, the BC HEAT Committee may implement an extension of the heat warning criteria following the third heat warning alert for a given forecast region. This extension may require three consecutive days and two consecutive nights with no change to the temperature criteria for another heat warning alert to be issued.

#### 4.4.1.2 Pre-heat Warning

ECCC may communicate the potential of a heat warning a few days in advance when the criteria for a heat

warning is expected. See Appendix 2 – Pre-heat Warning for pre-heat warning checklists, key messaging, and communication templates.

#### 4.4.1.3 Heat Warning Deactivation

Once the criteria for a level 1 heat warning are no longer met, ECCC will release a notification through the WeatherCAN mobile app concluding the heat warning and updates will be made to the ECCC weather website.

#### 4.4.2 Level 2 Extreme Heat Emergency for the Southwest Region



### LEVEL 2 EXTREME HEAT EMERGENCY

Heat warning criteria has been met **AND** forecast indicates that daily highs will substantially increase day over day for  $\geq 2$  days

- A **Very High** risk to public health ( $\geq 20\%$  increase in mortality)
- Can expect approximately 1 – 2 events per decade

The purpose of the extreme heat emergency alert is to increase public awareness of the heightened health risks associated with consecutive days of rising temperatures. An extreme heat emergency is when daytime and overnight temperatures are well above seasonal norms **AND** are getting hotter every day. ECCC defines an extreme heat emergency when heat warning criteria has been met and the forecast indicates a substantial increase in daily highs for more than two consecutive days.

It is recommended the community:

- » Activate its EOC. See Figure 4-3 – Sample Organizational Chart for an Extreme Heat Emergency
- » Consider the need for advance planning unit
- » Activate the EHE communications plan
- » Schedule a community partner coordination call

See Appendix 5 – Level 2 Extreme Heat Emergency for Level 2 extreme heat emergency checklists, key messaging, and communication templates.



**Note: Early summer extreme heat events may pose a greater public risk as populations be less prepared and have less time to acclimatize.**

#### 4.4.2.1 Extreme Heat Emergency Deactivation

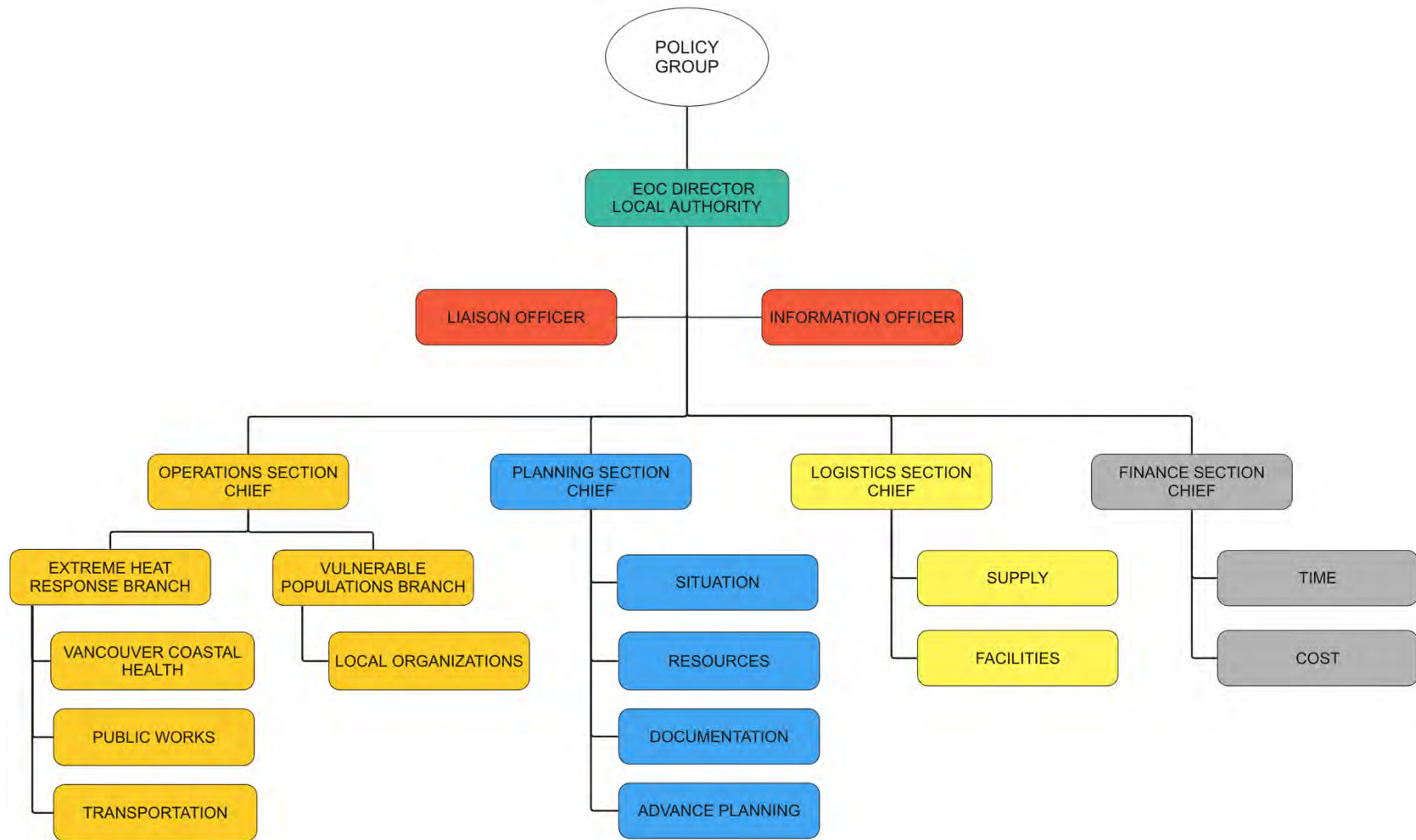
Upon receiving the BC HEAT Committee's directive to de-escalate the level 2 extreme heat emergency, ECCC will notify through the WeatherCAN mobile app, update its website, and may issue a special weather statement to communicate the end of the extreme heat emergency.

## 4.5 ORGANIZATIONAL CHART

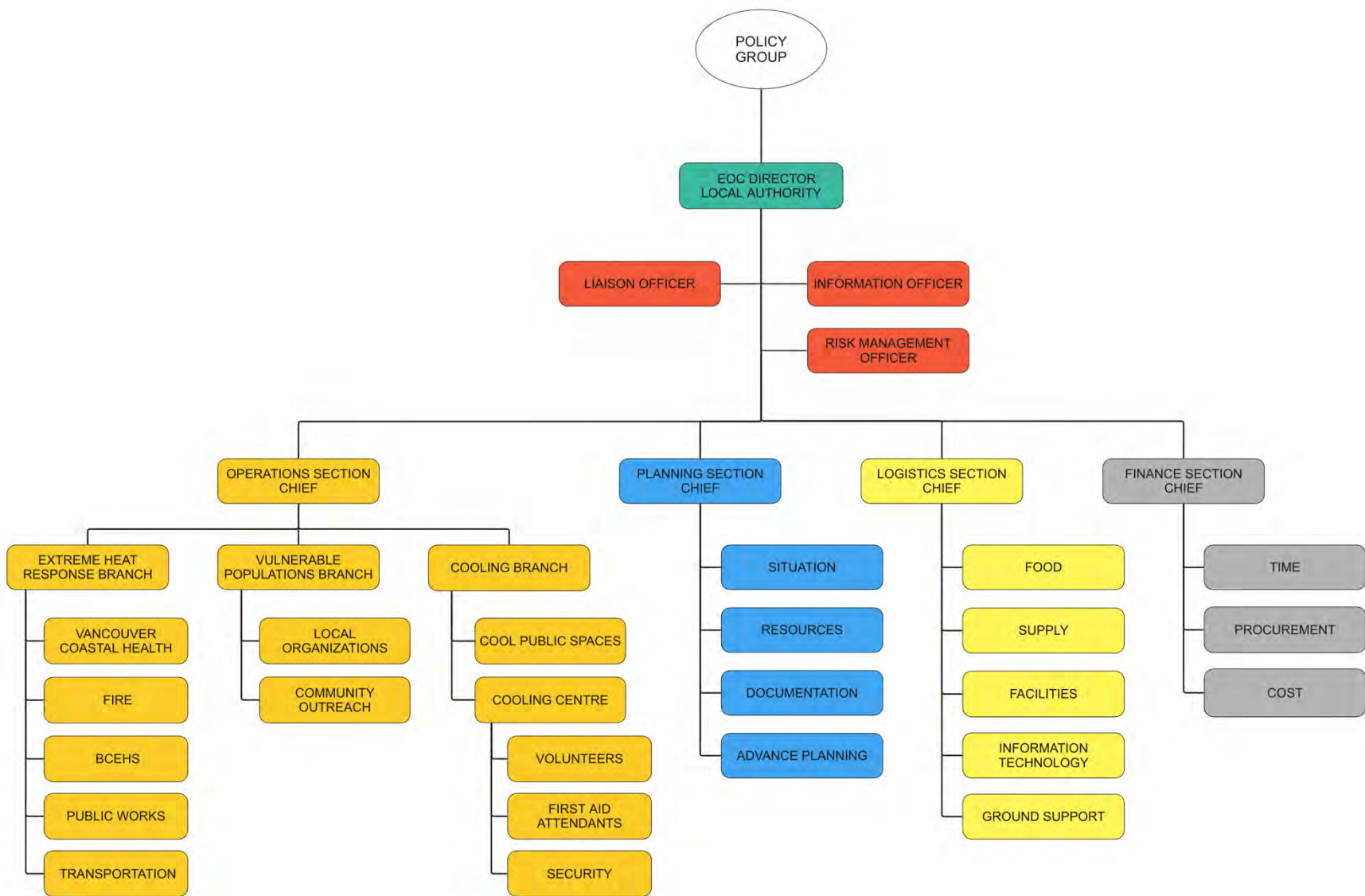
Figure 4-2 and Figure 4-3 illustrate potential EOC organizational structures for a heat warning event and an extreme heat emergency, respectively. Each chart shows potential EOC functions that may be required depending on the heat event type. It is entirely possible only one or two individuals may be needed to successfully manage an EOC activation for a heat warning.



**Note: This is for guidance only. An EOC activation may not always be required and depending on the situation, not all functions may be required, and one person can be responsible for more than one function**



**Figure 4-2** Sample Organizational Chart for a Level 1 Heat Warning



**Figure 4-3** Sample Organizational Chart for a Level 2 Extreme Heat Emergency



**Best Practice: Consider activating a Liaison Officer, Risk Management Officer, Information Officer, and an Advance Planning Unit for effective extreme heat planning**

## **4.6 HEAT RESPONSE FLOWCHART**

Figure 4-4 outlines the ECCC heat alert notification process. February 1<sup>st</sup> is selected as a start date for illustrative purposes only and may be adjusted as necessary. It is advisable to begin pre-season heat planning before freshet season.

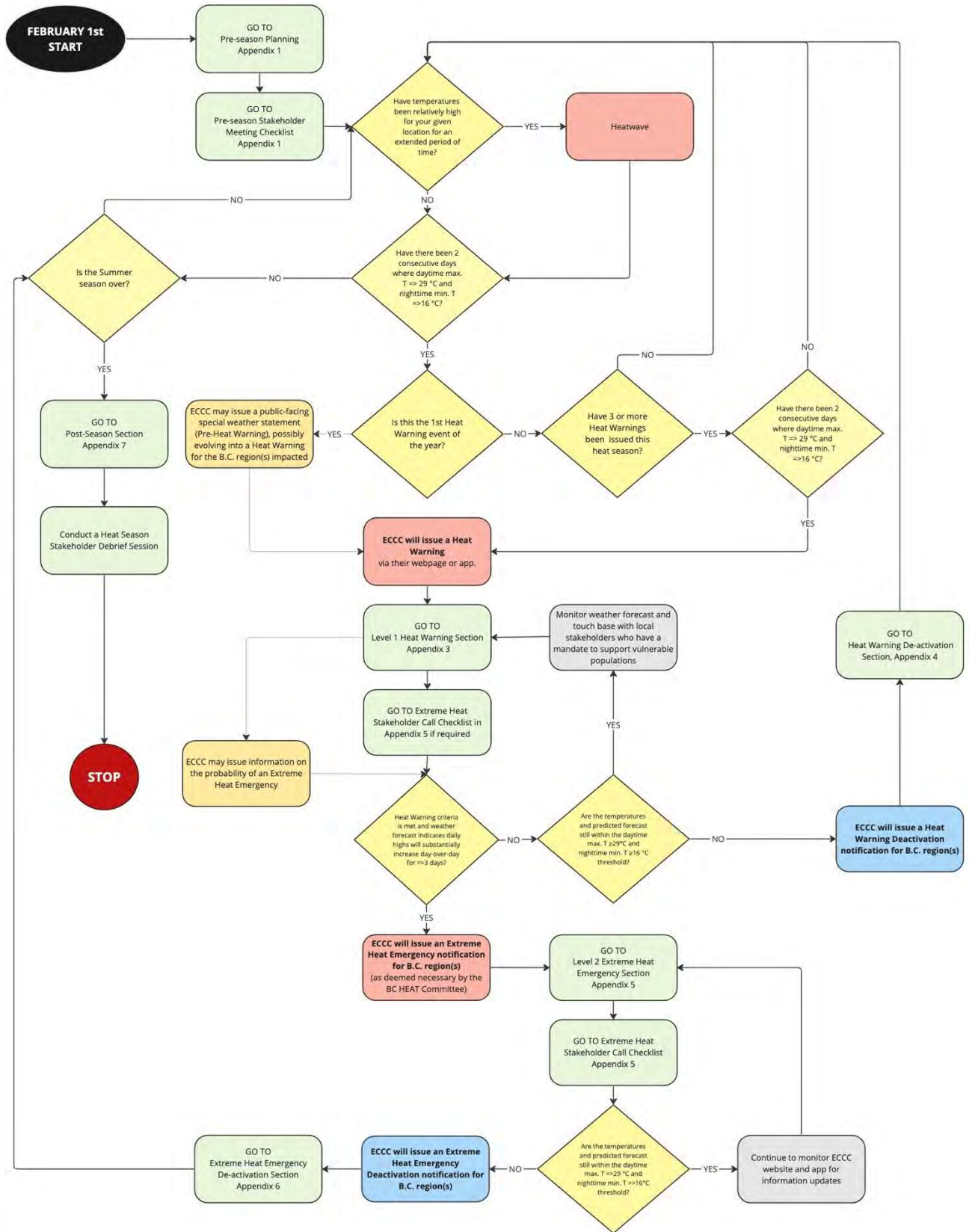


Figure 4-4 Heat Response Flowchart

## 5.0 EXTREME HEAT COMMUNITY PLANNING

### 5.1 EXTREME HEAT RISK ASSESSMENT

The Sunshine Coast extreme heat risk assessment compiles data from the community including resources, services, and strategies available to help protect the known vulnerable populations, Statistics Canada census data, Climate Data Canada 2022, and the Climate Atlas Canada 2023.

#### 5.1.1 Heat Vulnerability Summary

Community vulnerability information is collected from a variety of sources including the Vancouver Coastal Health Authority online mapping tool, Statistics Canada, and community partner engagement interviews and is summarized in Table A-1 and Table A-2 in Annex A: Sunshine Coast. These summaries aim to provide information to guide and support heat risk reduction decision making.

#### 5.1.2 Factors Influencing Individual Resilience to an EHE

An extreme heat weather event impacts everyone. However, the degree to which a person is affected will vary from person to person. Figure 5-1 shows the individual-level factors and the community-level factors influencing a person's resilience to an EHE. It is important to note these categories do not carry equal weight and may impact individuals differently. The more factors a person contends with and the higher the risk of heat related illness, injury, or death during an EHE.



**Figure 5-1** Individual and Community Level Factors Influencing Individual Resilience

Source: [Health Canada](#)

## 5.2 KNOWN HEAT-VULNERABLE POPULATIONS

Some community members will be more vulnerable during EHEs than others. Table 5-1 outlines various factors contributing to such vulnerability, as well as examples of people who may fit these categories. It is important to note individuals can belong to more than one vulnerable category, thereby increasing their risk to heat-related illness, injury, and death from an EHE. For instance, some seniors may experience overlapping challenges such as limited mobility, poverty, and social isolation, placing them at higher risk of heat-related illness, injury, and death from EHEs.

**Table 5-1** List of Known Heat Vulnerable Populations

VULNERABLE CATEGORY	FACTORS CONTRIBUTING TO VULNERABILITY	EXAMPLES
Age	<ul style="list-style-type: none"> <li>Physiological characteristics (e.g., less able to thermoregulate)</li> </ul>	<ul style="list-style-type: none"> <li>Seniors aged 65 years or older</li> <li>Infants and young children (&lt; 5 years)</li> </ul>
Housing / Living Arrangements	<ul style="list-style-type: none"> <li>Limited or no access to cooling resources</li> <li>People living alone may not be able to recognize when they are overheating</li> </ul>	<ul style="list-style-type: none"> <li>People experiencing homelessness</li> <li>People who do not have access to adequate housing</li> <li>People without access to air conditioning</li> <li>People who live alone or are socially isolated</li> <li>People who depend on a caregiver</li> </ul>
Health Vulnerabilities	<ul style="list-style-type: none"> <li>Certain medications can interfere with body's ability to cool itself</li> <li>Inability to recognize overheating and/or protect oneself from overheating</li> <li>Certain health conditions may reduce the body's ability to adapt to heat</li> </ul>	<ul style="list-style-type: none"> <li>People who are pregnant</li> <li>People with mental illness (e.g., schizophrenia, depression, anxiety)</li> <li>People with pre-existing health conditions (e.g., diabetes, heart disease, or respiratory disease)</li> <li>People with communication, sensory, and cognitive impairment</li> <li>People who take certain medications (e.g., some antidepressants, antihistamines, some blood pressure medicines, some sedative medicines, and thyroid medicine)*</li> <li>People who drink alcohol or take illegal drugs (e.g., methamphetamines amphetamines, cocaine, heroin, PCP (phencyclidine hydrochloride), and LSD (lysergic acid diethylamide)**</li> </ul>
Accessibility	<ul style="list-style-type: none"> <li>Limited or no knowledge of cooling resources and services available</li> <li>Limited or no ability to access cooling resources and services</li> </ul>	<ul style="list-style-type: none"> <li>People experiencing literacy barriers</li> <li>People experiencing language barriers</li> <li>People experiencing systemic barriers</li> <li>People experiencing mobility challenges</li> <li>People without vehicles</li> </ul>
Occupation	<ul style="list-style-type: none"> <li>Higher exposure to heat risks</li> <li>Increased physical strain and therefore, increased sweating</li> </ul>	<ul style="list-style-type: none"> <li>People who work in hot environments (e.g., kitchens or outdoors)</li> </ul>

Personal Behavior	<ul style="list-style-type: none"> <li>• Lower perception of heat risk</li> </ul>	<ul style="list-style-type: none"> <li>• People who exercise or are physically active in the heat</li> </ul>
Socioeconomic Disparity	<ul style="list-style-type: none"> <li>• Reduced access to cooling resources and services</li> <li>• Limited financial resources to take adequate protective measures</li> <li>• Limited access to health care and social services</li> <li>• Higher rates of social isolation</li> <li>• Few to no social connections</li> </ul>	<ul style="list-style-type: none"> <li>• People with a low income</li> <li>• People with few to no social connections</li> </ul>
Cultural	<ul style="list-style-type: none"> <li>• Limited local knowledge</li> <li>• Cultural differences</li> <li>• Language and literacy barriers</li> <li>• Few to no social connections</li> </ul>	<ul style="list-style-type: none"> <li>• People who are new to Canada</li> <li>• People who have recently moved to the area or are visiting</li> <li>• People with English as a second language</li> </ul>

Sources: Health Canada, 2011 and BC HARS, 2022

- \* For a list of some medications that increase health risks from extreme heat see the [Government of Canada Acute Care During Extreme Heat pdf](#), call HealthLink BC at 8-1-1 to speak with a registered nurse, and/or contact your physician
- \*\* Certain substances such as amphetamines or cocaine can create hyperthermic responses in the body under normal conditions and can increase the risk of heat related illnesses

### 5.2.1 Known Heat-Vulnerable Locations

Pinpointing the exact locations of all heat-vulnerable individuals is an impractical task. Community partners engaged with or support these populations can play a critical role in addressing these knowledge gaps. Information collected through community partner engagement can help identify areas, buildings, or complexes where groups of people may face heightened risks during EHEs. This information can be used to support developing targeted strategies to protect and support those who are most vulnerable to the impacts of an EHE. Table A-3 in Annex A: Sunshine Coast lists the residences and locations of populations considered to be at greatest risk to EHEs within the Sunshine Coast based on the most current information available. For more information on heat-vulnerable populations, see Section 5.2 Known Heat-Vulnerable Populations. The heat-vulnerable locations identified in the Plan include:

- » Affordable housing low-income housing complexes
- » Assisted and supportive living complexes
- » Transition housing
- » RV parks with longer term rentals
- » Mobile home parks
- » Campgrounds
- » Childcare facilities for infants and young children

## 5.2.2 2021 Statistics Canada Census Age and Socioeconomic Data

The following known vulnerable population information was compiled using the data collected from the 2021 Statistics Canada Census:

- » Children under 5 years and adults 65 years and older
- » Residents living alone
- » Indigenous populations
- » Low-income measure for adults 65 years and older
- » Recent immigrants (2016 – 2021)

This information can be used to help a community to assess its overall vulnerability to EHEs, develop informed extreme heat response strategies, and develop effective communication plans.



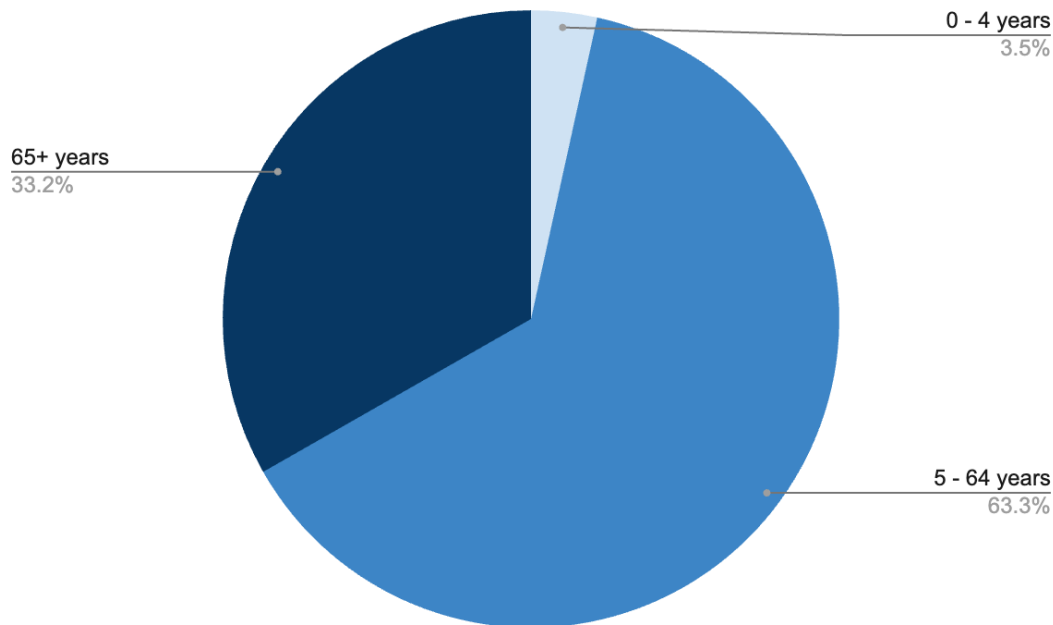
**Note: See the Community Information Annexes for all community specific Statistics Canada Census and vulnerability information.**



**Best Practice: Use the Canada census data to help inform the community heat vulnerability assessment as well as develop the targeted public education campaign.**

### 5.2.2.1 Children Under 5 years old and Adults 65+ years old

Young children under 5 years of age and adults 65 years of age or older are physically more susceptible to the impacts of extreme heat events. This vulnerability is attributed to factors such as an underdeveloped thermoregulatory system, an inability to recognize overheating and dehydration, and a reliance on caregivers for assistance, among others. A significant senior population, adults aged 65 and above years, may also create unique challenges such as mobility, transportation, and public health concerns, as well as the need to incorporate the use of traditional media and targeted messaging. In the Sunshine Coast, seniors account for approximately 59.9% of the total residents, well surpassing the national average of 18.8% in Canada. (Government of Canada, 2022). Figure 5-2 illustrates the age characteristics for the Sunshine Coast.



**Figure 5-2** Sunshine Coast Statistics Canada Age Demographics 2021



**Note: 33.2% of the residents in the Sunshine Coast are 65 years of age or older**

### 5.2.2.2 Living Alone

Social isolation was identified in the BC Coroners heat dome report as one of the common factors in the 619 heat-related deaths. Social isolation and/or living alone can compound the challenges posed by extreme heat events. Individuals living alone may lack a support network that can assist with wellness checks during an EHE. In addition, the absence of social interactions can lead to a decreased awareness of the severity of the heat as well as exacerbate any mental health concerns. 15.7% of Sunshine Coast residents live alone.

### 5.2.2.3 Poverty

EHEs go beyond being a mere inconvenience for individuals experiencing poverty. Without the financial means to adequately protect themselves, EHEs will create significant challenges and hardships. People experiencing poverty may be unable to afford essential cooling resources such as fans or portable air-conditioning units, struggle to pay higher utility bills, and face additional challenges due to disruptions in support services like daycare. Moreover, they may suffer inconveniences such as living in older, more poorly insulated homes, not having access to a vehicle, and lacking an expendable income to access expensive cooling opportunities such as waterslide parks and summer vacation rentals. Individuals with a limited to no disposable income face compounding impacts that can necessitate sacrifices in essential areas such as food, education, and especially health to minimize the additional costs of staying cool during hot

weather such as higher utility bills resulting from a greater usage of electric fans or air conditioning. Consequently, it is imperative to consider strategies that address potential financial and systemic barriers and provide opportunities to socialization and stress relief.

In 2020, 12.6% of residents in the Sunshine Coast were experiencing poverty based on the low-income measure after tax (LIM-AT), which is more than one and a half times the national 8.1% poverty rate in Canada. The LIM-AT measures the percentage of residents whose income falls below 50% of the median after tax income of all households in Canada.

#### 5.2.2.3.1 Seniors Aged 65+ Years and Children Aged 0-5 Years Experiencing Poverty

Poverty often compounds pre-existing vulnerabilities, rendering it more challenging for heat sensitive populations such as young children and seniors to effectively adapt to extreme heat events. Limited access to safe housing, adequate nutrition, healthcare services, mobility options, social interactions are a few examples of the challenges that should be considered when developing community heat response strategies. According to the 2021 Census LIM-AT, 13.3% of adults aged 65 years and older in the Sunshine Coast are experiencing poverty. This percentage is more than three times the average poverty rate in Canada. A poverty rate of 12.9% is affecting children 0-5 years of age.

#### 5.2.2.4 Indigenous People

Within the SCRD boundary, 7.2% of the population self-identify as Indigenous. According to the 2021 census of population, Indigenous people across the provinces (not including First Nations people living on reserve and the three territories) are more likely to experience poverty than non-Indigenous people because of colonization and structural racism. (Government of Canada, 2022). Indigenous people are also more likely to experience greater impacts from natural disasters and climate-caused emergencies. Systemic barriers and limited access to culturally appropriate support are potential challenges to consider when developing inclusive EHE response strategies. (Ministry of Emergency Management and Climate Readiness and Ministry of Health, 2022, p.9).

#### 5.2.2.5 Immigrants 2011-2021

Immigration across Canada has been steadily increasing. In 2011, immigrants represented 27% of the total population in Canada and that number is expected to grow to 30% by 2036. (Government of Canada, 2023). Newcomers to Canada tend to be more vulnerable to EHEs compared to people born in Canada due to factors such as cultural differences, language barriers, and lack of local knowledge. The 2021 census of population states that 1.5% of the population in the Sunshine Coast recently immigrated to Canada between the period of 2016 and 2021. Despite recent immigrants representing a relatively small fraction of the population, it is important to consider the potential communication and cultural barriers to accessing local cooling resources and services.

### 5.2.3 Unhoused Populations

There are known encampments within the Sunshine Coast, raising concerns among community partners about the well-being of individuals who are unhoused during EHEs. These individuals are particularly

vulnerable to EHEs due to their lack of permanent shelter, limited access to resources, and a potential reluctance to leave behind belongings to utilize cooling resources. The Sunshine Coast actively supports affordable housing initiatives and undertook a comprehensive housing needs assessment and report in November 2020. Some of the key findings relevant to EHE preparedness and response planning include the following statistics:

- » In 2016, 40% or more of all renter households were living in unaffordable housing across the Sunshine Coast
- » In 2016, 1,175 renter and 860 owner households were living in unacceptable conditions
- » In 2018, 57 unhoused individuals in Sechelt and Gibsons were counted

Accurate data for individuals underhoused as well as marginally housed is limited in nature and fluctuates seasonally. For more information on Sunshine Coast affordable housing challenges and implementation strategies, see the [November 2020 Sunshine Coast Housing Needs Report](#).

#### 5.2.4 Tourists and Foreign Workers

Tourist and foreign worker populations are potentially vulnerable people who may be in the community at the time of an EHE. People new to the community may not be acclimatized to the heat, aware of an impending EHE, or familiar with the public heat risk reduction resources and services available. Tourists seeking refuge from the heat can strain limited resources needed for residents or evacuees from other communities.

The Sunshine Coast boasts a vibrant tourism industry, contributing significantly to the local economy. In 2022, tourism played a pivotal role, accounting for approximately \$200 million annually in direct and indirect spending on the Sunshine Coast. Although current statistics on the number of summer visitors to the Sunshine coast is not available, a 2007 tourism study documented that 349,318 people visited the Sunshine Coast between June 8 and August 31.

### 5.3 OUTDOOR EVENTS

Outdoor events present unique challenges during extreme heat. Participants in outdoor events may be exposed to prolonged sun exposure, dehydration, and heat related illnesses. Other factors such as crowd density, availability of water, and lack of heat risk awareness can further add to these challenges. Incorporating heat safety measures into event planning can help alleviate some of these challenges. Table A-4 in Annex A: Sunshine Coast summarizes the annual summer outdoor events that take place with the Sunshine Coast.

### 5.4 COMMUNITY HEALTH CHALLENGES

During an EHE, several community health challenges can arise, affecting the well-being of residents. Potential extreme heat-related health challenges include the following:

- » Heat-related deaths
- » Heat-related hospitalizations

- » Exacerbation of chronic health conditions
- » Respiratory problems, especially when combined with poor air quality
- » Illnesses caused by swimming in contaminated water bodies (See Section 5.9.1 Freshwater Ecosystems and Section 5.9.2 Saltwater Ecosystems for more information)
- » An increase in vector borne diseases and pests
- » Health problems caused by limitations to mobility
- » Increased fatigue and the potential for an increase in workplace accidents

## 5.5 SOCIAL CHALLENGES

EHEs can intensify existing social challenges and create new ones such as a disruption in education for children and an increase in crime rates. Table 5-3 highlights the potential effects of EHEs on pre-existing social challenges.

**Table 5-2** Potential Ways EHEs Can Impact Pre-Existing Social Challenges

POTENTIAL EHE IMPACTS ON PRE-EXISTING SOCIAL CHALLENGES	EXAMPLES
An increase in health and mental health inequities	<ul style="list-style-type: none"> <li>• Individuals experiencing mental health challenges may not use municipal services such as a designated cooling centre due to a fear of, or a lack of trust in government.</li> <li>• Individuals with mental health challenges may be too fearful to open windows to help cool their residence.</li> <li>• An increase in aggressive and violent behavior, as well as mental health and wellness challenges due to:               <ul style="list-style-type: none"> <li>○ Increased social isolation during EHEs (people tend to stay at home)</li> <li>○ Increased fatigue</li> <li>○ Increased financial stress resulting from high utility bills</li> </ul> </li> </ul>
An increase in Economic Disparity	<ul style="list-style-type: none"> <li>• Income loss due to absenteeism or temporary layoffs.</li> <li>• Individuals who are socioeconomically disadvantaged may experience greater challenges if the support services (e.g., schools, daycares, and income assistance programs) they rely on need to close.</li> </ul>
An increase in Poverty Challenges	<ul style="list-style-type: none"> <li>• EHEs can cause individuals experiencing poverty to make health sacrifices such as forgoing groceries or expensive medications to stay cool or they may make health sacrifices such as comfort and sleep to minimize energy bills.</li> </ul>

## 5.6 CURRENT EXTREME HEAT RESOURCES AND SERVICES

This section provides a summary of available extreme heat resources and services to help the public cool down during EHEs. Examples of such resources include designated cooling centres, cool public spaces, service clubs offering support during EHEs, and community transportation services. Refer to the

Community Information Annexes for individual community heat resources including designated cooling centres and cool public spaces.

### 5.6.1 Cool Public Spaces

A cool public space is a pre-existing facility or outdoor area within the regional district that provides an opportunity for the public to cool down as well as engage in a recreational, social, or entertainment activity. Cool public spaces include facilities such as public libraries, museums, and shopping malls as well as outdoor areas such as spray parks and beaches.

#### 5.6.1.1 Cool Public Facilities

Before activating a designated daytime cooling centre, it is currently a wise practice to modify and/or extend the operating hours of existing indoor cool public spaces. This approach aligns with public preferences since individuals tend to gravitate toward frequented facilities for several reasons. Familiarity plays a key role, as individuals often find greater comfort in visiting locations they are acquainted with, especially when those places offer familiar faces, as well as customary activities and amenities.

For more information on cool public spaces see Section 7.2.1 – Extend Hours to Cool Public Spaces and Section 7.2.2 – Ensure Cool Public Spaces and Designated Cooling Centre are Welcoming to All.

#### 5.6.1.2 Outdoor Recreational Areas

The Sunshine Coast offers an idyllic setting for outdoor enthusiasts, graced by dense forests, lakes, creeks, ocean access, and well-maintained urban parks. During EHEs, these refuges, including shaded creeks, parks, beaches, and spray parks serve as enduring and essential features for locals and tourists seeking relief from the summer heat. Beyond their cooling ability, these sites promote physical activity, encourage social connections, and enhance overall health and well-being. For a summary of the outdoor parks within each community, see the Plan Annex section.

### 5.6.2 Designated Cooling Centres / Potential Overnight Cooling Centres

A designated cooling centre is a facility or location staffed by a local authority designated to provide relief and a safe environment for individuals during periods of extreme heat. Table A-6 in Annex A: Sunshine Coast lists the facilities identified as potential cooling centres for the Sunshine Coast. It is important to note that the two identified cooling facilities are also designated community reception centres. Competing priorities such as a community evacuation or hosting a neighbouring community may introduce additional logistical challenges so it is beneficial to identify facilities that are not already designated reception centres.

See Section 7.2.2 – Ensure Cool Public Spaces and Designated Cooling Centres are Welcoming to All for more information on designated Cooling Centre considerations.

### 5.6.3 Accessibility of Extreme Heat Resources and Services

Accessibility refers to the ability of vulnerable populations to physically access cooling resources and services. This may include physical barriers such as distance and wheelchair accessibility and can also include limitations preventing or dissuading potential users from benefiting from cooling resources and

services. These barriers can include:

- » Geographic location and limited or no access to free transportation
- » Language barriers
- » Awareness of existing cool public facilities
- » Cultural sensitivity and humility
- » Lesbian, Gay, Bisexual, Transgender, Questioning, Intersex, Asexual, Two-Spirit and Other (LGBTQIA2S+) sensitivity
- » Facility familiarization
  - Individuals are less likely to visit cool public spaces and designated Cooling Centres they are not familiar with
- » Insufficient age-appropriate spaces and activities available in designated cooling centres
  - A sterile facility with nothing to do may be considered degrading for individuals who do not have other options.
- » A negative socio-economic stigmatization of designated Cooling Centres.
- » A lack of accommodation of pet owners
  - Pet owners may not choose to utilize a cooling centre or cool public space if it is unsafe to leave their pet(s) at home or they are not comfortable leaving them in a kennel for an extended period.

Consideration of accessibility will make it easier for vulnerable and marginalized populations to use cooling resources and services. For information on cooling centre considerations, see Section 7.2.2 – Ensure Cool Public Spaces and Designated Cooling Centres are Welcoming to All.

### 5.6.3.1 Transportation Services

Walking to a cool public space or a designated cooling centre may be unsafe for some individuals during an EHE. This can make designated cooling centres and cool public spaces such as spray parks, beaches, libraries, and recreation centres inaccessible to those who do not have access to vehicles.

#### 5.6.3.1.1 Public Transportation Services

The Sunshine Coast Transit System is operated under a funding agreement with BC Transit, features service connections between most communities from the Langdale ferry terminal including Elphinstone, Gibsons, Roberts Creek, and Sechelt. Communities such as Halfmoon Bay and areas in Langdale have limited transportation services available and communities including Egmont, Pender Harbour, and Tuwanek in Sechelt are not served at all. While bike and e-bike options are available for most existing routes, Transit recommends verifying the bike specifications beforehand. Additionally, BC Transit is accommodating to mobility aids, but only at stops that are designed accessible stops.

#### 5.6.3.1.2 Private Industry

A small number of taxi companies provide transportation service within communities, between communities, to ferry terminals, and to float plane bases between Earls Cove and Langdale.

### 5.6.3.1.3 Door-to-Door Transportation Services

HandyDART is a service for individuals with permanent or temporary disabilities that prevent them from using fixed-route transit without the assistance from another person. To access this service, contact Sunshine Coast Transit at 604-885-6899 for further information. Other door-to-door transportation options that currently exist on the Sunshine Coast include:

- » A VCHA volunteer driver program for patients requiring access to on-coast and off-coast medical appointments
- » A Pender Harbour Health Centre wheelchair accessible passenger van

## 5.7 POTENTIAL COMPETING PRIORITIES

The convergence of competing priorities such as poor air quality, droughts, interface wildfires, extended power outages, structural fires, pandemics, the opioid crisis, and scheduled community events place additional strain on existing EOC resources during an EHE. See the hazard risk vulnerability assessment risk matrix (HRVA) in the SCRD emergency management plan for the list of the hazards that are of highest risk to the community.



**Best Practice: Utilize BC Emergency Management System (BCEMS) to help prioritize threats**



**Note: Heat poses a higher risk to health safety than poor air quality**

### 5.7.1 Municipal Operation Challenges

An EHE can impact the municipality's ability to respond effectively to extenuating challenges and competing priorities. Operational factors to consider include:

- » A reduction in work productivity due to reduced and modified hours of operation for outdoor services and the need for additional water breaks
- » Increased water treatment operating costs
- » Unscheduled power outages
- » Interruptions to municipal services including challenges with waste collection service
- » An increased demand for water resulting in water supply issues
- » Limited municipal staff due to planned vacations
- » Competition for local and regional cooling resources
- » Supply chain interruptions
- » Overwhelmed emergency services

### 5.7.2 Community Challenges

In addition to limited personnel and resources being spread thin, communities may face compounding challenges such as:

- » Businesses and organizations (e.g., support services, government services, construction, restaurants, and daycares) not adequately prepared for an EHE, may shut down or reduce hours of operation.
- » Poor air quality can hamper an individual's ability to cool themselves down
- » Poor air quality may increase the demand for indoor, cool, ventilated, public spaces.
- » Individuals experiencing poverty may struggle between compromising their health by exposing themselves to smoke or by enduring the heat within their homes to cool down.
- » An extended power outage may require more residents to seek cool public spaces and other support.

## 5.8 URBAN DESIGN

Urban design takes into consideration factors such as street orientation, building height and density, general building materials, building codes, the presence of green spaces and corridors, as well as the presence of shade trees along main walking corridors and outdoor public areas. Progressive community development will take into consideration climate adaptation designs as well as strategies promoting healthy community living. For more information see Section 10.0 Climate Adaptation Planning.

### 5.8.1 Urban Heat Island (UHI)

As a community grows, the number of human-made structures increases, thereby altering and/or diminishing natural greenspace, forests, and even water bodies in the area. Existing infrastructure also tends to absorb radiant heat from the sun, subsequently increasing both surface and air temperatures.

An urban heat island (UHI) is the effect of increased surface and air temperatures typically experienced in urban areas and can cause 5 °C increases in temperature. The impact of elevated air temperatures and reduced airflow are particularly noticed in the evening. Without the natural decrease in evening temperatures, the body's ability to cool itself becomes limited (especially in the absence of convenience items such as fans, fresh cool water, and air conditioning thus heightening the risk to vulnerable populations). While the concept of UHIs is typically associated with larger metropolitan areas, they should be considered in small but growing municipalities.

## 5.9 ENVIRONMENTAL IMPACTS

The MOECC Strategic Climate Risk Assessment for BC report indicates a medium chance that wildlife, forests, and fish may experience minor impacts because of a heat wave, typically defined as a three-day event. It also suggests wildlife and vegetation recovery may take place over several months. However, overlapping environmental threats such as wildfires and water shortages could exponentially impact overall environmental impacts.

Ecologically sensitive areas including local land and water bodies, forests, habitats utilized by species at risk, and any areas that may be in jeopardy in the future represent potential environmental concerns with respect to an EHE. Additionally, any impacts to Indigenous land use and/or sacred sites are also potential

environmental concerns that must be considered for the EHE.

### 5.9.1 Freshwater Ecosystems

Freshwater sources that are contaminated from elevated water temperatures can cause a variety of waterborne illnesses making it unsafe for recreational use and cooling down in. Warmer water can create conditions for pathogens to thrive and contaminate bodies of water, leading to the spread of waterborne diseases such as vibriosis, diarrhea, giardiasis, dysentery, E. Coli infection, and salmonellosis. Elevated freshwater temperatures can also trigger the rapid growth of harmful algae populations that can further increase water temperatures and cause impacts to the ecosystem such as create algal toxins and decrease the level of dissolved oxygen in water, making it difficult for aquatic animals such as fish and amphibians to survive.

### 5.9.2 Saltwater Ecosystems

The impact of an EHE on saltwater ecosystems may depend on the scope and scale of the event. Cumulatively, an increase in atmosphere temperatures is one of several factors that can impact saltwater ecosystems in the form of ocean heatwaves. Increased saltwater temperatures can result in:

- » A shift in marine species distribution where flora and fauna moving to cooler environments.
- » A reduction biodiversity; impact to marine organism reproductive and development processes
- » A disruption to marine ecosystems; a new species invasion
- » Mass marine mortalities and a disruption to marine food chains
- » Reduced levels of oxygen
- » An increase in ocean acidification
- » Fishing closures and food security issues

### 5.9.3 Wildlife

Salmon, amphibians, birds, bats, insects, and young animals, tend to be more vulnerable to an EHE. Due to limited information, the exact impacts of an EHE on wildlife is not known, but timing, intensity and duration are likely contributing factors. Damage to animal populations can have complex and long-lasting effects ranging from a decline in pollination to animal food chain disruptions.

### 5.9.4 Trees and Vegetation

An EHE can stress trees, scorch foliage, and make them more susceptible to pests, disease, and wildfire. Most native tree species can tolerate fluctuations in temperature, but compounding stress factors such drought, insects, and disease, can cause irreversible damage. Young trees and less drought tolerant tree species (e.g., western redcedar) may experience greater impacts from heat events. Additionally, trees and vegetation growing in areas with greater sun exposure such as south and west facing aspects, steep slopes, and along openings are at a higher risk of desiccation. The heightened stress experienced by trees and vegetation, coupled with dry forest fuels can increase the risk of interface wildfires threatening communities.

### 5.9.5 Traditional Land Use and Sacred Sites

Traditional use and sacred sites are unique to each Indigenous community and include archaeological sites, resources, features, objects, or structures in the landscape that carry deep spiritual, traditional, and/or cultural significance. Knowledge of the potential impacts of EHEs on traditional land use and sacred sites is limited. An EHE may impact the viability of Indigenous hunting and gathering ecosystems and consequently, food security.

## 5.10 CRITICAL INFRASTRUCTURE

Critical infrastructure is defined as facilities and assets owned or operated by the community that have dependencies existing between them, are deemed essential to the daily operations and services of the local authority, and are directly linked to community resiliency.

It is possible to lose critical infrastructure services during an extreme heat emergency and disruptions could potentially last multiple days. Failure could occur because of accidental damage, infrastructure components over-heating, and an unsustainable demand for energy. Types of critical infrastructure potentially vulnerable during an EHE include<sup>2,3</sup>:

- » Municipal buildings
- » Transportation (e.g., roads, rail, and bridges)
- » Energy (e.g., transmission powerlines)
- » Drinking water (e.g., reservoirs)
- » Wastewater facilities
- » Refrigeration units
- » Cooling systems (e.g., data storage facilities)

## 5.11 ECONOMIC VITALITY

Based on a climate risk assessment study conducted by the Ministry of Environment and Climate Change Strategy (MOECCS), a three-day heat wave in BC has the potential to create a deficit of over \$100 million for the province from reduced economic productivity and agricultural losses. An EHE may impact the economic vitality of a community in the following ways:

- » Wage loss and productivity loss due to workplace injuries, additional breaks and/or reduced work hours
- » Business and supply chain interruptions
- » Increased energy prices due to increased consumption
- » Loss of life

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<sup>2</sup> BSR. 2023. *Emerging Issues: Infrastructure Breaks Under Extreme Heat*. (2023, February).

<https://www.bsr.org/en/emerging-issues/infrastructure-breaks-under-extreme-heat>

<sup>3</sup> Eyquem, Joanna, ENV SP. CWE. CEnv., Feltmate, Blair. (2022, April). *Irreversible Extreme Heat: Protecting Canadians and Communities From a Lethal Future*. University of Waterloo. [https://www.intactcentreclimateadaptation.ca/wp-content/uploads/2022/06/UoW\\_ICCA\\_2022\\_04-Irreversible-Extreme-Heat.pdf](https://www.intactcentreclimateadaptation.ca/wp-content/uploads/2022/06/UoW_ICCA_2022_04-Irreversible-Extreme-Heat.pdf)

- » Reduced quality of life

During the 2021 heat dome event, some government operations, and businesses such as the Gibsons municipal hall and ICBC office, and the Grasshopper Pub and Liquor store in Pender Harbour closed temporarily for two to three days.

### 5.11.1 Food and Agriculture

Extended disruptions to electricity and transportation systems may result in wage loss and supply chain disruptions.<sup>4</sup> Agriculture commodities such as fruit trees, crops, livestock, apiaries, and poultry are highly vulnerable to weather and climate. Potential consequences to consider include:

- » An increase in food prices due to decline in production
- » An increased demand for water to keep livestock and poultry cool
- » A decrease in food security

### 5.11.2 Construction, Logging, and Service

Construction, logging, and service sectors are vulnerable to EHEs since workers are more exposed to extreme heat conditions. This includes people who work in outdoor environments as well as hot environments such as restaurant kitchens. Additionally, logging production may be restricted or halted when wildfire threat indices are too high.

### 5.11.3 Tourism

Tourism contributes over \$200M annually in direct and indirect spending on the Sunshine Coast (Sunshine Coast Tourism, 2023). Travelers typically visit the Sunshine Coast to engage in outdoor activities such as visiting national/provincial parks, wildlife viewing, visiting historic sites, and hiking. EHEs limit both the enjoyment and safety of these outdoor activities. EHEs may impact tourism revenue because of a decrease in participation in outdoor events and outdoor attractions, usage of parks and facilities, and avoidance of regions impacted by EHEs.

## 5.12 EMISSION SCENARIOS

The maximum temperature and the number of hot days for a given area are predicted to increase over the next 50 years. One of the main components in climate modeling is the anticipated concentration of greenhouse gases (GHGs) stemming from human activities. To highlight the various plausible futures for our planet's climate, climate scientists use a set of standardized scenarios such as Representative Concentration Pathways, or RCPs and more recently, Shared Socioeconomic Pathways, or SSPs. RCP scenarios are based entirely on forecasted GHG concentrations in the atmosphere whereas SSP scenarios build on RCPs and consider how socio-economic indicators such as population, education, land-use changes, energy use, and technology influence GHG concentration scenarios.

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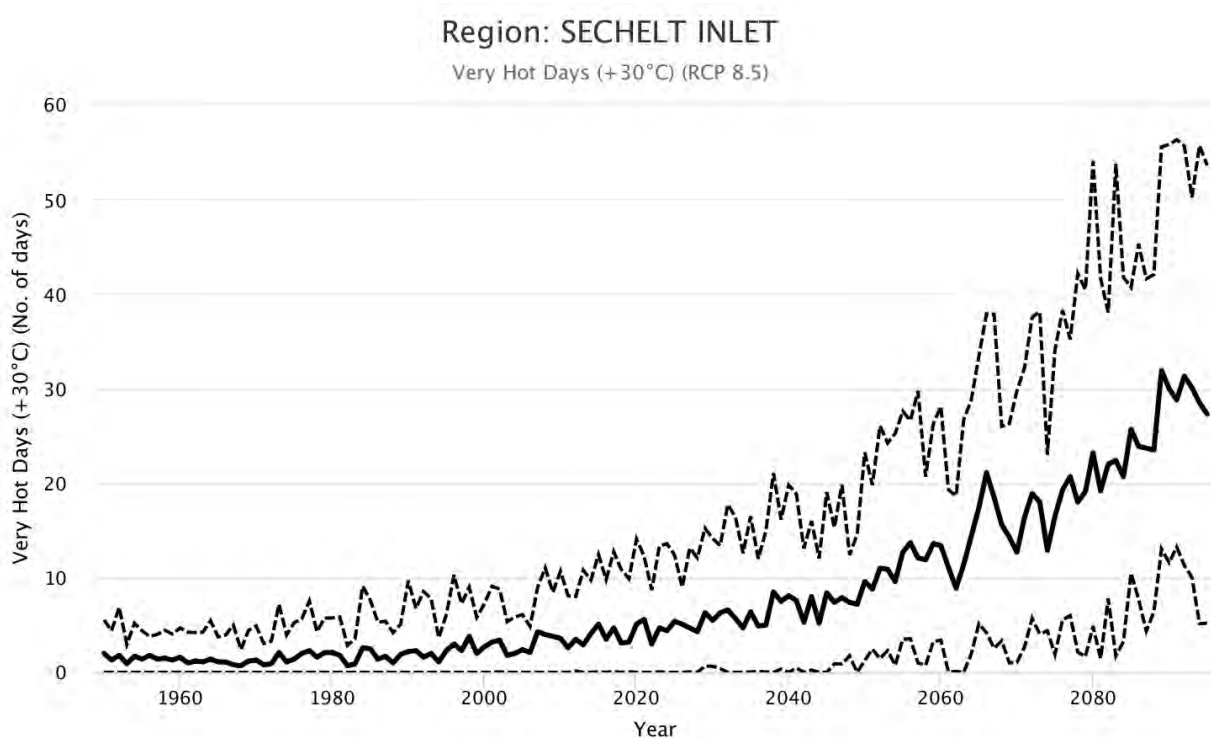
<sup>4</sup> Arsht-Rock. Hot Cities, Chilled Economies – Impacts of extreme heat on global cities. (2022)  
<https://onebillionresilient.org/hot-cities-chilled-economies/>

### 5.12.1 Representative Concentration Pathways (RCPs)

RCPs are a set of standard scenarios based on an average of 24 global climate models, using four plausible future GHG concentrations. A higher RCP number represents a greater amount of carbon dioxide emitted into the atmosphere during the 21<sup>st</sup> century, further warming the planet and acidifying the ocean. RCP 8.5 represents a high carbon scenario and assumes large amounts of carbon dioxide will continue to be released into the atmosphere through fossil fuel consumption, whereas RCP 4.5 depicts a low carbon scenario and assumes a drastic reduction of emissions in the coming decades will stabilize the GHG concentration in the atmosphere by the end of this century. (Climate Atlas Prairie Climate Centre, 2019). The RCP predictions are designed for broad geographic regions. The Sechelt Inlet region was selected to represent the climate predictions for the Sunshine Coast based on climate characteristic similarities for the entire region.

#### 5.12.1.1 RCP 8.5 High Carbon Climate Future

The high carbon RCP 8.5 scenario depicts an exponential growth curve for the average number of very hot days, days in which temperatures reach 30° C or greater, as shown in Figure 5-3. According to this scenario, it is possible for the Sunshine Coast to see the average number of very hot days per year to exceed 20 days by 2080.



The solid black line indicates the average values across the 24 models.  
The dashed lines indicate the 10<sup>th</sup> and 90<sup>th</sup> percentile values across the 24 models for each year.  
Source: *Climate Atlas Canada*

**Figure 5-3** The projected number of very hot days based on a high carbon RCP 8.5 future in which GHG emissions continue to increase at current rates

Table 5-3 summarizes the relative increase of very hot days, days 30 °C for 30-year periods.

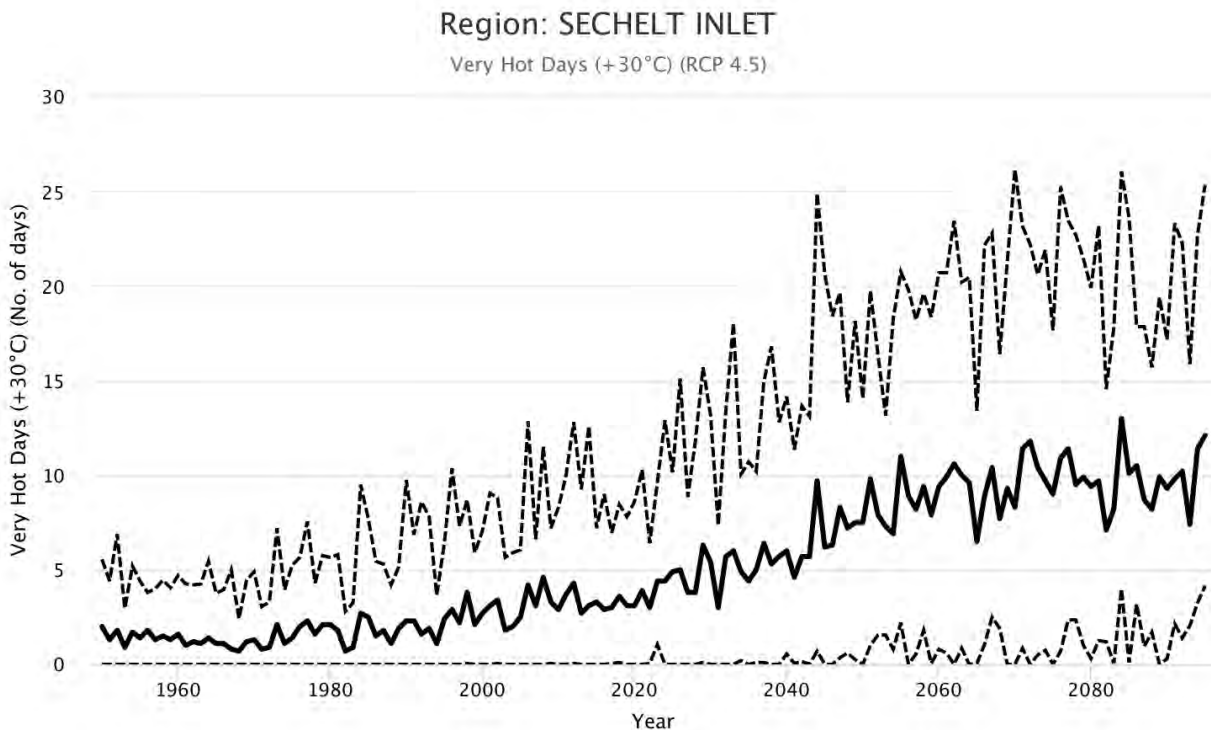
**Table 5-3** The Relative Increase of Very Hot Days Over Time Based on a High Carbon RCP 8.5 Future

Variable	Period	1976 - 2005	2021 - 2050			2051 - 2080		
		Average	Low	Average	High	Low	Average	High
Very Hot Days (+30 °C)	Annual	2.1	0.3	6.2	15.0	2.7	14.9	30.5

Source: [Climate Atlas of Canada, 2023](#)

### 5.12.1.2 RCP 4.5 Low Carbon Climate Future

The RCP 4.5 scenario suggests the number of very hot days, days 30 °C or above, will continue to increase despite a significant reduction to GHG emissions. Figure 5-4 illustrates a more linear increase of the number hot days over time and perhaps a leveling off around 2070, as compared to the exponential growth of the high carbon scenario. Nevertheless, despite drastic measures to reduce GHG emissions, the predicted annual number of hot days is expected to increase to 30 by the year 2080 as shown in Table 5-4.



The solid black line indicates the average values across the 24 models.

The dashed lines indicate the 10<sup>th</sup> and 90<sup>th</sup> percentile values across the 24 models for each year.

Source: [Climate Atlas Canada](#)

**Figure 5-4** The projected number of very hot days based on a low carbon RCP 4.5 future in which GHG emissions are greatly reduced

**Table 5-4** The Relative Increase of Very Hot Days Over Time Based on a Low Carbon RCP 4.5 Future

Variable	Period	1976 - 2005	2021 - 2050			2051 - 2080		
		Average	Low	Average	High	Low	Average	High
Very Hot Days (+30 °C)	Annual	2.1	0.1	5.5	13.7	0.9	9.4	20.3

Source: [Climate Atlas of Canada, 2023](#)

### 5.12.2 Shared Socio-economic Pathways (SSPs)

SSP scenarios summarize a multifaceted view of the world's future, considering diverse socioeconomic trajectories. Each SSP is assigned a number corresponding to its implications for climate conditions by the year 2100. These numbers offer insights into how our climate may evolve based on societal choices and development pathways. For instance, SSP5 - 8.5 signifies a world primarily driven by fossil-fueled development, where carbon emissions continue to rise significantly, exacerbating global warming and environmental changes. Conversely, SSP1 represents a sustainable future marked by robust environmental policies, equitable development, and minimal GHG emissions. These SSPs serve as essential tools for climate researchers and policymakers, allowing them to explore the range of potential climate outcomes based on varying human actions and societal directions (Adapted from IPCC, 2019).

#### 5.12.2.1 Projected Hottest Day

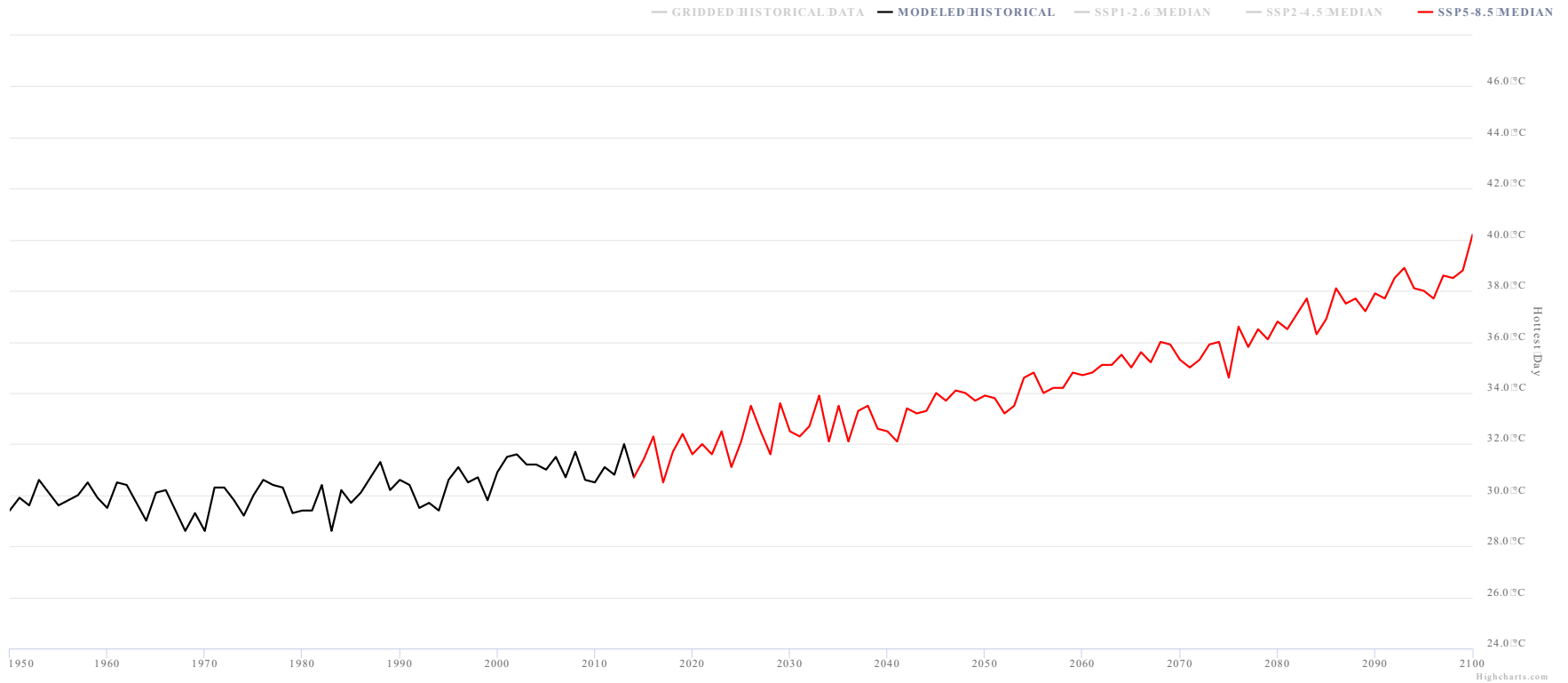
The hottest day, or the projected highest maximum temperature for the Sunshine Coast will continue to gradually increase over the next 50 years. Figure 5-5 illustrates the predicted average hottest temperature based on a high carbon climate future in which GHG emissions increase at current rates. Based on this scenario, the median hottest temperature for the Sunshine Coast is expected to increase to 33.3 °C between 2051 and 2080, whereas between 1991 and 2020, the average hottest day was 29.7 °C, as shown in Table 5-5. The hottest day measurement will influence factors such as the vitality of local flora and fauna, the feasibility of outdoor pursuits, climate conscious architectural designs, patterns of transportation and energy consumption, and mitigation strategies for heat-related illnesses for heat vulnerable populations.

**Table 5-5** The Average Values across 26 Global Climate Models and 3 SSPs Measuring Maximum Temperature in Celsius Using a SSP5- 8.5 Carbon Climate Future in which GHG Emissions are not Reduced

Period	1991 - 2020			2021 - 2050			2051 - 2080		
	Low	Average	High	Low	Average	High	Low	Average	High
Annual	29.1 °C	29.7 °C	30.1 °C	30.2 °C	31.3 °C	32.8 °C	32.3 °C	33.3 °C	36.1 °C

### Hottest Day

Click and drag in the plot area to zoom in



Source: [Climate Data Canada, 2022](#)

**Figure 5-5** The Average Temperature Across 26 Global Climate Models the Measuring Number of Very Hot Days Using a SSP5-8.5 High Carbon Future in Which GHG Emissions Continue to Increase at Current Rates for the Sunshine Coast.

Table 5-6 summarizes the forecasted hottest temperatures for 2051–2080 by electoral area.

**Table 5-6** Forecasted Hottest Day Temperatures in Celsius for 2051 by Electoral Area

ELECTORAL AREA	HOTTEST DAY MEDIAN (°C)	HOTTEST DAY RANGE (°C)
District of Sechelt	33.3 °C	32.3 °C – 36.1 °C
Town of Gibsons	33.3 °C	32.2 °C – 36.2 °C
shísháhlh Nation Government District	33.3 °C	32.3 °C – 36.1 °C
Electoral Area A: Egmont / Pender Harbour	34.2 °C	33.1°C – 37.1 °C
Electoral Area B: Halfmoon Bay	33.7 °C	32.8°C – 36.6 °C
Electoral Area D: Roberts Creek	34.6 °C	33.5 °C – 37.6°C
Electoral Area E: Elphinstone	33.3 °C	32.2 °C – 36.2 °C
Electoral Area F: West Howe Sound	35.0 °C	33.8 °C – 38.1 °C

Source: [Climate Data Canada, 2023](#)

As temperatures on the hottest days and the frequency of very hot days, 30 °C or warmer, are projected to steadily rise over the next 50 years, the Sunshine Coast should anticipate a corresponding rise in the frequency and duration of EHEs.

## 5.13 HEAT RISK PLANNING MAPS

### 5.13.1 Overview

The Sunshine Coast community heat risk planning maps serve as a geographical representation that highlights potential community resources that may help reduce vulnerability to EHEs. Additionally, the maps visually illustrate where populations that may be more vulnerable to EHEs are located. These maps can encourage a community to assess overall mitigation efforts and consider social determinants when planning for an EHE. These maps can:

- » Highlight buildings or areas housing heat vulnerable populations (e.g., assisted living facilities, care homes, and childcare facilities).
- » Highlight buildings or houses potentially vulnerable to EHEs (e.g., multi-storied, multi-residential buildings built to older building codes).
- » Highlight the community resources that are available to help community members and the public cool themselves (e.g., churches, museums, libraries, shopping malls, and cool outdoor public spaces such as spray parks, beaches, and shaded recreation areas).

By providing a visual representation of these important data points, these maps can help to create focus on areas needing more resources or support management of current and future heat related stresses including any future locations of misting stations, shade tents, public water fountains, or designated cooling centres. See Annex A – H for the community specific heat risk planning maps.

### 5.13.2 Map Uses

The heat risk assessment maps can be used to support conversations about climate and health

vulnerability but should not be relied on as the sole data for assessing community health vulnerability to climate change. They may also be used in the following ways:

- » As a starting point for discussing potential extreme heat impacts
- » Raising awareness of the extreme heat events community members may be facing
- » Supporting conversations about heat health and heat response strategies within the community
- » Mobilizing efforts to support the improvements to community members health outcomes
- » Helping to pinpoint some of the physiological and social determinants within vulnerable populations that play key roles in vulnerability to extreme heat
- » Helping to identify areas that may need more resources or support to cope with current and future extreme heat related stresses
- » Strengthening business continuity planning
- » Prompting community health and wellness conversations
- » Steering policy development and program delivery toward improving community amenities
- » Highlighting gaps in service provision
- » Prioritizing housing and infrastructure upgrade project
- » Considering alternate resilience building strategies

## **6.0 COMMUNITY PARTNER ENGAGEMENT**

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This Plan was developed in consultation with local community partners and regional collaborators who interact with or have a mandate to support heat-vulnerable populations. Approximately 175 community partners were identified and included in the outreach process, involving one-on-one conversations through telephone interviews, zoom interviews, or email correspondence to discuss topics related to extreme heat planning. The groups of community partners included government agencies, regional non-government organizations (NGOs), municipal departments, supporting agencies, neighboring communities, local supporting NGOs, and local non-profit organizations (NPOs). For more information regarding the local community partners interviewed and their responses, see Appendix 10 – Community Partner Information.

### **6.1 KEY ENGAGEMENT THEMES**

Four main themes emerged during the community partner engagement process, capturing common responses to topics including the heat-vulnerable populations they interact with, the challenges they have encountered or foresee during an EHE, how they might be able to support their communities, and the most effective ways in which the Sunshine Coast can support their communities:

1. A high population of seniors
2. Concern for local heat-vulnerable groups
3. Many residential homes and NGO buildings do not have air-conditioning
4. The designated Cooling Centres have been generally underutilized

### 6.1.1 A High Population of Seniors

Many of the local organizations interviewed during the development of the Plan not only serve a population of seniors aged 65 years and older but are also operated by volunteers who are seniors themselves. Seniors may encounter numerous obstacles or compounding challenges such as:

- » Limited or no access to transportation and require door-to-door transportation.
- » Health and mobility challenges.
  - Some seniors do not have air-conditioning in their homes and are unable to leave their homes to access cooling resources.
- » Social isolation during EHEs.
- » Mental health issues and not taking measures to adequately cool themselves and their homes.
- » Limited or no experience with technology and rely on traditional print media and radio as sources of information.

### 6.1.2 Concern for Local Heat-Vulnerable Groups

These observations are derived from the input of a limited number of community partners that participated in the engagement process. Therefore, it is advised that the Sunshine Coast comprehensively consider all the potential heat-vulnerable populations when prioritizing the implementation of extreme heat preparedness and response strategies. See Section 5.1.2 Factors Influencing Individual Resilience to an EHE and Section 5.2 – Known Heat-Vulnerable Populations for more information.

#### 6.1.2.1 Unhoused Populations

The topic of unhoused populations was highlighted during several engagement conversations. Some community partners seemed to know the locations of their encampments and felt they are generally located in cool public areas such as under forested areas and adjacent to creeks. See Section 5.2.3 Unhoused Populations for more information.

#### 6.1.2.2 Marginally Housed Populations

The Sunshine Coast has a few year-round RV parks, catering to longer term stays. However, some of these parks lack sufficient shade and cooling areas, posing a potential challenge for residents during EHEs who do not have air conditioning in their units.

#### 6.1.2.3 Young Children at Childcare Facilities

A conversation with one childcare facility highlighted that while they were able to manage the heat health challenges accompanying the heat dome event in 2021, some children still experienced heat-related illnesses during that time.

#### 6.1.2.4 Tourists Renting Private Vacation Homes

During the summer, the Sunshine Coast hosts a flourishing private vacation home rental industry. This, however, has raised concern regarding visitors renting accommodations from homeowners who do not reside on the Sunshine Coast and may not be aware of extreme heat challenges. Residents communicated

a need for effective dissemination of critical information to visitors, their limited local knowledge of the area, and levels of preparedness.

### 6.1.3 A Lack of Air Conditioning in Residential Homes and NGO Buildings

Many residents and organizations continue to function without air conditioning in their homes and buildings. Some organizations will utilize fans and passive cooling strategies and most residents will seek out nearby cool public spaces during the day. Many residents will take measures to passively cool their buildings and homes by opening windows and doors in the mornings and evenings and using fans during the heat of the day. However, indoor temperatures can pose danger to heat-vulnerable populations when they surpass 26 °C. The task of sustaining cool indoor conditions can become more challenging in the evenings and overnight if the air temperature does not dip below 16 °C. The accumulation of indoor heat throughout the day, retention of solar heat by buildings, and delayed cooling are some examples of why indoor temperatures can continue to rise after the sun has set. Indoor temperatures escalate in danger with hotter seasonal temperatures and prolonged periods of heat. For more information on dangerous overnight temperatures, see Section 7.12 – Consider activating an Overnight Cooling Centre.



**Note: Indoor temperature was the greatest predictor in heat-related deaths during the 2021 heat dome (BC Housing, 2022)**

### 6.1.4 Underutilized Designated Cooling Centres

EHEs and designated cooling centres are relatively new concepts which may explain why the use of Sunshine Coast designated cooling centres has been lower than expected. However, factors potentially impacting the underutilization of these facilities include:

- » Limited awareness of designated cooling centre locations and hours.
- » The presence of more accessible cool public facilities such as seniors' centres, and outdoor parks, beach and shaded areas.
- » A lack of free transportation to the designated cooling centres.
- » A lack of familiarity with the designated cooling centres.
- » A lack of an inclusive, cultural sensitivity, and welcoming environment for potential users.

## 7.0 EXTREME HEAT PREPAREDNESS AND RESPONSE RECOMMENDATIONS

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The following extreme heat preparedness and response recommendations draw from a range of sources currently available, including the BC HARS report, the BC Coroners Report, insights gathered during the community partner engagement phase, and online documents, such as the “Lived Experience of Extreme Heat in B.C.: Final Report to the Climate Action Secretariat.” Additionally, this comprehensive approach

integrates the specific challenges encountered by heat-vulnerable individuals in small rural communities and the existing heat risk reduction measures. Table 7-1 lists the recommended best practices contextualized within the current initiatives.

**Table 7-1** Summary and Status of Extreme Heat Preparedness and Response Current Recommended Practices

		CURRENT RECOMMENDED PRACTICES	STATUS
PREPAREDNESS	7.1	Establish Extreme Heat Community Alerting Procedures and Key Messaging	Implemented
	7.2	Pre-identify Cool Public Spaces and Evaluate Designated Cooling Centres	Implemented
	7.3	Implement a Community Partner Engagement Plan	Under Review
	7.4	Collaborate with shíshálh Nation	Ongoing
	7.5	Continue to Support Public Heat Health Education	Under Review
	7.6	Promote a Neighborhood Heat Patrol Program and Heat Buddy Program	Under Review
	7.7	Invest in Extreme Heat Contingency Planning	Under Review
RESPONSE	7.8	Distribute Drinking Water	Implemented
	7.9	Improve Transportation Access to Cool Public Spaces and the Designated Cooling Centres	Under Review
	7.10	Promote Community – Lead Health (Wellness) Check-ins	Under Review
	7.11	Consider Activating Health Check-ins	Under Review
	7.12	Consider Activating Overnight Cooling Centres	Under Review

This section should be updated as new information becomes available and community specific feedback is received. Critical factors including the time of year of the EHE, the forecasted duration/severity of event and, any existing or potential competing priorities/challenges will ultimately dictate the best strategy or the combination of strategies to activate during a given EHE.

## 7.1 ESTABLISH COMMUNITY ALERTING PROCEDURES AND KEY MESSAGING

The Plan outlines a clear alerting process utilizing BC HARS protocols and recommendations identifying streamlined response procedures and concise key messaging in advance. This information can be found in Section 8.0 Extreme Heat Communications Plan and the following Appendices:

- » Appendix 1 – Pre-Season Planning
- » Appendix 2 – Pre-Heat Warning
- » Appendix 3 – Level 1 Heat Warning
- » Appendix 4 – Heat Warning Deactivation

- » Appendix 5 – Level 2 Extreme Heat Emergency
- » Appendix 6 – Extreme Heat Deactivation
- » Appendix 7 – Post-Heat Season Review

The Extreme Heat Communications Plan summarizes key communications considerations, partner communications roles and responsibilities, and lists potential opportunities. Appendices 1 – 7 contain operational checklists, key messages, and media templates organized by phase/alert.

**The public should be aware of key preparedness information, including:**

- » Where to go for official up-to-date information.
- » What to expect during an EHE.
- » What they need to know to prepare for and protect themselves from an EHE.

**During an EHE, the public needs to know:**

- » What they can expect.
- » What they are responsible for.
- » Where to go for assistance.
- » What resources and services are available and how to access them.

<b>POTENTIAL STRATEGIES</b>	Develop age-informed and poverty-informed communication strategies.
	Ensure key messages are available in diverse languages.
	Develop heat health education campaigns focusing on seniors and children under 5 years.
	Utilize a variety of traditional media (e.g., newspaper, radio, pamphlets, posters at highly frequented locations, and bulletin boards). Highly frequented locations may include grocery stores, pharmacies, and ferry ports.
	Develop public-facing maps showing nearest cooling resources.
	Consider activating a telephone hotline number for the public to get up to date information.
	Consider developing hidden landing pages with key heat safety information for the SCRD website that can be made living during a Level 1 Heat Warning and Level 2 Extreme Heat Emergency.

For more information on recommended communication strategies, see Section 7.5 Continue to Support Public Heat Health Education and Section 8.0 Extreme Heat Communications Plan.

## **7.2 PRE-IDENTIFY COOL PUBLIC SPACES AND EVALUATE DESIGNATED COOLING CENTRES**

Cool public spaces describe pre-existing facilities or outdoor areas where the public typically goes to cool down, seek refuge from the heat, recreate, and socialize. Designated Cooling Centres are locations and facilities coordinated and potentially staffed by the municipality where the public may come to cool down, hydrate, and seek refuge from the heat. Designated Cooling Centres may include cool public facilities. Pre-

identifying these spaces in advance enables a community to respond to EHEs in a more efficient manner. For more information on cool public spaces and designated cooling centres see Section 5.6.1 – Cool Public Spaces and Section 5.6.2 – Designated Cooling Centres, respectively.

<b>POTENTIAL STRATEGIES</b>	As per Section 6.1.4. Underutilized Designated Cooling Centres, consider alternate designated Cooling Centre opportunities. Consider developing Mutual Aid Agreements and/or supporting organizations/facilities during EHEs such as the: <ul style="list-style-type: none"> <li>• Sechelt Public Library – District of Sechelt</li> <li>• Gibsons &amp; District Public Library – Gibsons</li> <li>• Royal Canadian Legion Branch 112 – Egmont / Pender Harbour</li> <li>• Roberts Creek Community Association (RCCA) – Roberts Creek</li> </ul>
	Promote pre-existing local resources such as shopping malls, seniors’ activity centres, royal legions, and community association. These organizations/facilities may provide heat-vulnerable individuals with more inclusive, accessible, comfortable, and entertaining options for staying cool.
	Ensure cool public spaces and designated Cooling Centres are welcoming to all. See Section 7.2.2 for more information.
	Launch public awareness campaigns to inform the community about cool public spaces and Designated Cooling Centre locations and hours of operation.
	Create cool public space / cooling centre set up kits in advance and store at each designated facility. For ideas on set up kit contents see Section 7.2.2 – Ensure Cool Public Spaces and Designated Cooling Centres are Welcoming to All.



**Best Practice: Establish a standardized symbol and signage for community cooling centres and post at the entrance to community facilities:**



### 7.2.1 Extend Hours to Cool Public Spaces

Consider extending the operating hours to pre-existing, cool, public facilities. This can be an effective and cost-efficient baseline strategy for providing heat risk reduction support to residents. These facilities provide users with a sense of familiarity and activities to engage in while keeping cool.

<b>POTENTIAL STRATEGIES</b>	Develop Mutual Aid Agreements (MAAs) to extend hours of operation of cool, public facilities in advance of an EHE.
	Discuss ways to best support the cool public spaces and make them more accessible, inclusive, and culturally sensitive. See Section 7.2.2 Ensure Designated Cooling Centres are Welcoming to All for potential strategies to consider.
	Launch public awareness campaigns to inform the community about extended hours of operation during EHEs.

Consider reducing and/or eliminating fees to cool public facilities such as outdoor pools and recreation centres to make it more accessible to low-income individuals and families.



**Note: Indoor temperatures of 26° C or higher is dangerous for vulnerable people (PreparedBC, 2022, p.9)**

## 7.2.2 Ensure Designated Cooling Centres are Welcoming to All

The goal of a cooling centre is to provide a safe and welcoming environment accessible to all potential users. Feedback from service providers in the Lived Experience of Extreme Heat in B.C. study suggested that many people chose not to use spaces that weren't welcoming, enjoyable, or entertaining. (Crawford, Klein, Yumagulova, 2022, p.23). Depending on the facility available, additional resources and services may be required, consider pre-organizing the following resources, services, and training in advance:

- » Sufficient volunteers
- » First aid attendants to identify heat illnesses
- » Cultural awareness and sensitivity training for staff and volunteers
- » Trauma and mental illness informed training for staff and volunteers
- » A First Nations Cultural Coordinator and/or a Library Program & Outreach Coordinator to help coordinate inclusive and culturally mindful activities and supports
- » Free WIFI
- » Free entry to facilities and/or reduced entry fees
- » Cell phone charging station(s) – area(s) where people can charge their devices and surf the internet
- » Activities and designated areas for children (e.g., arts and craft station, a family friendly movie area, toys, and games for various age groups, as well as a large area to run around and play)
- » An indoor pet area where pets do not need to be confined to kennels and/or outdoor shaded area with kiddie pools for pets to cool down in
- » Refreshments and healthy snacks
- » Free home pick-up and drop off for seniors living on their own, families, and daycares without transportation
- » A secured area where people can leave their belongings while they visit
- » Additional cleaning and maintenance services
- » Security services



**Note: Obtain pre-authorization for service and resource expenses. Not all expenses may be considered eligible for cost reimbursement by EMCR. See Appendix 13 – EMCR Financial Assistance for Heat Emergency Response and Cost Recovery Addendum for more information.**



**Note: Incremental costs for cultural supports such as for Community Navigator(s), activities aimed at providing culturally appropriate services at cooling centres, and incremental costs associated with a dedicated space within a cooling centre or separate designated gathering space to provide culturally appropriate services are EMCR eligible emergency heat expenses.**

It is the responsibility of the EPC to confirm the designated Cooling Centres are prepared and ready for use. The EPC should confirm regular maintenance and inventory checks of designated Cooling Centre equipment are completed. Designated Cooling Centre resources are best coordinated, and ready in advance of activation.

The following list outlines cooling centre supplies to consider when preparing for a designated Cooling Centre. Please note that not all supplies may be reimbursed by EMCR; remember to submit an Expenditure Approval Form (EAF) before purchasing:

- » Display information (e.g., white boards) and heat health information pamphlets
- » Drinking water
- » Healthy and culturally appropriate snacks
- » Medical supplies
- » Hand sanitizer and face masks
- » Cleaning and disinfecting supplies
- » Garbage, recycling, and composting bins
- » Access to cots and bedding if necessary
- » Back-up power generators
- » Electrical power bars

These items can be stored together in a kit and may be kept at the designated cooling centre. Designated Cooling Centre set-up kits are typically managed and maintained by the Emergency Program Coordinator.

### 7.2.3 Factors Influencing the Decision to Extend Hours of Cool Public Spaces and/or Activate Designated Cooling Centres

In the event of an ECCC heat warning or extreme heat emergency, the need to activate a cooling centre(s) will be assessed on a variety of factors including the nature of the EHE (e.g., the forecasted duration and severity of the event), any existing or potential competing priorities, as well as the potential usage and capacity of existing cool public facilities.

## 7.3 IMPLEMENT A COMMUNITY PARTNER ENGAGEMENT PLAN

Improve overall community resilience to EHEs by establishing and maintaining relationships with community partners. Many community partners have trusted relationships with their clients/membership,

and volunteers, and may be able to assist the Sunshine Coast during an EHE in the following ways:

- » Provide a greater sense of awareness with respect to heat-vulnerable population needs as well as who those individuals might be.
- » Provide a familiar and safe space for cooling down.
- » Amplify community key messaging utilizing their informal (e.g., face-to-face engagement and personal friendships) and formal communication networks (e.g., email distribution lists, telephone contact lists and social media).
- » Leverage existing in-home and outreach programs and/or conduct health check-ins on their known heat-vulnerable populations

The goal of the Community Partner Engagement Plan is to encourage community extreme heat preparedness and planning, improve information sharing, and foster a more cohesive and collaborative community response during EHEs. The Community Partner Engagement Plan can clarify the purpose, timing, methods, and the specific community partners who should be engaged in EHE planning, preparedness, and response activities. Furthermore, efforts put into developing and implementing this engagement plan can be leveraged for other emergency events including community evacuations. Table 7-2 outlines a sample timeline for community partner meetings along with corresponding meeting objectives.

**Table 7-2 Community Partner Engagement Strategy**

TIME OF YEAR	OBJECTIVES
<p>Pre-Season Meeting February 1<sup>st</sup></p>	<ul style="list-style-type: none"> <li>• Meet face-to-face or online if necessary</li> <li>• Update community partner contact information</li> <li>• Update community partner EHE services and resources offered</li> <li>• Confirm everyone’s roles and responsibilities</li> <li>• Review the plan for the upcoming season (e.g., what community partners can expect; alert protocols, training opportunities, communications, etc.)</li> </ul>
<p>EHE Coordination Call* <i>(e.g., during a significant heat warning event and/or an extreme heat emergency)</i></p>	<ul style="list-style-type: none"> <li>• Information sharing:               <ul style="list-style-type: none"> <li>○ Current EHE information</li> <li>○ Provincial, regional, and local context if applicable</li> </ul> </li> <li>• Understand what is working well from community partners</li> <li>• Identify any challenges and potential solutions</li> <li>• Encourage community partners to reach out to their members and establish a regular check-in schedule if necessary</li> <li>• Confirm the frequency of community partner check-ins required</li> </ul>
<p>Post-Season Follow Up</p>	<ul style="list-style-type: none"> <li>• Review the extreme heat event(s)</li> <li>• Identify successes, any new challenges, and potential solutions for next season</li> </ul>

\*An EHE coordination call is an independent, conference call that is not to be confused with an EMCR coordination call. It is a community driven practice that invites local community partners, shares situational awareness, and discusses community response strategies.

<p>POTENTIAL</p>	<p>Create and maintain an EHE community partner email distribution list and document the potential services and resources they can provide.</p>
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<b>STRATEGIES</b>	Equip community partners with heat safety and extreme heat preparedness and response information
	Encourage community partners to: <ul style="list-style-type: none"> <li>• Develop Extreme Heat Plans to help protect (employee, client/membership, and volunteer) health and safety, and reduce barriers to action.</li> <li>• Develop business continuity plans.</li> <li>• Familiarize themselves with the Sunshine Coast Community Partner Extreme Heat Playbook .</li> </ul>
	Engage community partners at least two to three times a year and regularly during an EHE as outlined in Table 5-10.
	Work with community partners to: <ul style="list-style-type: none"> <li>• Provide residents with a familiar, comfortable, and trusted space for residents to visit and cool themselves down.</li> <li>• Discuss innovative ways to improve the access to cooling resources for heat-vulnerable populations</li> <li>• Address climate adaptation strategies. See Section 10.0 – Climate Adaptation Strategies.</li> <li>• Incorporate public cooling strategies into tourism infrastructure</li> <li>• Improve heat health awareness for tourists and visitors</li> </ul>
	Research and share helpful strategies such as financial assistance with utility bills during EHEs. See Appendix 15 – Web URLs for Residential Utility Bill Assistance and Energy Rebate links.
	Coordinate trauma and cultural safety and sensitivity training for emergency staff and volunteers.
	Encourage outdoor vendors and summer event organizers to: <ul style="list-style-type: none"> <li>• Plan for EHEs and submit extreme heat plans.</li> <li>• Cancel or reschedule outdoor events during an extreme heat emergency.</li> </ul>
	Augment the pre-season meeting to include evacuation review for flood season and wildfire season (e.g., roles and responsibilities as well as expectations).

### 7.4 COLLABORATE WITH SHÍSHÁLH NATION

Collaborate with shíshálh to develop effective and supportive EHE response strategies that are culturally appropriate and reduce systemic barriers.

<b>POTENTIAL STRATEGIES</b>	Promote meaningful collaboration by inviting neighboring communities during the early, vision-sharing stage of EHE planning rather than requesting input at the review stage.
	Learn how to best support the preservation of traditional use and sacred sites.
	Coordinate cultural awareness and sensitivity training for emergency staff and volunteers.
	Hire a First Nations Cultural Coordinator to assist with the planning and execution of culturally inclusive supports and services during EHEs.

## 7.5 CONTINUE TO SUPPORT PUBLIC HEAT HEALTH EDUCATION

Public education is a crucial element in enhancing overall resilience, as it empowers individuals, neighborhoods, and organizations to better prepare for and respond to EHEs. To maximize success, community education must endeavor to change behavioural patterns and ultimately empower residents to take precautionary measures to protect themselves from EHEs. See the following Appendices for alert specific key messaging and templates:

- » Appendix 1 – Pre-Season Planning
- » Appendix 2 – Pre-Heat Warning
- » Appendix 3 – Level 1 Heat Warning
- » Appendix 4 – Heat Warning Deactivation
- » Appendix 5 – Level 2 Extreme Heat Emergency
- » Appendix 6 – Extreme Heat Deactivation
- » Appendix 7 – Post-Heat Season Review

<b>POTENTIAL STRATEGIES</b>	Incorporate pre-existing VCHA information to create targeted education campaigns
	Research and share helpful strategies such as financial assistance for utility bills. See Appendix 15 – Web URLs for Residential Utility Bill Assistance and Energy Rebate links.
	Work with the Vancouver Health local healthy community team, see Section 7.5.1 Work with the Vancouver Health Healthy Community Team
	Create effective education campaigns that disseminate practical information to the right audience at the right time. See Section 7.5.2 – Implement a Heat Health Education Campaign

### 7.5.1 Work with the Vancouver Coastal Health, Healthy Community Team

Heat health education is a shared responsibility and requires a collective effort. Each entity, including health authorities, community organizations, businesses, schools, and local government, play an important role in disseminating key information to different segments of a community. Working with the local Healthy Community facilitator can help ensure an effective outcome.

The Vancouver Coastal Health, Healthy Community team works with experts in the field of population health and wellbeing. They work collaboratively with Indigenous, local, and regional governments to enhance public health through community design, land-use planning, and the development of healthy public policies, by-laws, and community plans. The Healthy Community team can assist communities with climate adaptation and extreme heat planning to help reduce the number of heat-related illnesses, injuries, and deaths. A few ways in which they can assist communities include:

- » Public engagement planning and facilitation
- » Offering health related evidence, data, communication resources, expertise to planning and design practices that may inform the development of long-term plans
- » Participating in community meetings, committees, or partnerships
- » Sharing innovations and current practices with clients, partners, and community partners
- » Connecting communities with other VC Healthy Community teams

For more information on the healthy community team and to reach out to the healthy Community facilitator for your region, see the SCRD contact list.

### 7.5.2 Implement a Heat Health Education Campaign

An effective education campaign should focus on removing the potential barriers preventing residents from adopting new habits. This might include obstacles such as access to the internet and technology, sight, hearing, and language barriers, as well as varying perceptions of extreme heat risks. A few proven communications strategies include:

1. Identify the main heat-vulnerable population groups within the community for targeted messaging:
  - » Seniors 65+ years
  - » Individuals living alone
  - » Families with young children
  - » Pregnant people
  - » Unhoused populations
  - » Marginally housed populations
  - » Populations experiencing poverty
  - » People with mental health and/or chronic health challenges
2. Consider the time of year and the type of information required by residents to identify realistic education campaign goals and steer key messaging as outlined in Table 7-3.

**Table 7-3** Potential Strategy for Engaging the Public

TIME OF YEAR	POTENTIAL GOALS	POTENTIAL STRATEGIES
Pre-Season April - May	Build heat health awareness	<ul style="list-style-type: none"> <li>• Increase knowledge of official sources of information and personal preparedness</li> <li>• Piggy-back pre-existing promotional campaigns (e.g., spring freshet newsletter.)</li> <li>• Include EHE key messaging in community mail-outs (e.g., tax notices)</li> <li>• See Appendix 1 – Pre-Season Planning for pre-season key messaging</li> </ul>
During Heat Season May - August	Build heat health awareness Change behaviors	<ul style="list-style-type: none"> <li>• Promote healthy heat behavior (e.g., ways to prevent heat illness as well as how to identify and treat heat illness)</li> <li>• Promote home improvement subsidies and rebates (e.g., purchasing and installing heat pumps and air-conditioners)</li> </ul>

		<ul style="list-style-type: none"> <li>• Set up information booths at popular outdoor locations (e.g., beaches and farmers markets)</li> <li>• Distribute heat health pamphlets and a Sunshine Coast map of cooling resources to high traffic locations (e.g., grocery stores and farmers markets) and locations focused on heat vulnerable populations (e.g., pharmacies, resource centres, thrift stores, and visitor centres)</li> <li>• See Section 7.5 Continue to Support Public Heat Health Education for key message considerations</li> </ul>
During an EHE	Communicate alerts	<ul style="list-style-type: none"> <li>• Educate residents on what cooling resources and services are available and how to access them</li> <li>• See Appendix 5 for level 2 extreme heat emergency key messaging</li> <li>• See Appendix 6 for level 2 deactivation key messaging</li> </ul>
Post-Heat Season September	Promote climate adaptation strategies and build community engagement	<ul style="list-style-type: none"> <li>• Ways to mitigate and prepare for EHEs (utility rebates and subsidies) and more long-term strategies</li> <li>• See Appendix 7 – Post Heat Season Review for post-heat season key messaging</li> </ul>

3. Create segmented community partner distribution lists (see Appendix 9 – Community Partner Information) such as:
  - » Churches, Pharmacies, and Medical Clinics – seniors, low income, health challenges
  - » Thrift Stores and Food Banks – low income
  - » Family resource centres – low income, one-parent-families
4. Develop key messaging for local community partners
  - » Utilize heat health key messaging for susceptible populations from reputable sources such as [HealthLink BC](#)
5. Encourage community partners to establish business practices with respect to re-broadcasting official heat and preparedness messaging to their clients or membership. Encourage community partners to follow the official sources of information listed in Step 9, sign up for Voyent Alert notifications, and follow the SCRD social media accounts.
6. Select appropriate communication mediums considering audience, urgency of key messaging, and timing:
  - » Send press releases through mass media (e.g., internet, newspapers, radio, and tv)
    - Consider prioritizing the newspaper, radio, and tv to more effectively alert seniors and less technology inclined individuals
  - » Send press releases to community partners who can amplify the key messaging through their own distribution lists and social networks
  - » Distribute posters and pamphlets to highly frequented public places (e.g., medical clinics, pharmacies, grocery stores, the tourist centre, and thrift stores)

7. Consider focusing efforts on the following key topics:
  - » Passive and active cooling strategies for residents without air-conditioning
  - » Home cooling rebates for homeowners (e.g., the CleanBC Income Qualified Program for BC homeowners with eligible homes and a total household income within a specific threshold<sup>5</sup>). See Appendix 15 – Web URLs for more information on residential utility financial assistance programs and energy rebates.
  - » A volunteer-based neighbourhood heat patrol program
  - » A neighborhood heat buddy program
  - » How to do health check-ins during EHEs
  
8. Create public-facing maps that identify nearest cool public spaces, shaded walking routes, shaded parks, spray parks, access to beaches, and any other public heat relief locations, as well as include key heat health information. Distribute these maps throughout the community (e.g., tourist information centres, grocery stores, pharmacies, the post office, ferry port locations, seniors' centres, and thrift stores) and post them online.
  
9. Create a landing page for municipal heat health awareness. Consider including the following information:
  - » Where to find official up-to-date information:
    - » ECCC - [Weather alerts website](#)
    - » ECCC - [WeatherCAN app](#)
    - » SCRD - [Voyent Alert! sign up](#)
    - Social media accounts
    - » Government of BC - [EmergencyInfo BC](#)
    - » Government of BC - [Air Quality Health Index Monitoring](#)
    - » Prepared BC - [Prepared BC on X \(formerly Twitter\)](#)  
[Prepared BC on Facebook](#)
  - » Personal Preparedness Information
  - » PreparedBC - [Household Preparedness Guide](#)
  - » General Heat Safety Information
    - » VCHA - [Extreme Heat Poster](#)
    - » Health Canada - [Extreme Heat Information](#)
    - » HealthLinkBC - [Safety for Infants and Young Children During Extreme Heat](#)
    - » BC Housing - [Heat and Pets](#)
    - » BC Housing - [Heat and Pets Do's and Don'ts](#)
    - » WorkSafe BC - [Heat Stress Information and Resources](#)
  - » Air Quality Safety Information:
    - » BCCDC - [Wildfire Smoke Information](#)

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<sup>5</sup> CleanBC Better Homes. (2022). CleanBC Income Qualified Program. <https://www.betterhomesbc.ca/rebates/income-qualified/>

- » VCHA – [How to protect yourself from wildfire smoke](#)  
[Wildfire Smoke Information – PDF](#)

## 7.6 PROMOTE A NEIGHBOURHOOD HEAT PATROL PROGRAM & HEAT BUDDY PROGRAM

Neighbourhood heat patrol programs and heat buddy programs are preventative practices focused on empowering residents to play active roles in ensuring heat health safety.

A neighbourhood heat patrol program involves volunteers from the community who actively monitor and patrol local neighborhoods during EHEs. Their role is to provide outreach, foster closer relationships with neighbors, disseminate safety information, and provide timely assistance if required. Some communities have pre-existing neighbourhood watch programs, citizens on patrol programs, and Facebook neighbourhood pages that may be leveraged to create a neighborhood heat patrol program and to facilitate health check-ins for their most vulnerable neighbours.

A heat buddy program involves volunteers from the community who regularly check in on and provide support to a vulnerable individual during EHEs. Both programs encourage residents to identify a friend or neighbour to regularly check in with during an EHE to ensure they are doing well and to identify a need for assistance. These strategies can be especially helpful for ensuring the health and safety of people who live alone. Until more neighborhoods and residents proactively adopt preventative strategies such as these, it is important to layer multiple strategies to safeguard the well-being of the Sunshine Coast’s most heat vulnerable residents. See Appendix 1 – Pre-Season Planning for a copy of the heat buddy information pamphlet.

<b>POTENTIAL STRATEGIES</b>	Engage with local neighborhood associations to raise awareness about the benefits of neighborhood heat patrol programs and heat buddy programs
	Launch public awareness campaigns to inform the community about the programs
	Ensure residents have access to heat health check-in and heat buddy program information
	Coordinate the Heat Patrol Program and the Heat Buddy Program with other community support programs such as Citizens on Patrol to create a more comprehensive safety network



**Note: Heat Health Check-in References:**

- [NCCEH Health Checks During Extreme Heat Events Guide](#)
- [Vancouver Coastal Health Heat Check-In Support Framework for Non-Governmental Organizations](#)

## 7.7 PLAN FOR COMPETING PRIORITIES

Planning for competing priorities can help reduce the potential impacts of compounding challenges, maintain business continuity within the EOC, and improve overall resilience. This section serves as a starting point for EHE contingency planning and takes into consideration the top, relevant, hazards, risks, and vulnerabilities for the SCRD. Table 7-4 lists the top competing priorities for the Sunshine Coast including factors and opportunities to consider.

**Table 7-4** Competing Priority Considerations

	COMPETING PRIORITY	CHALLENGES	CONSIDERATIONS	OPPORTUNITIES
1	Community Evacuation	<ul style="list-style-type: none"> <li>Providing ESS / Reception Centre for a neighboring evacuated community</li> </ul>	<ul style="list-style-type: none"> <li>A potentially greater need for cool public facilities and/or designated cooling centres</li> <li>Individuals spending more time indoors</li> <li>Additional stress on first responders working in adverse outdoor conditions</li> <li>A need for indoor muster points, shaded outdoor areas for gathering, cold water, and first aid attendants</li> <li>Air-conditioned mass transportation</li> </ul>	<ul style="list-style-type: none"> <li>Identify multiple cool public facilities that are not designated reception centres</li> <li>Source outdoor shade tents, cold water and misting stations if people are required to spend time mustering outside</li> <li>Staying cool is <i>generally</i> prioritized over clean air</li> </ul>
2	Drought and limited clean water supply challenges	<ul style="list-style-type: none"> <li>Limited clean water supply</li> </ul>	<ul style="list-style-type: none"> <li>A greater need for cool public facilities</li> <li>Green spaces not being watered</li> <li>Spray park not available</li> <li>Gardens dying</li> </ul>	<ul style="list-style-type: none"> <li>Identify multiple cool public facilities to accommodate any increase in demand</li> <li>Source bottled water suppliers in advance</li> </ul>
3	Poor Air Quality	<ul style="list-style-type: none"> <li>Exposure to pollutants and/or wildfire smoke to stay cool</li> </ul>	<ul style="list-style-type: none"> <li>A potentially greater need for cool public facilities and/or designated cooling centres</li> <li>Individuals with chronic health challenges and breathing related challenges (e.g., asthma and COPD) are most at-risk</li> <li>Individuals spending more time indoors</li> </ul>	<ul style="list-style-type: none"> <li>Source clean air scrubber rental units in advance</li> <li>Source air conditioning units in advance</li> <li>Consider ways to actively cool the residences of individuals who are unable to leave their homes due to chronic health challenges</li> </ul>
4	Extended Power Outage	<ul style="list-style-type: none"> <li>No power at cool public facilities and</li> </ul>	<ul style="list-style-type: none"> <li>A greater need for cool public facilities and/or designated Cooling</li> </ul>	<ul style="list-style-type: none"> <li>Invest in back-up generators for designated Cooling Centres</li> </ul>

		<p>designated Cooling Centres without back-up generators</p> <ul style="list-style-type: none"> <li>• No cellular service</li> <li>• No WIFI access</li> </ul>	<p>Centres</p> <ul style="list-style-type: none"> <li>• Emergency key messaging not reaching community partners and the public</li> </ul>	<ul style="list-style-type: none"> <li>• Recommend cool public facilities invest in back-up generators</li> <li>• Invest in satellite internet equipment and services (e.g., Starlink)</li> <li>• Educate the public about being emergency prepared (having emergency food, water, supplies, including a battery powered radio on hand)</li> <li>• Create an extended power outage emergency communications plan</li> </ul>
5	Pandemic	<ul style="list-style-type: none"> <li>• Prevent the spread of disease in cool public facilities and designated Cooling Centres</li> </ul>	<ul style="list-style-type: none"> <li>• A strain on healthcare services</li> </ul>	<ul style="list-style-type: none"> <li>• Identify large air-conditioned indoor facilities that can accommodate safe distancing</li> <li>• See Appendix 11 – Managing Heat Risk During Communicable Disease Events</li> </ul>
6	Large Scheduled Summer Events	<ul style="list-style-type: none"> <li>• Tourists visiting the area</li> </ul>	<ul style="list-style-type: none"> <li>• A strain on the healthcare system</li> </ul>	<ul style="list-style-type: none"> <li>• Request event organizers include extreme heat planning and response strategies in their event applications</li> <li>• Recommend re-scheduling or cancelling events during Level 2 extreme heat emergencies</li> </ul>

<b>POTENTIAL STRATEGIES</b>	Encourage community partners to invest in business continuity planning and competing priority planning.
	Assess Sunshine Coast critical infrastructure for extreme heat vulnerabilities
	Utilize BC Emergency Management System (BCEMS) to prioritize threats.
	Utilize organizational strategies such as joint EOCs and joint information centres to optimize limited resources to manage multiple events more effectively.
	Support the community partners who interface with and provide support services to heat-vulnerable populations.
	Collaborate with community partners to develop the competing priority plan.

## 7.8 IMPROVE TRANSPORTATION ACCESS TO COOL PUBLIC SPACES AND THE DESIGNATED COOLING CENTRES

Consider coordinating a door-to-door transportation service (e.g., through a pre-existing local transportation service and/or BC Transit) to help make cooling facilities more accessible for those who require it most.

POTENTIAL STRATEGIES	Support a free door-to-door transportation service for basic amenities (e.g., doctors' appointments, groceries, and medications) and to-and-from cool public spaces and/or Designated Cooling Centres.
	Reduce or eliminate inter-community public transportation fees to make EHEs more manageable for low-income populations. See Appendix 13 EMCR Financial Assistance for Heat Emergency Response and Cost Recovery Addendum for more information and Section 5.2.2.3 Poverty for more information regarding the number of Sunshine Coast low-income residents.
	Consider the need for a BC Transit handyDART bus. Request the resource through the EMCR EAF process. Be sure to document the extenuating services that support the need for this resource. See Appendix 13 EMCR Financial Assistance for Heat Emergency Response and Cost Recovery Addendum for more information.

## 7.9 DISTRIBUTE DRINKING WATER

Water distribution to vulnerable populations and targeted at-risk areas is a strategy suggested in the 2022 BC Coroners Service Extreme Heat Death Review Panel Report and has been used in major heat events such as the Montréal heat event in 2018. Water distribution may include setting up portable water bottle re-filling stations and/or distributing bottled water. Consider targeting at-risk areas within the community such as outdoor parks and low-income neighbourhoods.

POTENTIAL STRATEGIES	Distribute water at pre-identified cool public facilities and designated Cooling Centres as identified in Appendix 13 – EMCR Financial Assistance for Heat Emergency Response and Cost Recovery Addendum.
	Consider enhancing water distribution locations with misting stations, nourishing snacks, and simple rehydration first aid supplies.
	Consider the need to target at-risk areas within the community and low-income neighborhoods and possibly coordinate water bottle distribution through bylaw enforcement and/or public works vehicles during patrols.

## 7.10 PROMOTE COMMUNITY PARTNER-LEAD HEALTH (WELLNESS) CHECK-INS

Local community partners exhibit varying abilities in connecting with heat-vulnerable clients or members depending on the strength of their network and available resources. Few community partners offer

outreach services, but many are willing to reach out to their membership through email distribution lists, telephone, or potentially, in-person visits. Therefore, it is highly recommended communities build and strengthen relationships with the local organizations who interact with known heat-vulnerable populations. Consider engaging assistance from volunteer organizations such as neighborhood watches, citizens on patrol, and Facebook neighborhood groups. See Section 5.2 Known Heat-Vulnerable Populations and Section 6.0 Community Partner Engagement for more information.

POTENTIAL STRATEGIES	Engage community partners who interact with or have a mandate to support heat-vulnerable populations in advance. See Section 7.3 Implement a Community Partner Engagement Plan.
	Encourage community partners to regularly reach out to their members, especially those who may be more isolated and potentially vulnerable during an EHE.
	Ensure local organizations have a copy of the Community Partner Extreme Heat Playbook

## 7.11 CONSIDER ACTIVATING HEALTH CHECK-INS

Health check-ins or wellness checks are a heat risk prevention strategy identified in the 2022 BC Coroners Service Extreme Heat Death Review Panel Report, recommended by the BC Centre for Disease Control, and used in the 2018 Montréal heat event. During this heat event, city officials conducted door-to-door visits to deliver heat safety information to the most vulnerable populations. The BC Centre for Disease Control maintains the importance of health check-ins since heat-vulnerable populations may not recognize when they are overheating. (BCCDC, 2022).

POTENTIAL STRATEGIES	Coordinate “Just in Time” training for wellness checks for local support organizations in advance of heat season. Consider local Search and Rescue organizations as another potential resource. Incremental overtime may be financially supported by EMCR as identified in Appendix 13 Financial Assistance for Heat Emergency Response and Cost Recovery Addendum.
	Launch a health check-in, neighborhood heat patrol program and heat buddy program awareness campaign.
	Promote community partner-lead health (wellness) check-ins through an EHE engagement meeting. See Section 7.10 Promote Community Partner-Lead Health (Wellness) Check-ins for more information.
	Consider establishing a secure online registry for residents who need assistance during emergencies, including transportation and health check-ins.



**Note: The BC Coroner’s Report concluded 56% of 2021 heat dome decedents lived alone**

The newly adopted ESS community navigator model may be one way to facilitate in-person health check-ins during an EHE See Appendix 12 – EHE Guide to Health (Wellness) Checks for information on how to conduct heat health check ins. For more information on residents living alone, see Section 5.2.2.2 Living

Along.



**Note: 18.1% of residents in the Sunshine Coast live alone. This statistic can help inform decision makers with respect to the number of residents who may be potentially vulnerable to social isolation. This percentage is above average for BC (12.2%) and Canada (12.1%).**



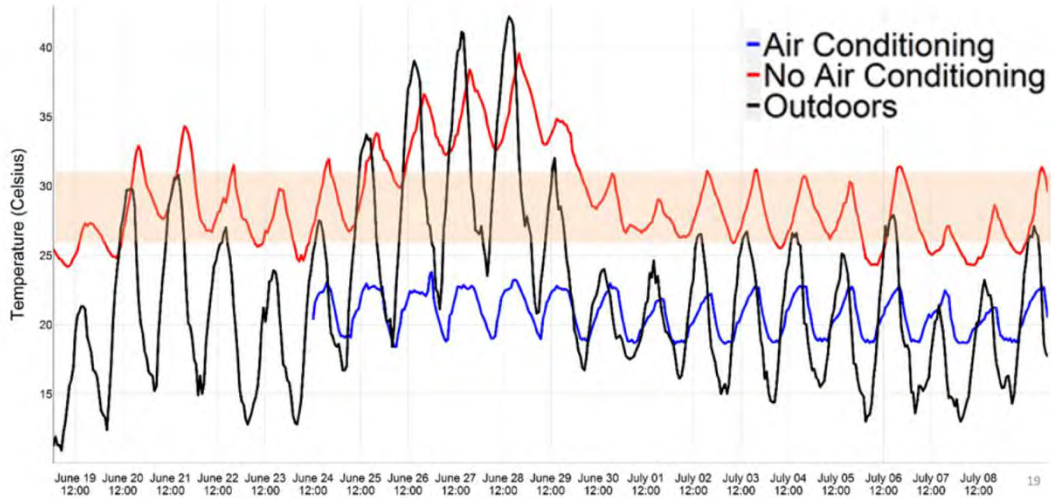
**Note: The BC Coroner's Report concluded half of the 2021 heat dome decedents were found at their place of residence during a wellness check.**



**Best Practice: Health check-ins should be performed as often as possible, at least two times during the heat of the day and at least once during the evening when it is warmest indoors.**

## 7.12 CONSIDER ACTIVATING AN OVERNIGHT COOLING CENTRE

An overnight cooling centre can provide community members who are unable to adequately lower the temperature of their homes in the evenings, a safe place to cool down and rest. Figure 7-1 illustrates the daily warming and cooling trends during the 2021 heat dome event, comparing the outdoor temperature to the temperatures measured inside residences with air conditioning and residences without air conditioning. As the outdoor temperature climbs on June 26<sup>th</sup>, June 27<sup>th</sup>, and June 28<sup>th</sup>, the indoor non-air-conditioned temperatures rise as well. Most alarming are the three days showing indoor overnight temperatures that remained at 30 °C or above in non airconditioned homes. The most current literature indicates a sustained indoor temperature of 26 °C or higher poses a safety concern for heat vulnerable populations and a sustained indoor temperature of 31°C or higher is deemed unsafe for healthy populations.



**Figure 7-1** The Diurnal Trends of Indoor Residences with A/C and without A/C During the 2021 Heat Dome Event (BC Coroners Service, 2022, p.19.)

<b>POTENTIAL STRATEGIES</b>	Identify overnight Cooling Centres in advance and consider factors such as location, maximum capacity, space planning, wheelchair access, sufficient washroom facilities, designated areas for privacy and baby care, and cultural sensitivity.
	Build upon existing infrastructure such as winter warming centers for unhoused populations
	Source beds, bedding, volunteers, security, cleaning, first aid, emergency response planning, and additional resources and services in advance.
	Discuss with local community partners and Vancouver Health Healthy Communities to assess the need for activating an overnight cooling centre.



**Note: The BC Coroner’s Report concluded 93% of decedents did not have air conditioning present in their residence**

## 8.0 EXTREME HEAT COMMUNICATIONS PLAN

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### 8.1 PURPOSE

A coordinated, responsive, and collaborative communications approach is a vital element of the overall Sunshine Coast Regional District Extreme Heat Plan, ensuring target audiences are aware, engaged and better equipped to benefit from related preparedness, mitigation, response, and recovery efforts implemented by local governments, response partners and community agencies.

### 8.2 KEY CONSIDERATIONS

This plan was developed to address observations and best practices from past provincial and national heat events regarding specific Extreme Heat Events communications challenges. Those identified challenges are:

#### 8.2.1 Internal (Local Authorities and Response Agencies):

1. A lack of access to plain language health-informed messaging.
2. Inconsistent flow of information between local governments and community partners.
3. A lack of pre-established roles, responsibilities and activities impeding effective coordination.
4. Event triggers and activities are unclearly linked and not effectively signaled.
5. A lack of timely and accurate notifications and situational reports from higher authorities.
6. Provincial support partners face conflicting widespread demands during extreme heat events.

#### 8.2.2 External (Community Agencies and the Public)

1. A varied understanding of extreme heat event levels and event considerations and effective preparedness and response actions are often not intuitively linked.
2. Audiences are unclear which information sources (traditional and social media, federal, provincial, regional, municipal) are authoritative sources, exacerbated by inconsistent, untimely, and ineffectively sequenced messaging across those sources.
3. Outreach and connection with homeless and under-housed populations is beyond the capacity of government agencies, while targeting senior adults and those with socio-economic or health challenges is also a significant challenge, with most of those audiences underserved by “digital-first” approaches.
4. Insufficient awareness of response activities exacerbated by shifting locations of cooling spaces with inconsistent hours led to inadequate uptake.
5. There was a need for mapping resources for sharing the location of cooling infrastructure supports (i.e., greenspaces, water sources, washrooms, climate controlled public spaces, etc.).

### 8.3 COMMUNICATIONS OBJECTIVES

The communications objectives are to:

1. Ensure that extreme heat emergency messaging is:
  - Timely (regularly updated).
  - Accurate (informed by trusted sources).
  - Relevant (localized and responsive).
  - Accessible (available in plain language through diverse channels).
  - Consistent (across agencies, partners, and populations).
  - Audience-centric (equitable and digestible).
2. Maximize public awareness and comprehension of Extreme Heat Events, their associated risks, preparedness, mitigation measures, and relevant Sunshine Coast response activities.
3. Allow local, regional, Indigenous, and provincial agencies to better collaborate and leverage their subject-matter expertise in developing effective Extreme Heat Event communications approaches, and to amplify and expand the reach of Sunshine Coast relevant information.
4. Empower local governments, response partners and support agencies' communication leads to coordinate joint Extreme Heat Event communications efforts through an audience- and event-centric lens by implementing a Joint Extreme Heat Communications Working Group (JEHCWG) made up of local government and response information leads. This group will ensure unified messages, products, and activities are developed collaboratively while being individually managed based on expertise and capacity. Coordinated messaging will be disseminated various channels and amplified to target audiences.
5. Engage community partners to help identify target populations, groups of people with unique information needs stemming from factors like geographic area, demographic characteristics, socioeconomic status, and health considerations. and Identify gaps and leverage the capacities of these agencies to collectively support and empower these populations for Extreme Heat Events.
6. Apply an equity-driven lens in preparing and delivering key messaging during Extreme Heat Events. This approach ensures that heat-vulnerable populations receive equitable access to critical information, empowering them to better protect themselves.

## 8.4 COMMUNICATION ROLES AND RESPONSIBILITIES

AGENCIES	ROLES & RESPONSIBILITIES
SCRD	<ul style="list-style-type: none"> <li>• Partner coordination and liaison.</li> <li>• Hub for risk and event information (Through the provincial government or shared externally via the EOC during active events or ongoing JEHCWG activities).</li> <li>• Coordinates seasonal readiness, event, and after-action coordination calls for a more coordinated local response.</li> <li>• Develops event specific content and messaging.</li> <li>• Issues Voyent Alert messaging, with input from response partners.</li> </ul>
Local Governments	<ul style="list-style-type: none"> <li>• Contribute communication resources and local content.</li> <li>• Technical support (e.g., graphics, GIS, and IT).</li> <li>• EOC Information Officer (IO) staff (if required).</li> <li>• Front line outreach (e.g., parks, recreation, and libraries).</li> <li>• Ensures messaging is aligned and reviewed by leadership.</li> </ul>

	<ul style="list-style-type: none"> <li>• Amplifies extreme heat safety content.</li> </ul>
Response Partners	<ul style="list-style-type: none"> <li>• Advise on public safety messaging.</li> <li>• Confirm impacts to populations, and event-related emergency services.</li> <li>• Content amplification.</li> </ul>
Community Based Organizations	<ul style="list-style-type: none"> <li>• Provide resilience facility and volunteer supports where possible.</li> <li>• Advise on targeted audiences attributes and messaging.</li> <li>• Direct outreach and amplification to networks.</li> </ul>
Health Emergency BC (HEMBC) & Health Partners	<ul style="list-style-type: none"> <li>• Advise on public heat safety messaging.</li> <li>• Provide, review, and advise on health-specific messaging content.</li> <li>• Broker linkages and information sharing with sectoral partners and resources (i.e., BCHARS).</li> </ul>
Emergency Management and Climate Readiness (EMCR)	<ul style="list-style-type: none"> <li>• Coordinates provincial and cross-regional engagement via regional coordination calls, Emergency Info BC, and Prepared BC.</li> <li>• Shares information resources and communications best practices from federal and other provincial jurisdictions.</li> <li>• Issues wide-scale Alert Ready and broadcast-intrusive messaging.</li> <li>• Provides financial and logistical support to First Nations and Local Authorities for the operation of Cooling Spaces and emergency operations centre activation to provide coordinated response measures and communications.</li> </ul>
Environment and Climate Change Canada (ECCC)	<ul style="list-style-type: none"> <li>• Issues level 1 heat warning alerts pertaining to geographic regions in BC</li> <li>• Collaborates with the BC (Health Effects of Anomalous Temperatures) HEAT committee to issue level 2 extreme heat emergency alerts to geographic regions in BC</li> </ul>

## 8.5 KEY AUDIENCES AND COMMUNICATION APPROACHES

	KEY AUDIENCE	APPROACH
1	General Public	Develop key messaging that is applicable to all Sunshine Coast audiences.
2	shíshálh Nation	Develop Indigenous-specific key messaging for on-and off-reserve populations and deliver through a culturally aware and sensitive lens
3	Local Governments	Distribute situational awareness information to decision makers and staff across Sunshine Coast regional and municipal governments who are supported by their provincial partners.
4	Response Agencies (local fire, RCMP, BCEHS, ground and marine search and rescue teams)	Distribute operational key messaging relevant to their needs such as a list of cooling resources and their contact information, heat health check-in reference information, how to stay cool, and hydrated so they can continue to safely provide their services.
5	Community-Based Organizations (CBOs)	Distribute targeted key messaging to organized and informal organizations and collectives whose mandate includes providing support and services to general or specific local populations key to leverage those networks accordingly (see Annex A to F - Community Partner Information).
6	Sunshine Coast Visitors	Develop key messaging targeted to tourists and other short-mid stay visitors, who collectively comprise some 3.6 million visits to the region per annum.
7	Populations with Identified EHE Vulnerabilities*	Develop targeted key messaging to heat-vulnerable groups regarding preparedness and response strategies during EHEs.

*\*Including persons experiencing physical (heart disease, obesity, diabetes, high blood pressure) and/or mental health comorbidities (schizophrenia, dementia, substance use, depression, mood/anxiety disorders), adults over 50 and children under 12, people who are under-housed or experiencing homelessness, first-generation Canadians, and multi-unit property owners who support their legal duty of care to building residents.*

## 8.6 OPTIONAL COMMUNICATIONS OPPORTUNITIES

The subsequent subsections outline potential communication opportunities that can be explored, contingent upon the availability of budget and/or resources.

### 8.6.1 Internal Staff

1. Distribute pre-built product templates to EHJCWG partners to seek their advice on implementation, or customizing for specific audiences, types, and stages of events.
2. Revise existing Sunshine Coast EHE web content to reflect Plan messaging, creating a trusted source for related resources, providing local communities and agencies with authoritative and evergreen information and links to resources and best practices.
3. Consider creation of a “dark page” for SCRD website, made live during a Heat Warning / Extreme Heat Emergency to function as a primary local resource hub for event-related information – weather and status updates, community support locations, municipal and partner contacts, etc.
4. Review existing Sunshine Coast extreme weather print and web materials to prioritize use of graphical elements; more easily understood and rapidly processed (e.g., ESL, youth, and health-compromised).
5. Request financial resources as part of emergency management operational budget to enable provision of print outreach materials to key vulnerable and/or non-digital populations through alternative means (e.g., bulk advertising, posters, or public distribution points, and inclusion in utility bills).
6. Identify needs (demographics) and resources available to create translated materials for second-language residents and visitors.
7. Continue research for data- and health-informed heat information best practices (e.g., defining at-risk groups, factors, supports, etc.).
8. Develop aligned branding for public-facing heat comms materials with local government, health, and response partners.
9. Examine potential to establish a Sunshine Coast extreme weather phone hotline, providing information and support to seniors or others without internet access, only active during EW events.

### 8.6.2 External Community Partners and Public

1. Create standing bodies for consultation to coordinate and elicit input from partners on target audiences and relevant communications considerations (e.g., reaching vulnerable populations, conflicts with COVID or smoke messaging).
2. Create an Extreme Weather Advisory Committee (EWAC) consisting of local government, response, support agency and (potentially) public reps; responsible for reviewing and providing advice on specific elements of Sunshine Coast EHE outreach and communications activities (e.g., engagement, outreach, and advocacy), providing subject matter expertise from the lens of their respective portfolios; representation to be confirmed through agency leads by Winter 2023-24.
3. Review proposed public health messaging with health system partners, consistency of content is key - signage, messaging, etc.
4. Identify key partner agencies for each designated target audience and consult with them to optimize format and delivery channels of products and activities.
5. Work with media and NGO partners to identify opportunities for public education messaging delivery and amplification (e.g., articles, newsletters, and events).

### 8.6.3 Communications Products

	NOTES
SCRD Extreme Weather Website	<ul style="list-style-type: none"> <li>• Hub for preparedness and general extreme weather information; should include a dark main page to provide event updates during alerts.</li> </ul>
Brochure	<ul style="list-style-type: none"> <li>• Primary print resource providing EHE preparedness info, tips for coping with extreme heat, heat illness warning signs/symptoms mitigations and local resource information.</li> <li>• Would be used for physical and online distribution.</li> <li>• QR code directing to website for updated info.</li> </ul>
Posters	<ul style="list-style-type: none"> <li>• For key public, partner, and at-risk population sites.</li> <li>• Common look and feel template with brochure.</li> <li>• Basic info plus QR code link to SCR D web site for more info.</li> </ul>
Pocket Info Card	<ul style="list-style-type: none"> <li>• For distribution to front-line workers to provide to at-risk populations.</li> <li>• Includes map of “heat-safe” spaces, and excerpts from brochure, QR code link to web site for more info, SCR D phone contact for more info.</li> </ul>
Public Education & Presentations	<ul style="list-style-type: none"> <li>• Develop a standing EHE presentation which can be adapted and delivered to target audiences as part of annual seasonal readiness efforts; could also be a virtual and or pre-recorded online presentation.</li> </ul>

## **9.0 FINANCIAL ASSISTANCE FOR EHEs**

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When the ECCC issues a heat warning or extreme heat weather event, it is advisable for the municipality to request a task number from EMCR if the EOC is activated. Furthermore, adhering to standard EOC business practices, consult EMCR regarding any concerns with expense eligibility and obtain pre-authorization through the expenditure approval form (EAF) process prior to making a purchase.

It is strongly recommended for the municipality to become familiar with the Financial Assistance for Extreme Heat Emergency Response and Recovery Addendum which has been provided by EMCR and can be found in Appendix 13 – Financial Assistance for Heat Emergency Response and Recovery Costs Addendum. EMCR typically provides financial support for expenses incurred during ECCC-issued heat warnings and extreme heat emergencies that align with their guiding document and are consistent with actions outlined in the BC HARS. It is important to note, EMCR's support for EHEs is a relatively new business practice and the financial guidelines are subject to ongoing development. To enhance a resource request or EAF submission, refer to Section 7.0 Extreme Heat Preparedness and Response Recommendations and explore similar support documentation. This can help strengthen financial support requests, particularly if it is not explicitly outlined in the EMCR Financial Assistance for EHE Response and Recovery Addendum.

## **10.0 CLIMATE ADAPTATION PLANNING**

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Climate adaptation planning assesses and prioritizes strategies to enhance adaptive capacity and to mitigate the impacts of EHEs. Unlike the immediate response and preparedness strategies outlined in Section 7.0 Extreme Heat Preparedness and Response Recommendations, adaptation strategies focus on long-term mitigation, systematically reducing impacts over time. Although beyond the scope of the Plan, it is recommended to incorporate climate adaptation planning into longer term community planning frameworks.

An essential aspect of effective climate adaptation planning is prioritizing an equity perspective. This means considering the diverse socioeconomic backgrounds, vulnerabilities, and capacities within each community. Different individuals and groups have varying levels of resilience to extreme heat due to factors such as age, income, housing conditions, ability to access to cooling resources, and overall health. By ensuring an equity perspective is prioritized, community leadership can be certain most vulnerable populations are not disproportionately affected by EHEs and their unique needs are addressed.

This section offers an overview of potential climate adaptation planning strategies for the SCRD to consider. These strategies are broken down into four categories: addressing disparities in accessing cooling resources, changing human behaviors, working with nature, and improving building and community infrastructure. (Eyquem, ENV SP. CWEM, Feltmate, 2022, p.7).

# 10.1 ADDRESS DISPARITIES IN ACCESSING COOLING RESOURCES

Additional measures may be needed to establish policies that effectively address the discrepancy between populations merely inconvenienced by EHEs and individuals struggling to survive. This is best accomplished when policy makers understand the distinct challenges faced by heat-vulnerable populations during EHEs. While the proposed community partner engagement strategy in Section 7.3 Implement a Community Partner Engagement Plan is a good starting point for gathering and better understanding firsthand experiences and challenges, more efforts are needed to improve community resilience. Policies that bridge the gap between people inconvenienced by EHEs and those struggling to survive can help improve community resilience to EHEs.

<b>POTENTIAL STRATEGIES</b>	<p>Evaluate existing regional district policies from an equitable standpoint, ensuring they address the specific needs and challenges faced by heat-vulnerable populations. Consider asking questions such as:</p> <ul style="list-style-type: none"> <li>• Who benefits least from these current policies?</li> <li>• Are there mechanisms in place to actively gather feedback and input from diverse community partners?</li> <li>• Does this policy provide targeted support or resources to address inequities or disparities?</li> </ul>
	<p>Develop and implement equitable measures that enhance access to resources that reduce heat-related impacts such as:</p> <ul style="list-style-type: none"> <li>• Supporting community gardens and green spaces</li> <li>• Promoting cooling retrofit subsidies and rebates to low-income households, such as the <a href="#">residential rebates and free programs offered through BC Hydro</a> including <a href="#">the current heat pump offer and limited portable air-conditioner offer</a></li> <li>• Promoting energy efficiency programs and incentives for businesses such as through the <a href="#">BC Hydro and the CleanBC Better Building program</a></li> <li>• Focusing community education and outreach on underserved populations</li> <li>• Ensuring heat health information is available in multiple languages and in formats accessible to individuals with disabilities</li> </ul>
	<p>Research potential funding opportunities available to local authorities and Indigenous communities for hiring staff, training, and community projects such as the ones offered through <a href="#">BC Hydro</a> to help support climate adaptation initiatives.</p>

## 10.1.1 Continue to Support Affordable Housing Initiatives

The SCR D acknowledges regional affordable housing challenges and supports strategies local initiatives and community planning strategies. Extreme heat-vulnerable individuals, including those experiencing poverty, seniors, and individuals with special needs such as chronic health challenges, mental health challenges, and physical limitations, face disproportionate impacts during EHEs. The SCR D Official Community Plan (OCP) emphasizes affordable housing and densification strategies throughout the region. For more information see the SCR D OCP.

<b>POTENTIAL STRATEGIES</b>	<ul style="list-style-type: none"> <li>Review recommendations in the Sunshine Coast Housing Needs Report, November 2020</li> </ul>
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## 10.2 CHANGE HUMAN BEHAVIOURS

The SCRD is committed to reducing climate change impacts and has many plans in place including a Corporate Carbon Neutrality Plan, a Transit Future Action Plan, and a Climate Change Action Plan to reduce local GHG emissions and increase regional resiliency through climate adaptation measures.

### 10.2.1 Reduce Greenhouse Gas (GHG) Emissions

By actively implementing measures that minimize our carbon footprint, communities can contribute to global efforts in mitigating the impacts of climate change and fostering environmental resilience.

<b>POTENTIAL STRATEGIES</b>	Continue to support green transportation strategies through incentive programs and by investing in green infrastructure <ul style="list-style-type: none"> <li>Increase foot paths and bike lanes throughout the community</li> <li>Create tax incentive programs for businesses to install electric vehicle charging stations</li> </ul>
	Promote energy efficient household products such as heat pumps through rebates and incentive programs such as <a href="#">CleanBC</a>
	Promote passive cooling strategies to off-set the use of air-conditioning unit which are heavy consumers of electricity and rely on hydrofluorocarbons (HFCs)
	Continue to support waste reduction and diversion initiatives (e.g., residential organic composting, education and awareness programs, and local business product package reduction initiatives)

See the SCRD Climate Change Action Plan for regionally supported GHG emission reduction goals and supporting actions.

### 10.2.2 Continue to Support Water Conservation Initiatives

Access to clean water is a cornerstone of community safety and resilience. Clean water is a vital resource for hydration, cooling, emergency response efforts, and food security. However, when water shortages occur, they undermine the community's ability to withstand and recover from EHEs. Water conservation is a high priority for the Sunshine Coast and the organization has undertaken numerous projects to help address the challenges created by drought. For more information, see <https://www.scrd.ca/water> and <https://gibsons.ca/services/water-supply-and-distribution/>.

### 10.2.3 Work With Nature

Working with pre-existing natural features or incorporating natural designs into the built environment is a proactive strategy. This approach not only aids in keeping people cool and mitigating UHIs, but also supports community health and wellness, contributing to an enhanced overall quality of life.

<b>POTENTIAL STRATEGIES</b>	Increase shaded green spaces for the public to cool themselves down and engage in social outdoor activities.
	Expand vegetation cover by: <ul style="list-style-type: none"> <li>• Prioritizing main streets used for walking and existing parks.</li> <li>• Expanding tree canopy cover along main walking corridors connecting green spaces and outdoor recreation spaces.</li> <li>• Expanding deciduous tree canopy cover along residential streets to increase shade reduce GHG emissions from air-conditioning units.</li> <li>• Planting shade trees and drought tolerant vegetation.</li> <li>• Considering joint funded community projects such as the <a href="#">BC Hydro Regreening Program</a>.</li> </ul>
	Strategically preserve green spaces and wetlands.
	Support “nature-based” solutions that mimic natural habitats and ecosystems.
	Maintain natural ventilation, water features, and biophilic design (elements of nature) in urban designs such as installing public water fountains, restoring previously covered streams, and modifying urban design to increase natural airflow.

### 10.3 IMPROVE COMMUNITY INFRASTRUCTURE

Improving community infrastructure refers to modifying existing buildings, outdoor spaces, and critical infrastructure to help people cool down and maintain facility operations during EHEs.

<b>POTENTIAL STRATEGIES</b>	Consider building shades structures (e.g., shade sails and gazebos) in heat-vulnerable areas where planting trees is not possible).
	Consider the impacts of built environment features such as street width, building height, and building materials. Consider: <ol style="list-style-type: none"> <li>1) Incorporating high albedo materials in concrete pavement and more reflective or permeable building materials where appropriate.*</li> <li>2) Update bylaws to require pre-wiring for solar and electric charging stations in new homes.</li> <li>3) Incorporate energy retrofit programs.</li> </ol>
	Install back-up generators for critical infrastructure such as the EOC and the designated Cooling Centre can continue to operate during a power outage.

*\*These products may not be suitable for all environments and situations*

### 10.4 CLIMATE ADAPTATION PLANNING CONSIDERATIONS

A collaborative and open dialogue approach is strongly recommended when initiating climate adaptation planning. This section is intended to serve as a starting point and provide a basic framework for community climate adaptation planning.

<b>POTENTIAL STRATEGIES</b>	Identify, establish, and nurture relationships and partnerships with a diverse range of community partners and multidisciplinary partners. <ul style="list-style-type: none"> <li>• Promote inclusivity; encourage collaboration and open dialogue to capture different perspectives.</li> </ul>
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	<ul style="list-style-type: none"> <li>Climate adaptation actions may be combined with nature-based solutions that can be leveraged to help reduce greenhouse gases as well as promote community health and wellness.</li> </ul>
	Aim to better understand the extreme heat risks and vulnerabilities faced by the community, taking into consideration the vulnerable populations, infrastructure, and natural resources to help inform the development and prioritization of objectives.
	Consult with community partners to identify a common vision.
	Conduct health impact assessments (HIAs) on municipal plans and policies to: <ul style="list-style-type: none"> <li>Review health implications</li> <li>Promote healthy built environments and climate adaptation actions</li> <li>Give feedback on urban planning and policy-making processes</li> <li>Raise the profile of public health in designing healthy communities</li> </ul>
	Consult with subject matter experts and qualified professionals regarding climate adaptation ideas, strategies, and community assessments. <ul style="list-style-type: none"> <li>Consider community planning and bylaws to implement GHG reduction plans.</li> <li>Introduce green building standards.</li> <li>Expand vegetation cover.</li> <li>Implement climate-sensitive urban design and planning.</li> </ul>
	Encourage community involvement in the planning process. <ul style="list-style-type: none"> <li>Hold town hall meetings, develop questionnaires, hire community navigators to help solicit input, etc.</li> </ul>
	Develop measurable (short, medium, and long term) objectives and prioritize them.
	Develop climate adaptation strategies based on the objectives, risks, and priorities.
	Conduct a health-equity analysis to help inform proposed strategies.
	Conduct a cost and return on investment analysis on the proposed strategies.
	Conduct public consultations on regional plans and policies to give health authorities an opportunity to advocate for healthy community and extreme heat adaptation actions.
	Integrate climate adaptation planning into existing community plans and policies
	Identify potential funding sources and mechanisms (e.g., incentive programs) to support climate adaptation initiatives. <ul style="list-style-type: none"> <li>Consider local grant opportunities, public-private partnerships, and community-based funding options.</li> </ul>
	Promote public education and awareness through outreach and educational campaigns.
Foster regional collaboration with neighboring communities, regional organizations, and other networks to: <ul style="list-style-type: none"> <li>Share knowledge, resources, and best practices.</li> <li>Leverage collective strengths.</li> <li>Effectively address cross-boundary challenges.</li> </ul>	

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# APPENDICES

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**APPENDIX 1 – PRE-SEASON PLANNING**

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# PRE-SEASON PLANNING

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## TRIGGER

WINTER/SPRING (EVERY FEBRUARY 1<sup>st</sup>)

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## Checklist

See attached page for checklist

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## Internal Key Messaging

- A Heat Warning can be expected 1 – 3 times per summer and means that temperatures are very hot and can pose a moderate risk to public health
  - An Extreme Heat Emergency can be expected 1 – 2 times per decade and means that temperatures are dangerously high and there is a very high public health risk
  - See Health & Safety for internal Worksafe procedures
  - Review the [BC HARS](#) document
  - Review the Sunshine Coast Extreme Heat Plan
  - Review department specific heat risk reduction strategies
- 

## Community Partner Key Messages

- Please review the Community Partner Pre-Season Checklist
  - To access communication materials for distribution, contact the EOC at [emergency.program@scrd.ca](mailto:emergency.program@scrd.ca)
  - A Heat Warning can be expected 1 – 3 times per summer and means that temperatures are very hot and can pose a moderate risk to public health
  - An Extreme Heat Emergency can be expected 1 – 2 times per decade and means that temperatures are dangerously high and there is a very high public health risk
  - A community partner coordination call is scheduled for <insert date, time, and location> to discuss the upcoming heat season
- 

## Public Key Messages

- See Pre-Season News Release Template and Key Message Summary on the following pages
-

# Pre-Season Extreme Heat Checklist

## ENSURE THE COMMUNITY EXTREME HEAT PLAN IS UP TO DATE

- Confirm contact lists are complete and current
  - All staff and service areas are subscribed to receive relevant alerts (e.g., Voyent Alert!)
  - All key staff are subscribed to receive alerts from the [WeatherCAN](#) app, etc.
  - Supporting community partners
    - Confirm extreme heat risk reduction services and resources for upcoming season – see Section 7.3 Implement a Community Partner Engagement Plan in the extreme heat plan for examples
  - Volunteers (e.g., availability, capacity, and contact information)
- Ensure key messaging is current
  - Most current [BC HARS document](#) and [Vancouver Coastal Health Extreme Heat webpage](#)
- Update procedures as necessary
- Review / socialize the plan with key community partners and new staff

## SCHEDULE AND COORDINATE HEAT HEALTH AWARENESS EDUCATION AND TRAINING

- Extreme heat plan familiarization training for staff, substitute staff, volunteers, community partners who engage with vulnerable populations, as well as mayor and council so they may confidently speak to the heat risk reduction activities supported by the community
- Provide information on how to recognize heat illness signs and symptom to staff (especially outdoor workers) and volunteers
- Cultural safety training, trauma-informed training, and de-escalation training for staff, substitute staff, volunteers, and community partners who may engage in volunteer outreach

## RE-STOCK PUBLIC EDUCATION MATERIALS IN ADVANCE OF HEAT SEASON

- [Extreme heat community preparedness brochures from Health Canada:](#)
  - Adapting to Extreme Heat Events – Guidelines for Assessing Health Vulnerability
  - Heat Alert and Response Systems to Protect Health: Best practices guidebook
  - It's Much too Hot – Protect yourself from extreme heat
  - Keep Children Cool! – Protect your child from extreme heat
  - Staying Healthy in the Heat – Heat exhaustion
  - Staying Healthy in the Heat – Safety tips
  - Staying Healthy in the Heat – Who is most at risk?
  - You're Active in the Heat. You're at Risk! – Protect yourself from extreme Heat
- Print the [Prepared BC Extreme Heat Preparedness Guide pdf](#)
- Print the following HealthLinkBC pdfs (various language options):
  - [Beat the Heat](#)
  - [Heat-related Illness](#)
  - [Heat-related Illness in Infants and Young Children](#)
  - [Safety for Infants and Young Children During Extreme Heat](#)
  - [Safety for the Perinatal Population During Extreme Heat](#)

# Pre-Season Extreme Heat Checklist cont'd

## CONVENE COMMUNITY PARTNERS AND PARTNERS TO REFRESH / PLAN FOR THE UPCOMING SEASON

- Review heat alert protocols, any plan changes, and community partner engagement expectations and practices
  - Go to Pre-season Community Partner Meeting Agenda checklist

## CONFIRM MUNICIPAL EXTREME HEAT PLANS, CONTINGENCY PLANS, AND RESOURCES ARE IN PLACE

- Department heat response plans are in place (e.g., modified work schedules and triggers for adjusting hours of work for outdoor activities for cooler parts of the day, and increased scheduled water breaks)
  - Contingency plans are in place for staff summer vacations
- Availability or access to emergency response equipment (e.g., fans, generators, and back-up communications)
  - Consider EOC, Reception Centre, and designated Cooling Centre facilities
- Any critical service disruptions are scheduled for spring or fall outside of potential heat warning and extreme at emergency events
- Confirm there is an annual spring inspection of cooling infrastructure for the EOC and designated cooling centres in place

## ACTIVATE PRE-SEASON PUBLIC EDUCATION CAMPAIGN

- Engage with local non-profit organizations to build heat health awareness
  - Distribute heat health information to local NGOs and service providers
- Display heat health information displays/guides in designated community locations – see Section 7.5.2 Implement a Community Partner Engagement Plan in the Sunshine Coast Extreme Heat Plan
- Increase community awareness of public cooling options (e.g., pools, splash parks, shaded green spaces, libraries, and shopping centres)
- Continue to promote the Voyent Alert! app and educate the public on where to go to for official information

## CONFIRM EXTREME HEAT RESPONSE STRATEGIES FOR UPCOMING SEASON

- Schedule a local supporting community partner meeting or conference call to discuss community response strategies
- BC Transit – Options for coordinating free transport for accessing cool public spaces and need for additional service
- Parks & Rec – Reducing or removing pool and rec fees
- Confirm the need for posting lifeguards at popular public beaches during EHEs
- Confirm options for extending hours of operation for cool public spaces (e.g., library and outdoor spray park)
- Discuss providing portable water fountains at designated public places with Planning & Operations
- Confirm water distribution resources are in place (Portable water fountains and bottled water delivery to at-risk populations)
- Confirm Cooling Centre facilities, resources, services, and transportation options are in place
  - Staff are alerted to potential extended hours of operations

Page 2 of 2

## PRE-SEASON COMMUNITY PARTNER MEETING AGENDA CHECKLIST

- Offer an introduction/ welcome and share objective of the pre-season meeting
- Provide reminders of BC HARS two level alert system and the criteria for each
- Ensure roles and responsibilities are understood. Consider:
  - Environment and Climate Change Canada (ECCC)
  - Vancouver Coastal Health Authority
  - Community partners
  - Sunshine Coast and member communities
- Call on attendees present (one-by-one) to:
  - Confirm and/or update contact information
  - Confirm and/or update services and resources that may be offered
- Review the plan for the upcoming season. Consider discussing:
  - What community partners can expect
  - Alert protocols
  - Training opportunities (e.g., cultural safety training and tabletop exercises)
  - Communication protocols
- Review and confirm information distribution sources of key messaging from the Regional District. Consider the following strategies: Voyent Alert! App
  - SCRD social media (Facebook, Twitter)
  - Radio and Television
  - SCRD website
  - Print media
- Community Hall. Confirm print material requirements for distribution to community partners. Consider:
  - Quantities required
  - Type and style of material
- Provide opportunity to discuss any additional concerns
- Provide opportunity for questions or clarifications
- Closing Remarks
  - Express appreciation for participants' involvement and contributions
  - Reinforce the importance of their roles in the municipality's extreme heat response efforts
  - Set expectation for when an extreme heat event coordination call might be expected

## Pre-Season Public / Social Media Key Messages

<p>Key Messages</p>	<ol style="list-style-type: none"> <li>1. The Sunshine Coast Regional District is working closely with local authorities along with response and community partners to ensure that all Sunshine Coast residents are well-equipped to beat the heat this summer.</li> <li>2. Register with Voyent Alert! at <a href="https://www.scrd.ca/alert-system/">https://www.scrd.ca/alert-system/</a> to receive heat or fire alerts, drought measures and other important notifications.</li> <li>3. Keep your household safe by having an emergency plan that covers what to do during extreme heat.</li> <li>4. Heat illness can happen in uncooled homes during extreme heat events. Identify indoor or outdoor cooling spaces near you before the heat hits.</li> <li>5. Learn the signs of heat-related illnesses, and what to do.</li> </ol> <p>Register with the SCR D Voyent Alert! mass notification system at: <a href="https://www.scrd.ca/alert-system/">https://www.scrd.ca/alert-system/</a> to stay informed and safe.</p>
<p>Social Media and Website</p>	<ol style="list-style-type: none"> <li>1. <b>[Information Advisory]</b> Are you ready to beat the heat? Your local government can help when temperatures rise this summer. Visit <a href="http://scrd.ca">scrd.ca</a></li> </ol>
<p>Audience-Specific Products</p>	<ul style="list-style-type: none"> <li>• <a href="#">PreparedBC Extreme Heat Preparedness Guide</a></li> <li>• How to Build an <a href="#">Emergency Kit</a></li> <li>• <a href="#">Staying Healthy in the Heat</a></li> <li>• <a href="#">Tips to Beat the Heat</a></li> <li>• <a href="#">Summer Home Cooling Tips</a></li> <li>• <a href="#">Fraser Health: Sun and Heat Safety</a></li> <li>• <a href="#">Sun Safety Basics</a></li> <li>• <a href="#">Sun Protection</a></li> <li>• <a href="#">Heat Safety</a></li> <li>• <a href="#">Be Prepared for Hot Weather</a> (Indigenous)</li> <li>• <a href="#">Sun Safety for Children</a> (Children)</li> <li>• <a href="#">Long Term Care Facilities and Heat</a> (Seniors)</li> </ul>



## Pre-Season Heat Notification

Tags: [YYYY] | News Release

Date Released: [Month DD, YYYY]

The Sunshine Coast Emergency Program would like to remind residents that warmer weather is on the way. Residents are encouraged to:

- Prepare a Personal Heat Plan following the PreparedBC Extreme Heat Preparedness Guide at: [https://www2.gov.bc.ca/assets/gov/public-safety-and-emergency-services/emergency-preparedness-response-recovery/embc/preparedbc/preparedbc-guides/preparedbc\\_extreme\\_heat\\_guide.pdf](https://www2.gov.bc.ca/assets/gov/public-safety-and-emergency-services/emergency-preparedness-response-recovery/embc/preparedbc/preparedbc-guides/preparedbc_extreme_heat_guide.pdf)
- Register with the SCR D Voyent Alert! mass notification system at: <https://www.scrd.ca/alert-system/> to stay informed in events of extreme heat alerts, fire alerts, water conservation measures and other important notifications
- Establish a heat buddy system; someone who will check in with you frequently and regularly as well as provide assistance if necessary
- Spread the word. Check in with friends, neighbours, and family who might require assistance during heat events
- A Heat Warning can be expected 1 – 3 times per summer and means that temperatures are very hot and can pose a moderate risk to public health
- An Extreme Heat Emergency can be expected 1 – 2 times per decade and means that temperatures are dangerously high and there is a very high public health risk
- Be prepared to change your routine. If outdoor tasks are required, consider performing them before 11am or after 5pm.
- Be aware of how to stay healthy in the heat. See the Heat Canada Staying Healthy in the Heat Fact Sheet at: <https://www.canada.ca/content/dam/hc-sc/documents/services/publications/healthy-living/fact-sheet-staying-healthy-heat/fact-sheet-staying-healthy-heat.pdf>
- Be aware of the signs of heat related illness and what to do
- Keep bottled water on hand
- For more information, please monitor:
  - EmergencyInfoBC: <https://www.emergencyinfobc.gov.bc.ca/>
  - Environment Canada Weather: <https://weather.gc.ca/>
  - SCR D Website: <https://www.scrd.ca/>
  - SCR D Facebook: <https://www.facebook.com/sunshinecoastrd>
  - SCR D Twitter: <https://twitter.com/SunshineCoastRD>
- Learn More: [www.preparedbc.ca/extremeheat](http://www.preparedbc.ca/extremeheat)

# HEAT EXHAUSTION



Skin rash



Muscle cramps



Dizziness or fainting



Nausea or vomiting



Heavy sweating



Headache



Rapid breathing and heartbeat



Extreme thirst



Dark urine and decreased urination



If you experience any of these symptoms during extreme heat, immediately move to a cool place and drink liquids; water is best.

What are the **SIGNS AND SYMPTOMS** of heat illness?

# HEAT STROKE

High body temperature



Confusion and lack of coordination



Dizziness/ Fainting



No sweating, but very hot, red skin



Heat stroke is a medical emergency! **Call 911 or your local emergency number immediately.** While waiting for help—cool the person right away by:

- moving them to a cool place, if you can;
- applying cold water to large areas of the skin; and
- fanning the person as much as possible.



Who is  
**MOST AT  
RISK?**

**FACT 1**  
**OLDER  
ADULTS**

Older adults may be faced with compounding factors that could put them at increased risk during extreme heat events. These factors may include chronic illnesses, medications that interfere with the body's cooling mechanisms, social isolation, and poverty.

**FACT 2**  
**INFANTS AND  
YOUNG  
CHILDREN**

Given the unique physiological characteristics of children's bodies and their high dependency on caregivers, they are likely to be at risk during extreme heat events.



**FACT 3**  
**CHRONIC  
ILLNESS/  
SPECIAL  
MEDICATION**

Individuals with breathing difficulties, heart problems, and psychiatric illnesses are at a higher risk of heat-related health effects.



**FACT 4**  
**PEOPLE WHO WORK  
OR ARE ACTIVE  
OUTDOORS**

People who work outdoors (e.g. construction, road repair) and physically active individuals who exercise in the heat could face greater environmental heat exposure and physical strain.

Can: H144-573-2019E-PDF • ISBN: 978-0-600-29165-9 • Pdf: 180715



# SAFETY TIPS

## TIP 1 PREPARE FOR THE HEAT

- Tune in regularly to local weather forecasts and alerts so you know when to take extra care.
- If you have an air conditioner, make sure it works properly.
- If you don't have an air conditioner, find an air-conditioned spot close by where you can cool off for a few hours on very hot days.

## TIP 2 KNOW THE SIGNS OF HEAT

## TIP 3 PAY ATTENTION TO HOW YOU AND THOSE AROUND YOU FEEL

Frequently visit neighbors, friends and older family members, especially those who are chronically ill, to make sure that they are cool and hydrated.

## TIP 4 DRINK LIQUIDS; WATER IS BEST.

## TIP 5 STAY COOL



### *How to stay cool?*



Wear loose-fitting, light-coloured clothing made of breathable fabric.



Take cool showers or baths until you feel refreshed.



Plan strenuous outdoor activities for cooler days, or choose a cooler location, like a place with air conditioning or with tree shade.



Spend a few hours in a cool place. It could be a tree-shaded area, swimming facility or an air-conditioned spot.



Can: H144-57/1-2019E-PDF • ISBN: 978-0-60-29157-4 • Pub: 180711

# HEAT PREPAREDNESS

Is Your Facility Prepared?



## Summer Is Approaching...

In the summer of 2021, Environment Canada issued multiple heat warnings throughout the province of British Columbia.

The Island Health region experienced daily temperatures of over 40 degree Celsius causing serious health and safety risks within our communities.

Community Care Facilities Licensing is committed to ensure Licensees are proactive and prepared for the upcoming summer heat.



## Watch for symptoms of heat illness

dizziness or fainting  
nausea or vomiting  
fatigue and weakness  
extreme thirst, heavy sweating  
pale, cool, moist skin  
muscle cramps, headache, rash  
rapid breathing and heartbeat  
decreased urination with  
unusually dark yellow urine

## Getting Prepared in Residential Care

To ensure your site is prepared to respond to heat emergencies, it is important to have a plan in place. Please see below for some important points to consider as you develop your preparedness plan.

- Create a Heat Preparedness Policy and ensure all staff are trained and knowledgeable;
- Provide staff training on extreme heat emergency measures;
- Increase frequency of checks on persons in care during hot days;
- Increase frequency of hydration rounds for persons in care;
- Increase frequency of rest and water breaks;
- Drink plenty of water; ensure access to water; create shade/cooling stations (fans, air conditioners, ice-water baths/showers);
- Ensure fans, air-conditioners and HVAC systems are regularly maintained and in working order ahead of time;
- Continue to monitor indoor temperature to modify preparedness plan when necessary;
- Block direct sun with blinds and shutters; increase air flow where possible;
- Have popsicles on hand; consume foods with higher water content including fruit and vegetables; store and prepare food with extreme heat in mind;
- Wear light-colored, loose fitting, breathable clothing; wear hats;
- Ensure sunscreen is applied to all persons in care when outside as need;
- Reduce strenuous activity during periods of extreme heat; plan physical activities for cooler parts of the day;
- Never stay in a parked car on a hot day.



## Resources

- BC Heat Impacts Prediction System (BCHIPS), BCCDC
- Heat Safety, Island Health
- Heat-Related Illness, HealthLinkBC
- Health Facilities Preparation for Extreme Heat: Recommendations for Retirement and Care Facility Managers, Government of Canada
- Wildfire Smoke, BCCDC
- Wildfire Smoke and COVID-19 in Long Term Care



May 2022

# Heat Preparedness Considerations

To ensure your site is prepared to respond to heat emergencies, it is important to have a plan in place. Please see below for some important points to consider as you develop your preparedness plan.



Create a Heat Preparedness Policy for your facility



Monitor indoor temperatures regularly and modify preparedness plan if necessary



Ensure staff are trained and knowledgeable on facility policies, responding to emergencies and identifying heat responses for persons in care



Block direct sun with blinds, shutters or reflective material; increase air flow where possible



Increase frequency of hydration rounds and visits with persons in care



Have cool refreshments available such as popsicles, fruit and veggies with higher water content



Increase frequency of rest and water breaks



Wear light-coloured, loose fitting clothing and hats; ensure sunscreen is applied to all persons in care when outside



Drink plenty of water and ensure access to water; create shade and cooling stations with fans or air conditioners



Plan physical activities for cooler parts of the day



Ensure fans, air-conditioners and HVAC systems are regularly maintained and in working order ahead of time



Never stay in a parked car on a hot day

May 2022



## APPENDIX 2 – PRE-HEAT WARNING

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*29 °C for 2 consecutive days and  $\geq 16$  °C overnight*

# PRE-HEAT WARNING

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## TRIGGER

The ECCC MAY communicate the potential of a heat warning a few days in advance when the following criterion is met:  
**Temperatures are expected to meet or exceed 29 °C for 2 consecutive days and the overnight minimum temperature is  $\geq 16$  °C**

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## Checklist

- Advise the Manager of Protective Services and confirm the next steps, including activating the Extreme Heat Plan
  - Advise the Manager of Communication and Engagement to start preparing messaging for the public (e.g., news releases and social media)
  - Consider activating EOC for pre-planning purposes and to monitor weather conditions
  - Go to Heat Warning Section and review checklist
- 

## Internal Staff Key Messages

- The ECCC has issued a weather notification in advance of a likely Heat Warning
  - Prepare to activate internal department extreme heat plans
  - The EOC may activate for pre-planning purposes and weather monitoring
  - Monitor the [ECCC weather alerts webpage](#) and/or the [WeatherCAN app](#)
  - See Health & Safety for internal Worksafe procedures
- 

## Community Partner Key Messages

- The ECCC has issued a weather notification in advance of a likely Heat Warning
  - The EOC may activate for pre-planning purposes and weather monitoring
  - The Pre-Heat Warning may evolve into a Heat Warning
  - Please review the Community partner Extreme Heat Warning Checklist
- 

## Public Key Messages

- See Pre-Heat Warning News Release Template and Key Message Summary on the following pages
-

## Pre-Heat Warning Public / Social Media Key Messages

<p>Key Messages</p>	<ol style="list-style-type: none"> <li>1. Environment and Climate Change Canada has issued a pre-heat warning alert.</li> <li>2. The Sunshine Coast Emergency Program is working closely with government, response, and community partners to ensure residents and visitors are well-equipped to beat the heat this summer.</li> <li>3. Heat illness can happen in uncooled homes during extreme heat events. Identify indoor or outdoor cooling spaces near you before the heat hits.</li> <li>4. Residents are encouraged to check in on family members and neighbors.</li> <li>5. Older adults with underlying health concerns such as heart disease, uncontrolled diabetes, emphysema, kidney failure, colitis, or mental health illness are especially at risk.</li> <li>6. Register with the SCRD Voyent Alert! mass notification system at: <a href="https://www.scrd.ca/alert-system/">https://www.scrd.ca/alert-system/</a> to stay informed and safe.</li> </ol>
<p>Voyent Alert</p>	<ol style="list-style-type: none"> <li>1. <b>[Advisory]</b> Are you ready to beat the heat? Your local government can help when temperatures rise this summer. Visit <a href="http://scrd.ca">scrd.ca</a></li> </ol>
<p>Audience-Based Products</p>	<ul style="list-style-type: none"> <li>• <a href="#">PreparedBC Extreme Heat Preparedness Guide</a></li> <li>• <a href="#">Staying Healthy in the Heat</a></li> <li>• <a href="#">Tips to Beat the Heat</a></li> <li>• <a href="#">Sun Safety</a> (Children &lt; 5 years)</li> <li>• <a href="#">Be Prepared for Hot Weather</a> (Indigenous)</li> <li>• <a href="#">Prepare an Extreme Heat Kit</a> (Vulnerable Populations)</li> <li>• <a href="#">Long Term Care Facilities and Heat</a> (Seniors)</li> </ul>
<p>Recommended Social Media Strategy</p>	<ol style="list-style-type: none"> <li>1. Follow <a href="#">@PreparedBC on Facebook</a> and re-share posts or</li> <li>2. Cut and paste the graphic and content directly into your organization Facebook page</li> </ol> <div data-bbox="621 1360 907 1648" data-label="Image"> </div> <p>Source: Government of British Columbia  <a href="https://www2.gov.bc.ca/gov/content/safety/emergency-management/education-programs-toolkits/social-media-toolkits/extreme-heat?keyword=extreme&amp;keyword=heat&amp;keyword=risk">https://www2.gov.bc.ca/gov/content/safety/emergency-management/education-programs-toolkits/social-media-toolkits/extreme-heat?keyword=extreme&amp;keyword=heat&amp;keyword=risk</a></p>



## Pre-Heat Warning Notification

Tags: [YYYY] | News Release

Date Released: [Month DD, YYYY]

The Sunshine Coast Emergency Program would like to advise residents the ECCC (Environment and Climate Change Canada) has issued a pre-heat warning. Residents are encouraged to:

- Be prepared to change your routine. If outdoor tasks are required, consider performing them before 11am or after 5pm.
- Be aware of [how to stay healthy in the heat](#)
- **Be aware of the signs of heat related illness and what to do. For more information go to:**
  - VCHA webpage: <https://www.vch.ca/en/extreme-heat>
  - HealthLinkBC: <https://www.healthlinkbc.ca/health-topics/heat-related-illnesses>
  - Learn More: [www.preparedbc.ca/extremeheat](http://www.preparedbc.ca/extremeheat)
- Use the heat buddy system; someone who will check in with you frequently and regularly as well as provide assistance if necessary
- Have your air conditioner serviced to ensure it is working
- Know the risks – those with chronic illnesses or on special medications, older adults, infants, and young children are more at risk with increased heat.
- Spread the word. Check in with friends, neighbours, and family who might require assistance during heat events.
- For more information please monitor:
  - EmergencyInfoBC: <https://www.emergencyinfobc.gov.bc.ca/>
  - Environment Canada Weather: <https://weather.gc.ca/>
  - SCR D website: <https://www.scrd.ca/>
  - SCR D Facebook: <https://www.facebook.com/sunshinecoastrd>
  - SCR D X (formerly Twitter): <https://twitter.com/SunshineCoastRD>

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## **APPENDIX 3 – LEVEL 1 HEAT WARNING**

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*29 °C for 2 consecutive days and ≥16 °C overnight*

# LEVEL 1 – HEAT WARNING

## TRIGGER

The ECCC will issue a heat warning through the [weather alerts webpage](#) or the [WeatherCAN app](#) when the following criterion is met:

**Daytime maximum temperatures are Forecasted to reach or exceed 29 °C for 2 consecutive days AND the overnight minimum temperature is  $\geq 16$  °C**

## Checklist

See Heat Warning Checklist on the following page

## Internal Key Messages

- The ECCC has issued a Heat Warning for the <geographic area> due to daytime expected maximum temperatures of 29 °C or warmer and nighttime minimum temperatures of 16 °C or warmer
- The Heat Warning may evolve into an Extreme Heat Emergency
- Review the current Sunshine Coast heat risk reduction strategies in place to provide consistent key messaging to the public
- Be aware of heat illness sign and symptoms
- Monitor the [ECCC weather alerts webpage](#) and/or the [WeatherCAN app](#)
- See Health & Safety for internal Worksafe procedures
- Adjust work schedules to the cooler part of the day as appropriate for the location and type of work
- The EOC has been activated at <insert address>
- Cooling Centres have been opened at <insert address> with operating hours: <insert hours of operation>

## Community Partner Key Messages

- The ECCC has issued a Heat Warning for <geographic area> due to daytime expected maximum temperatures of 29 °C or warmer and nighttime minimum temperatures of 16 °C or warmer
- Cooling Centres have been opened at <insert address> with operating hours: <insert hours of operation>
- Additional community resources include <list available options>
- Consider rescheduling services and major events to cooler times of day, especially outdoor activities
- Take your usual steps to stay cool
- Review the Community Partner Level 1 Heat Warning Checklist
- The EOC has been activated at <insert address>
- To access communication materials for distribution, contact the EOC at <insert contact number>

## Public Key Messages

See Heat Warning News Release Template and Key Message Summary on following pages

# Heat Warning Checklist

## EOC DIRECTOR

- Call EMCR for a task number
- Review relevant EOC Director checklists
- Consider activating a Liaison Officer and Information Officer
- Consider requesting liaisons from BCHES and VCHA be present in the EOC
- Brief Mayor and Council on municipal response efforts, cooling centre and transportation details, and key messaging

## LIAISON OFFICER

- Review relevant Liaison Officer checklists
- Establish contact with / send key messaging to EHE community partners – EHE community partner information in Appendix 9
- Consider the need to schedule regular local conference calls at an appropriate frequency

## INFORMATION OFFICER

- Review relevant Information Officer checklists
- Confirm level 1 heat warning key messaging with EOC Director
- Contact neighboring communities / regional district IOs to advise, confirm key messaging, and release joint messaging
- Issue heat warning key messaging to staff, responding agencies, supporting community partners, and the public see Section 8.0 Extreme Heat Communications Plan
- Promote heat health safety as well as signs and symptoms of heat illnesses health (e.g., how to identify heat illnesses, and ways to stay cool) and where to monitor for up-to-date information
- Distribute heat health communication materials
  - [Health Canada's Staying Healthy in the Heat Poster](#)
  - [HealthLink BC Heat-related Illness pdf](#)
  - [VCHA Extreme Heat Poster](#)
- Consider registering the cooling centres on the EmergencyInfoBC Find a Cooling Centre webpage

## OPERATIONS SECTION

- Review relevant Operations Section Checklists
- Consider extending hours of operation of pre-existing cool public facilities and reducing entry fees
- Coordinate public water fountains, if applicable
- Consider the need for posting lifeguards at public beaches
- Reschedule all non-essential outdoor events or events in venues without air conditioning
- Check in with supporting community partners
  - Encourage re-scheduling all non-essential outdoor events or events in venues without air conditioning to cooler parts of the day
- Review relevant operations section checklists
- Confirm heat risk reduction strategies with the planning section

# Heat Warning Checklist cont'd

## OPERATIONS SECTION

- Work with the Planning and Logistics Sections to implement heat risk reduction strategies
- Confirm key messaging before checking in with supporting community partners
- Collect information regarding other heat risk reduction services and resources being offered in the community and share with plans
  - Request feedback on current/ongoing challenges
- Participate in the EMCR coordination call

## PLANNING SECTION

- Review relevant Planning Section checklists
- Contact GM Corporate Services / Manager of Financial Services and request a "Subproject" be created
- Contact the Records Management Help Desk [rms@is.scrd.ca](mailto:rms@is.scrd.ca) and request a folder be created under protective services 7131 Emergency Events. Provide a name for the folder, incorporating the Task Number i.e.: Heat warning 2022-Jul-25 Task number 22-3233
- Discuss / confirm heat risk reduction strategies with the General team:
  - Extend hours of operation of pre-existing cool public facilities and reduce entry fees
  - The need to conduct a community partner conference call (if yes, go to the Extreme Heat Emergency Community Partner Coordination Call Checklist in Appendix 5)
  - The need for a cooling centre
    - Free door-to-door transportation to cooling centre facilities
  - The need for posting lifeguards at public beaches
  - Request that all non-essential outdoor events or events in venues without air conditioning be rescheduled to cooler parts of the day
  - Delivery service for groceries and medication if relevant
  - Activate portable public water fountains, if applicable
- Monitor the ECCC Weather Alert Page and/or WeatherCAN App
  - [Metro Vancouver - NW, British Columbia - Air Quality Health Index \(AQHI\) - Environment Canada \(weather.gc.ca\)](https://www.weather.gc.ca)
- Consider the need for an advance planning unit
  - Monitor, assess, and plan for potential conflicting priorities (e.g., air quality concerns, water quality concerns, wildfire evacuation alerts/orders, power outages, public health concerns, and long-term staffing)
  - Develop contingency plans as necessary
    - Consider the need for an overnight cooling centre for vulnerable residents

## LOGISTICS SECTION


- Review relevant EOC Logistics Section checklists
- Work with Operations and Planning to identify and source resources required and anticipated

## FINANCE SECTION

- Review relevant Finance Section checklists
- Review EMCR expense eligibility for heat emergency table in Appendix 13

## Heat Warning Public / Social Media Key Messages

<p>Key Messages</p>	<ol style="list-style-type: none"> <li>1. Environment and Climate Change Canada has issued a heat warning alert.</li> <li>2. Residents and visitors should take measures to protect themselves and others.</li> <li>3. Cooling spaces have been opened at &lt;insert address&gt; with operating hours of &lt;insert hours of operation&gt;.</li> <li>4. Local and Indigenous governments are implementing their extreme heat plans.</li> <li>5. Check local media and web resources to find cooling spaces and more information.</li> <li>6. Learn the signs of heat related illness and what to do.</li> <li>7. Heat illness can happen in uncooled homes during extreme heat events. Find indoor or outdoor cooling spaces near you.</li> <li>8. If others are unwell, move them to a cool shady spot, help them get hydrated and call for medical assistance, if appropriate.</li> <li>9. Spending time in a COOL SPACE and drinking plenty of WATER is the best way to prevent heat related illness.</li> <li>10. Older adults with underlying health concerns such as heart disease, uncontrolled diabetes, emphysema, kidney failure, colitis, or mental health challenges are especially at risk.</li> <li>11. Residents are encouraged to check in with their family, friends, and neighbours.</li> <li>12. Register with the SCRD Voyent Alert! mass notification system at: <a href="https://www.scrd.ca/alert-system/">https://www.scrd.ca/alert-system/</a> to stay informed and safe.</li> </ol>
<p>Voyent Alert</p>	<p><b>[Information Advisory]</b> Are you ready to beat the heat? Your local government can help when temperatures rise this summer. Visit <a href="#">[insert web link]</a></p>
<p>Audience-Based Products</p>	<ul style="list-style-type: none"> <li>• <a href="#">Extreme Heat Poster</a></li> <li>• <a href="#">Staying Healthy in the Heat</a></li> <li>• <a href="#">Heat-Related Illness</a></li> <li>• <a href="#">Wildfire Smoke – Protect your Health</a></li> <li>• <a href="#">Parents’ and Coaches’ Guide to Dehydration and Other Heat Illnesses in Children</a> (Young Athletes)</li> <li>• <a href="#">Wellness Card for Tenants</a> (Renters)</li> <li>• <a href="#">Prepare an Extreme Heat Kit</a> (Vulnerable Populations)</li> <li>• <a href="#">Community Care During Extreme Heat. Heat Illness: Prevention and Preliminary Care</a> (Community/Outreach Workers)</li> <li>• <a href="#">Health Check Guidance</a> (Community/Outreach Workers)</li> <li>• <a href="#">Be Prepared for Hot Weather</a> (Indigenous)</li> <li>• <a href="#">Keep Children Cool! Protect Your Child From Extreme Heat</a> (Parents)</li> <li>• <a href="#">Childcare Facilities and Heat</a> (Parents)</li> <li>• <a href="#">Perinatal Safety During Extreme Heat</a> (Parents)</li> </ul>

	<ul style="list-style-type: none"> <li>• <a href="#">Long Term Care Facilities and Heat</a> (Seniors)</li> <li>• <a href="#">Heat and Pets: Heatstroke and Heat Exhaustion</a> (Pet Owners)</li> </ul>
<p>Recommended Social Media Strategy</p>	<ol style="list-style-type: none"> <li>1. Follow <a href="#">@PreparedBC on Facebook</a> and re-share posts or</li> <li>2. Cut and paste the graphic and content directly into your organization Facebook page</li> </ol>  <p>Source: Government of British Columbia  <a href="https://www2.gov.bc.ca/gov/content/safety/emergency-management/education-programs-toolkits/social-media-toolkits/extreme-heat?keyword=extreme&amp;keyword=heat&amp;keyword=risk">https://www2.gov.bc.ca/gov/content/safety/emergency-management/education-programs-toolkits/social-media-toolkits/extreme-heat?keyword=extreme&amp;keyword=heat&amp;keyword=risk</a></p>



## Heat Warning Notification

Tags: [YYYY] | News Release

Date Released: [Month DD, YYYY]

The Sunshine Coast Emergency Program would like to advise residents a Heat Warning is in effect. Residents are encouraged to:

- Be prepared to change your routine. If outdoor tasks are required, consider performing them before 11am or after 5pm
- Check-in with friends, family, and neighbours who might require assistance [NCCEH Guide to Health Checks](#)
- Be aware of [how to stay healthy in the heat](#)
- **Be aware of the signs of heat related illness and what to do. For more information go to:**
  - VCHA webpage: <https://www.vch.ca/en/extreme-heat>
  - HealthLinkBC: <https://www.healthlinkbc.ca/health-topics/heat-related-illnesses>
  - Learn More: [www.preparedbc.ca/extremeheat](http://www.preparedbc.ca/extremeheat)
- Use the heat buddy system; someone who will check in with you frequently and regularly as well as provide assistance if necessary
- The <insert locations> with operating hours of <insert hours of operation> is available to the public who are looking to cool down
- Additional community resources include <list available options>
- For more information please monitor:
  - EmergencyInfoBC: <https://www.emergencyinfobc.gov.bc.ca/>
  - Environment Canada Weather: <https://weather.gc.ca/>
  - SCRD website: <https://www.scrd.ca/>
  - SCRD Facebook: <https://www.facebook.com/sunshinecoastrd>
  - SCRD X (formerly Twitter): <https://twitter.com/SunshineCoastRD>

**APPENDIX 4 – HEAT WARNING DEACTIVATION**

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# HEAT WARNING DEACTIVATION

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## TRIGGER

The ECCC will issue an alert ending the heat warning when current and forecasted temperature criteria no longer meet the Heat Warning criteria:  
Daytime maximum temperatures are forecasted to be less than 29 °C for 2 consecutive days **AND** the overnight minimum temperature is < 16 °C

---

## Checklist

- Issue heat warning deactivation key messaging to staff, community partners, and the public
  - Conduct a heat warning hotwash and debrief
  - Restock heat health education material / pamphlets if necessary
- 

## Internal Key Messages

- The criteria for a Heat Warning are no longer being met.
  - The ECCC has issued a notice ending the Heat Warning.
  - The EOC will remain activated until <insert potential deactivation date>.
  - The <insert location> will return to regular hours of operation <insert hours> on <insert date>.
  - An AAR will be scheduled during the fall. We are interested in feedback on what worked well and what challenges were encountered. Details will be shared closer to the date.
- 

## Community Partner Key Messages

- The criteria for a Heat Warning are no longer being met. The ECCC has issued a notice ending the Heat Warning.
  - The EOC will remain activated until <insert potential deactivation date>.
  - The <insert location> will return to regular hours of operation <insert hours> on <insert date>.
  - An AAR will be scheduled during the fall. We are interested in feedback on what worked well and what challenges were encountered. Details will be shared closer to the date.
- 

## Public Key Messages

See the Heat Warning Deactivation News Release Template

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Sunshine Coast  
Regional District

## Heat Warning Cancelled

Tags: [YYYY] | News Release

Date Released: [Month DD, YYYY]

The Sunshine Coast Emergency Program would like to advise residents the heat warning is no longer in effect. The criteria for a Heat Warning are no longer being met. The ECCC (Environment and Climate Change Canada) has issued a notice ending the Heat Warning.

- Beginning <insert date> the Cooling Centres will return to their regular hours of operation.
- Regular hours for the <insert community building facility> will begin <insert date>
- For more information please monitor:
  - EmergencyInfoBC: <https://www.emergencyinfobc.gov.bc.ca/>
  - Environment Canada Weather: <https://weather.gc.ca/>
  - SCR D website: <https://www.scrd.ca/>
  - SCR D Facebook: <https://www.facebook.com/sunshinecoastrd>
  - SCR D X (formerly Twitter): <https://twitter.com/SunshineCoastRD>

- 30 -

## **APPENDIX 5 – LEVEL 2 EXTREME HEAT EMERGENCY**

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*ECCC issues an extreme heat emergency alert when Heat Warning criteria are met AND daily highs will substantially increase for  $\geq 3$  consecutive days*

## LEVEL 2 – EXTREME HEAT EMERGENCY

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### TRIGGER

The ECCC will issue an extreme heat emergency through the weather alert page and the WeatherCAN app when the following criterion is met:

**Heat Warning criteria has been met AND forecast indicates that daily highs will substantially increase day over day for ≥3 consecutive days**

---

### Checklist

See Extreme Heat Emergency Checklist on the following page

---

### Internal Key Messages

- The ECCC has issued an Extreme Heat Emergency Alert for the <geographic region> due to forecasted daily temperatures substantially increase over time over the next three or more consecutive days.
  - Implement department specific heat risk reduction strategies.
  - Review the Sunshine Coast public key messaging to promote consistent messaging.
  - Be aware of heat illness sign and symptoms.
  - Monitor the [ECCC weather alerts webpage](#) and/or the [WeatherCAN app](#).
  - See Health & Safety for internal Worksafe procedures and adjust work schedules to the cooler part of the day as appropriate for the location and type of work.
  - The EOC has been activated at <insert address>.
  - Cooling centres have been opened at <insert address> with operating hours of <insert hours of operation>.
  - List all other extreme heat risk reduction strategies being activated
- 

### Community Partner Key Messages

- The ECCC has issued an Extreme Heat Emergency Alert for the <geographic area> due to daily temperatures forecasted to substantially increase over the next three or more consecutive days
  - Consider rescheduling services and major events to cooler times of day, especially outdoor activities
  - Do not rely on fans alone for cooling as they create a perceived cooling effect without lowering the actual air temperature
  - Cooling Centres have been opened at <insert address> with operating hours of <insert hours of operation>
  - Additional community resources include <list available options>
  - Review Community partner Extreme Heat Emergency Checklist
  - The EOC has been activated at <insert address>
  - To access communication materials for distribution, contact the EOC at <insert contact number>
  - A community partner coordination call is scheduled for <insert date, time, and location> to discuss the imminent extreme heat event
- 

### Public Key Messages

See Extreme Heat Emergency News Release Template and Public Key Messages on the following pages.

# Extreme Heat Emergency Checklist

## EOC DIRECTOR

- Activate a Liaison Officer, Information Officer, a Risk Management Officer, and all General staff positions (Section Chiefs)
- Consider requesting liaisons from BCHES and VCHA be present in the EOC
- Brief Mayor and council on municipal response efforts, cooling centre and transportation details, and key messaging
- Confirm who the community spokesperson will be
- Activate the community emergency management plan
- Activate community business continuity plan

## LIAISON OFFICER

- Review relevant liaison officer checklists
- Establish contact with / send key messaging to EHE community partners – EHE community partner information in Appendix 9
- Consider the need to schedule regular local conference calls at an appropriate frequency
- Consider requesting liaisons from BCHES and VCHA be present in the EOC

## INFORMATION OFFICER

- Review relevant Information Officer checklists
- Confirm EHE key messaging with EOC Director
- Contact neighboring communities / regional district IOs to advise, confirm key messaging, and schedule joint news releases
- Issue EHE key messaging to staff, responding agencies, supporting community partners, and the public
- Continue to build awareness regarding heat health safety as well as signs and symptoms of heat illnesses health (e.g., how to identify heat illnesses, and ways to stay cool) and where to monitor for up-to-date information

## RISK MANAGEMENT OFFICER

- Review relevant Risk Management Officer checklists
- Address any heat health safety concerns
- Review the community business continuity plan

## OPERATIONS SECTION

- Review relevant Operations Section checklists
- Assess current cooling facility usage and confirm capacity
- Participate in EMCR coordination call
- Establish / maintain contact with supporting community partners
- Request feedback on current/ongoing challenges and consider ways the EOC may be able to provide support Collect information regarding other heat risk reduction services and resources being offered in the community and share with Planning
- Work with Planning and Logistics to support heat risk reduction strategies

# Extreme Heat Emergency Checklist cont'd

## PLANNING SECTION

- Review relevant EOC Planning Section checklists
- Contact GM Corporate Services / Manager of Financial Services and request a "Subproject" be created
- Contact the Records Management Help Desk [rms@is.scrd.ca](mailto:rms@is.scrd.ca) and request a folder be created under protective services 7131 Emergency Events. Provide a name for the folder, incorporating the Task Number i.e.: Heat warning 2022-Jul-25 Task number 22-3233
- Gather situational awareness from EMCR coordination call as well as Command and General staff
- Consider the need for an advance planning unit
  - Consider potential conflicting priorities (e.g., air quality concerns, water quality concerns, wildfire evacuation alerts/orders, power outages, public health concerns, and long term EOC staffing)
  - Develop contingency plans as necessary
  - Depending on the scope and scale of the EHE, consider the need for:
    - Damage assessment impact analysis planning
    - Economic impact planning
    - Cultural and environmental impact planning
- Discuss / confirm extreme heat risk reduction strategies with Command team:
  - Recommend rescheduling all non-essential outdoor events or events in venues without air conditioning
  - Extend the hours of operation of pre-existing cool public facilities and remove entry fees
  - Portable public water fountains, if applicable
  - The need for a cooling centre and
    - Free door-to-door transportation to cooling centre facilities for those in need
  - The need for an overnight cooling centre and
    - Evacuating at-risk populations to an overnight cooling centre
  - The need to post lifeguards at popular public beaches
  - Free door-to-door transportation to cooling centre facilities
  - Distribute bottled water to at-risk populations, if feasible
  - Increase public outreach through local support community partners and/or community navigators
  - In partnership with local health authority, encourage wellness checks for people at high risk
- Assess current cool public facility usage/capacity and consider the need to activate additional designated cooling centres and/or overnight cooling shelters
- Monitor the ECCC Weather Alert Page and/or WeatherCAN App

## LOGISTICS SECTION


- Review relevant EOC Logistics Section checklists
- Work with Operations and Planning to identify and source resources both required and anticipated
- Consider the need for the following resources such as auxiliary power equipment, medical and health supplies, and food for volunteers

## FINANCE SECTION

- Review relevant EOC Finance Section checklists
- Review EMCR expense eligibility for heat emergency table in Appendix 13

## EXTREME HEAT EMERGENCY Public / Social Media Key Messages

<p>Key Messages</p>	<ol style="list-style-type: none"> <li>1. Environment and Climate Change Canada has issued a heat warning alert.</li> <li>2. Residents and visitors should take measures to protect themselves and others.</li> <li>3. Cooling spaces have been opened at &lt;insert address&gt; with operating hours of &lt;insert hours of operation&gt;.</li> <li>4. Local and Indigenous governments are implementing their extreme heat plans.</li> <li>5. Check local media and web resources to find cooling spaces and more information.</li> <li>6. Learn the signs of heat related illness and what to do.</li> <li>7. Heat illness can happen in uncooled homes during extreme heat events. Find indoor or outdoor cooling spaces near you.</li> <li>8. If others are unwell, move them to a cool shady spot, help them get hydrated and call for medical assistance, if appropriate.</li> <li>9. Spending time in a COOL SPACE and drinking plenty of WATER is the best way to prevent heat related illness.</li> <li>10. Older adults with underlying health concerns such as heart disease, uncontrolled diabetes, emphysema, kidney failure, colitis, or mental health challenges are especially at risk.</li> <li>11. Residents are encouraged to check in with their family, friends, and neighbours.</li> <li>12. Register with the SCRD Voyent Alert! mass notification system at: <a href="https://www.scrd.ca/alert-system/">https://www.scrd.ca/alert-system/</a> to stay informed and safe.</li> </ol>
<p>Voyent Alert</p>	<p><b>[Emergency Broadcast]</b> Environment and Climate Change Canada has declared an Extreme Heat Emergency. Seek cool spaces and remain there as much as possible. Visit <a href="#">[insert web link]</a> for critical information.</p>
<p>Audience-Based Products</p>	<ul style="list-style-type: none"> <li>• <a href="#">Extreme Heat Poster</a></li> <li>• <a href="#">Staying Healthy in the Heat</a></li> <li>• <a href="#">Heat-Related Illness</a></li> <li>• <a href="#">Wildfire Smoke – Protect your Health</a></li> <li>• <a href="#">Parents’ and Coaches’ Guide to Dehydration and Other Heat Illnesses in Children</a> (Young Athletes)</li> <li>• <a href="#">Wellness Card for Tenants</a> (Renters)</li> <li>• <a href="#">Prepare an Extreme Heat Kit</a> (Vulnerable Populations)</li> <li>• <a href="#">Community Care During Extreme Heat. Heat Illness: Prevention and Preliminary Care</a> (Community/Outreach Workers)</li> <li>• <a href="#">Health Check Guidance</a> (Community/Outreach Workers)</li> <li>• <a href="#">Be Prepared for Hot Weather</a> (Indigenous)</li> <li>• <a href="#">Keep Children Cool! Protect Your Child From Extreme Heat</a> (Parents)</li> <li>• <a href="#">Childcare Facilities and Heat</a> (Parents)</li> <li>• <a href="#">Perinatal Safety During Extreme Heat</a> (Parents)</li> <li>• <a href="#">Long Term Care Facilities and Heat</a> (Seniors)</li> </ul>

	<ul style="list-style-type: none"> <li>• <a href="#">Heat and Pets: Heatstroke and Heat Exhaustion</a> (Pet Owners)</li> </ul>
<p>Recommended Social Media Strategy</p>	<ol style="list-style-type: none"> <li>1. Follow <a href="#">@PreparedBC on Facebook</a> and re-share posts or</li> <li>2. Cut and paste the graphic and content directly into your organization Facebook page</li> <li>3. Learn more: <a href="http://www.preparedbc.ca/extremeheat">www.preparedbc.ca/extremeheat</a></li> </ol>  <p>Source: Government of British Columbia  <a href="https://www2.gov.bc.ca/gov/content/safety/emergency-management/education-programs-toolkits/social-media-toolkits/extreme-heat?keyword=extreme&amp;keyword=heat&amp;keyword=risk">https://www2.gov.bc.ca/gov/content/safety/emergency-management/education-programs-toolkits/social-media-toolkits/extreme-heat?keyword=extreme&amp;keyword=heat&amp;keyword=risk</a></p>

# EXTREME HEAT

Some people are more affected by the heat than other people. Those who may need extra care include people over age 60, people who live alone, people with certain health conditions or disabilities, people who use substances, people on certain medicines, people who are pregnant, and young children.



## Signs of Heat Exhaustion

- Skin Rash
- Heavy Sweating
- Feel Dizzy
- Feel Sick or Throw Up
- Rapid Breathing and Heartbeat
- Headache
- Trouble Concentrating
- Muscle Cramps
- Extreme Thirst
- Dark Urine and Urinate Less

## Signs of Heat Stroke

- High Body Temperature
- Drowsy or Fainting
- Confused
- Less Coordinated
- Very Hot and Red Skin

### Anyone with these signs:

- Move to a cool space.
- Give plenty of water.
- Cool the skin down with water.

### Anyone with these signs: **Call 9-1-1**

- Submerge all or part of the body in cool water.
- Remove their clothes and cover them with wet towels.



The best way to prevent a heat-related illness is to spend time in a **cool space**.



### Cool Off

- Go somewhere with air conditioning such as a library, community centre, café, or someone else's home.
- Cool off with water. Take a cool shower. Sit in or put your feet and legs in a cool bath. Wear a wet shirt. Put damp towels on your skin.
- Never rely on fans as the only way of cooling your body during extreme heat. Fans cannot directly lower your body temperature or prevent heat illnesses.



### Check-In

- Notice how you feel and watch for signs of heat illness in those around you.
- Monitor the indoor temperature.
- At least 2 times a day, check in on those at risk for heat illness.



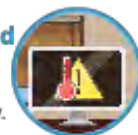
### Dress for the heat

- Wear clothing that is loose-fitting, light-colored, and breathable.



### Hydrate

- Drink plenty of water.
- Offer water often to those in your care.



### Keep the space cool

- Keep shades and blinds closed during the day.
- If you have air conditioning, keep windows closed to trap cooler air inside.
- If you don't have air conditioning, open windows at night to let cooler air in. Use fans in front of open windows to pull cooler air from outside into your home.



### Plan ahead and stay informed

- Check the weather forecast and latest heat alert information. Take it easy during the hottest times of the day.



Find out more about heat-related illness, preparing for the heat season and staying healthy in the heat: [ych.ca/heat](http://ych.ca/heat)

During the summer months both heat and wildfire smoke can be a health concern. Find out more about air quality: [ych.ca/wildfiresmoke](http://ych.ca/wildfiresmoke)



# Using Substances During Extreme Heat

## Safer substance use during extreme heat may help prevent heat illness

Some substances can make you more sensitive to heat illness:



### Stimulants cocaine, crack, meth

Stimulants can increase your body temperature and make it harder for your body to cool off.



### Opioids heroin, fentanyl

Opioids can make it hard to feel the effects of heat and take action to protect yourself.



### Alcohol

Alcohol is dehydrating. Large amounts of alcohol can lower blood pressure making it harder to cool your body down during extreme heat.

## Try these harm reduction tips during extreme heat:

- |  |  |
|--|--|
| <ul style="list-style-type: none"><li>• Be aware of how different substances affect your body during extreme heat.</li><li>• Find a friend so you can take care of each other.</li><li>• Close window coverings during the day and open windows at night.</li><li>• Do not stay inside if it is very hot (above 31°C). Move to a cool, shaded area.</li><li>• Find a nearby cooling centre, overdose prevention site, shaded park, pool, or beach to cool off.</li></ul> | <ul style="list-style-type: none"><li>• Carry naloxone.</li><li>• Stagger use. Take some time between doses.</li><li>• If you are drinking alcohol:<ul style="list-style-type: none"><li>• Choose drinks with lower alcohol content (beer or coolers).</li><li>• Mix hard liquor, like vodka or whiskey, with a hydrating fluid (Gatorade, orange juice, cola).</li><li>• Drink non-alcoholic fluids (water or juice) between alcohol beverages.</li></ul></li></ul> |
|--|--|

You may not be able to follow all of these tips. Do what you can and reach out for support.

### Resources & Apps

- [Toward the Heart: prepare for extreme heat for people who use substances](#)
- [BC Heat Impacts Prediction System \(BCHIPS\)](#)
- [Public Weather Alerts for British Columbia](#)
- [WeatherCAN](#)

### References:

- [Extreme Heat Events Guidelines: Technical Guide for Health Care Workers](#)
- [Medicines can affect thermoregulation and accentuate the risk of dehydration and heat-related illness during hot weather](#)
- [Health effects of hot weather: from awareness of risk factors to effective health protection](#)

For more information visit: [www.towardtheheart.com](http://www.towardtheheart.com)

Last updated: 12-May-2023

## Extreme Heat Coordination Call Checklist

*The objective of the coordination call is to bring community partners together to collaborate, share information in an efficient and effective manner, and to help facilitate a collective community response during an extreme heat event.*

- Offer an introduction/welcome
- Provide an update on the current situation (current and available information). This may include:
  - Information from ECCC
  - Weather forecast
  - Information from EMCR
  - Regional/Provincial context (e.g., activities, competing priorities)
  - Municipal actions being taken
    - Resources and services available
  - Any other information that may be relevant to community partners
- Identify any municipal concerns
- Call on attendees present (one-by-one) to give a brief update containing the following possible information:
  - Details on resources or services they are provided if any
  - What is working well
  - Any challenges and potential solutions
- Any unmet needs (e.g., vulnerable population challenges or concerns)
- Any other comments, concerns, or questions
- Communicate Key Messaging. This may include:
  - Review and confirm information distribution sources of key messaging from the city.  
Consider:
    - Voyent Alert!
    - SCRD Facebook
    - Radio and Television
    - SCRD website
    - Print media
    - Community Hall
- Encourage community partners to regularly reach out to formal and informal contacts, especially those who may be more isolated and potentially vulnerable during an extreme heat event
  - Encourage community partners to amplify key messaging through their distribution lists and social media networks
  - Provide opportunity to discuss any final questions and concerns
- Closing Remarks
  - Express appreciation for participants' involvement and contributions
  - Reinforce the importance of their roles in the municipality's extreme heat response efforts
  - Confirm methodology for contacting the Village with outstanding needs
  - Set timeline for the next coordination call



## Extreme Heat Emergency Notification

Tags: [YYYY] | News Release

Date Released: [Month DD, YYYY]

The Sunshine Coast Emergency Program would like to advise residents there is an Extreme Heat Emergency in effect. Residents are encouraged to:

- Spread the word. Check in with friends, neighbours, and family who might require assistance during heat events.
- If you have any health questions or concerns, please go directly to an urgent care provider, or call 8-1-1, for free-of-charge health information and advice
- Be prepared to change your routine. If outdoor tasks are required, consider performing them before 11am or after 5pm.
- Do not rely on fans alone for cooling as they create a perceived cooling effect without lowering the actual air temperature
- Sustained exposure from 26 °C – 31 °C may pose a risk to most susceptible people
- Sustained exposure to temperatures above 31° C should be avoided for susceptible populations whenever possible
- Be aware of how to stay healthy in the heat and the signs of heat-related illness:
  - Health Canada: <https://www.canada.ca/content/dam/hc-sc/documents/services/publications/healthy-living/fact-sheet-staying-healthy-heat/fact-sheet-staying-healthy-heat.pdf>
  - BC Government - Be Prepared For Extreme Heat and Drought: <https://www2.gov.bc.ca/gov/content/safety/emergency-management/preparedbc/know-your-hazards/severe-weather/extreme-heat>
  - VCHA Extreme Heat: <https://www.vch.ca/en/extreme-heat>
  - Learn More: [www.preparedbc.ca/extremeheat](http://www.preparedbc.ca/extremeheat)
- Use the heat buddy system; someone who will check in with you frequently and regularly as well as provide assistance if necessary
- Cooling Centre(s) has been opened at the following locations:
  - <insert facility name>, <insert address> with operating hours of <insert hours of operation>
- Additional community resources include <list available options>
- For transportation assistance to cooling centres or other resources call <insert contact method>
- For more information please monitor:
  - EmergencyInfoBC: <https://www.emergencyinfobc.gov.bc.ca/>
  - Environment Canada Weather: <https://weather.gc.ca/>
  - SCRD Website: <https://www.scrd.ca/>
  - SCRD Facebook: <https://www.facebook.com/sunshinecoastrd>
  - SCRD X (formerly Twitter): <https://twitter.com/SunshineCoastRD>

**APPENDIX 6 – EXTREME HEAT DEACTIVATION**

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# EXTREME HEAT EMERGENCY DEACTIVATION

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## TRIGGER

The ECCC will issue an alert ending the EXTREME Heat Emergency as determined by the BC Heat Committee and when current forecasted weather no longer meet the EHE criteria.

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## Checklist

- Issue extreme heat deactivation key messaging to staff, community partners, and the public
  - De-activate cooling centres
  - De-activate community cooling services
    - Free shuttle / public transportation to cooling centres or public library
    - Other heat risk reduction strategies
  - Confirm financial recovery through EMCR is underway
  - Deactivate EOC
  - Conduct a hotwash and a debrief
- 

## Internal Key Messages

- The ECCC has confirmed the Extreme Heat Emergency is no longer in effect.
  - The EOC will remain activated until <insert date of potential deactivation>.
  - Beginning <insert date> the Cooling Centre will be closed.
- 

## Community Partner Key Messages

- The ECCC has confirmed the Extreme Heat Emergency is no longer in effect.
  - Beginning <insert date> the Cooling Centre will be closed.
  - The EOC will remain activated until <insert potential deactivation date>.
  - A debrief is scheduled for <insert date, time, and location>. We are interested in feedback on what worked well and what challenges were encountered. Details will be shared closer to the date.
- 

## Public Key Messages

See Extreme Heat Emergency News Release Template Public Key Messages on the following page.

# EXTREME HEAT EMERGENCY DEACTIVATION

## Public / Social Media Key Messages

Key Messages	<ul style="list-style-type: none"> <li>• Environment and Climate Change Canada has <b>anceled</b> its Heat Warning.</li> <li>• Beginning &lt;insert date&gt; regional cooling spaces will be closed, with regular services and hours resuming for those community facilities.</li> <li>• Residents and visitors can resume enjoying safe and fun summer activities.</li> <li>• Keep aware and informed for future heat events:</li> <li>• Register with the SCRD Voyent Alert! mass notification system at: <a href="https://www.scrd.ca/alert-system/">https://www.scrd.ca/alert-system/</a> to stay informed and safe.</li> </ul>
Voyent Alert	<p><b>[Information Alert]</b> Environment and Climate Change Canada has ended its Heat Warning. Keep staying cool, Sunshine Coast! Learn more about heat events here <a href="#">[insert web link]</a>.</p>



Sunshine Coast  
Regional District

## Extreme Heat Emergency Rescind Notification

Tags: [YYYY] | News Release

Date Released: [Month DD, YYYY]

The Sunshine Coast Emergency Program would like to advise residents the Extreme Heat Emergency is no longer in effect. Beginning <insert date> the following Cooling Centres will return to regular hours of operation:

- <insert facility name>, <insert address>
- <insert facility name>, <insert address>

For more information, please monitor:

- o EmergencyInfoBC: <https://www.emergencyinfobc.gov.bc.ca/>
- o Environment Canada Weather: <https://weather.gc.ca/>
- o SCRD website: <https://www.scrd.ca/>
- o SCRD Facebook: <https://www.facebook.com/sunshinecoastrd>
- o SCRD X (formerly Twitter): <https://twitter.com/SunshineCoastRD>

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**APPENDIX 7 – POST-HEAT SEASON REVIEW**

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# POST-HEAT SEASON REVIEW

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## TRIGGER

Mid-September to October, when scheduling enables

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## Checklist

- Actively engage relevant community partners regarding:
    - How they are recovering from the heat event
    - How effective the heat response strategies were
    - Any emerging needs and challenges
    - How to improve future community heat response
  - Collate and review hotwash and debrief reports
  - Schedule a post-season debrief
  - Consider conducting an AAR if relevant
  - Address any new challenges and implement strategies using post-season heightened heat health awareness
  - Update the community heat management plan as required
- 

## Internal Key Messaging

- A post season debrief is scheduled for <insert date>. We are interested in feedback on what worked well and what challenges were encountered.
- 

## Community Partner Key Messaging

- A post season debrief is scheduled for <insert date>. We are interested in feedback on what worked well and what challenges were encountered.
- 

## Public Key Messaging

- The SCRD is interested in feedback on the resources and services offered during the heat events. What worked well and what could be improved. Feedback can be submitted by <insert method - online form / survey, etc.>

## APPENDIX 8 – SUMMARY OF CURRENT EXTREME HEAT PRACTICES

SECTION	CURRENT PRACTICES	BACKGROUND	POTENTIAL STRATEGIES
7.1	Establish Community Alerting and Key Messaging Procedures	Extreme heat communication was identified as a concern through the community partner engagement process, particularly for seniors who do not use or have access to technology	<ul style="list-style-type: none"> <li>• Develop age-informed communication strategies</li> <li>• Develop poverty-informed communication strategies</li> <li>• Develop heat health education campaigns focusing on seniors and children 5 years of age and younger</li> <li>• Utilize a variety of traditional media</li> <li>• Activate a hotline number for the public to get up to date information</li> </ul>
7.2	Pre-Identify Cool Public Spaces and Evaluate Designated Cooling Centres	Ensure an efficient and effective response to an EHE by identifying and preparing cool public spaces and facilities in advance	<ul style="list-style-type: none"> <li>• Refer to Section 7.2.2 Ensure Cool Public Spaces and Designated Cooling Centres are Welcoming to All for suggestions</li> <li>• Launch public awareness campaigns to inform the community about Designated Cooling Centre locations and hours of operation</li> <li>• Create cooling centre set up kits in advance and store at each designated facility</li> <li>• Develop MAAs to extend the hours of operation of cool public facilities in advance of an EHE</li> <li>• Discuss ways to best support the cool public spaces and make them more accessible and inclusive. See Section 7.2.2 Ensure Cool Public Spaces and Designated Cooling Centres are Welcoming to All for potential strategies to consider.</li> <li>• Launch public awareness campaigns to inform the community about extended hours of operation during EHEs</li> <li>• Consider reducing and/or eliminating fees to cool public facilities such as outdoor pools and recreation centres to make it more accessible to low-income individuals and families</li> </ul>
7.3	Implement a Community Partner Engagement Plan	Community partners who interact with heat-vulnerable populations play a vital role during EHEs. Collaborative efforts are needed to raise awareness, educate the public, amplify key messaging, conduct community outreach, and understand the current extreme heat challenges to	<ul style="list-style-type: none"> <li>• Create and maintain an EHE community partner email distribution list</li> <li>• Encourage community partners to:               <ul style="list-style-type: none"> <li>• Develop Extreme Heat Plans</li> <li>• Encourage business continuity planning</li> <li>• Familiarize themselves with the Community Partner Extreme Heat Playbook</li> </ul> </li> <li>• Engage community partners at least 2 – 3 times / year and regularly during an</li> </ul>

		enhance overall community well-being and resilience.	<p>EHE</p> <ul style="list-style-type: none"> <li>• Consider working with community partners to provide residents with a familiar, comfortable, and trusted space for the public to visit and cool themselves down</li> <li>• Research and share helpful strategies such as financial assistance with utility bills during EHEs. See Appendix 15 – Web URLs for Residential Utility Bill Assistance and Energy Rebate links.</li> <li>• Encourage vendors of summer events to: <ul style="list-style-type: none"> <li>• Plan for EHEs and submit Extreme Heat Plans</li> <li>• Cancel or reschedule outdoor events during an EHE</li> </ul> </li> <li>• Consider augmenting the pre-season meeting to include evacuation review for flood season and wildfire season</li> </ul>
7.4	Collaborate with shishálh Nation	Enhance resources, expertise, support, and collective capacity by collaborating with shishálh	<ul style="list-style-type: none"> <li>• Promote meaningful collaboration by actively inviting to shishálh community planning, preparedness, and response meetings</li> <li>• Coordinate cultural safety and sensitivity training for emergency staff and volunteers</li> <li>• Hire an indigenous Cultural Coordinator to assist with the planning and execution of culturally inclusive supports and services during EHEs</li> </ul>
7.5	Continue to Support Public Heat Health Education	Empower the public to proactively reduce extreme heat risks, enhance their preparedness, and take effective action during EHEs	<ul style="list-style-type: none"> <li>• Incorporate existing IH information to create targeted education campaigns</li> <li>• Research and share helpful strategies such as financial assistance for utility bills. See Appendix 15 – Web URLs for residential utility bill and energy rebate links</li> <li>• Develop an effective education campaign, see Section 7.3 Implement a Heat Health Education Campaign</li> </ul>
7.6	Promote a Neighborhood Heat Patrol Program and Heat Buddy Program	Empower residents to an active role in looking out for one another during an EHE	<ul style="list-style-type: none"> <li>• Engage with local Facebook pages to raise awareness about the benefits heat patrol programs and heat buddy programs</li> <li>• Launch public awareness campaigns to inform the community about the programs</li> <li>• Ensure residents have access to heat health check-in and heat buddy program information</li> <li>• Coordinate the Heat Patrol Program and the Heat Buddy Program with other community support programs such as Citizens on Patrol to create a more comprehensive safety network</li> </ul>

7.7	Plan for Competing Priorities	Reduce the impacts of compounding disruptions, maintain the business continuity of the EOC and the regional district to improve overall resilience	<ul style="list-style-type: none"> <li>• Drought and limited clean water supply challenges: <ul style="list-style-type: none"> <li>◦ Identify multiple cool public facilities to accommodate any increase in demand</li> <li>◦ Source bottle water suppliers in advance</li> </ul> </li> <li>• Interface wildfire <ul style="list-style-type: none"> <li>◦</li> </ul> </li> <li>• Poor air quality <ul style="list-style-type: none"> <li>◦</li> </ul> </li> <li>•</li> </ul>
7.8	Improve Transportation Access to Cool Public Spaces and Designated Cooling Centres	Ensure cool public spaces and facilities are accessible to the heat-vulnerable populations	<ul style="list-style-type: none"> <li>• Request a BC Transit handyDART bus through the EMCR EAF process. Be sure to document the extenuating services that support the need for this resource. See Appendix 13 – EMCR Financial Assistance for Heat Emergency Response and Cost Recovery Addendum for more information.</li> <li>• Reduce or eliminate inter-community public transportation fees to help make EHEs more manageable for low-income populations. See Appendix 13 – EMCR Financial Assistance for Heat Emergency Response and Cost Recovery Addendum for more information and Section 5.2.2.3 Poverty for more information regarding the number of Sunshine Coast residents experiencing financial challenges.</li> </ul>
7.9	Distribute Drinking Water	Ensure heat-vulnerable populations have access to drinking water	<ul style="list-style-type: none"> <li>• Distribute water at pre-identified cool public facilities and designated Cooling Centres as identified in Appendix 13 – EMCR Financial Assistance for Heat Emergency Response and Cost Recovery Addendum.</li> <li>• Consider the need to target at-risk areas and low-income neighborhoods within the community and coordinate water bottle distribution through bylaw enforcement and/or public works vehicles during their patrols.</li> </ul>
7.10	Promote Community Partner-Lead Health (Wellness) Check-ins	Health check-ins can save lives. This strategy is focused on encouraging community partners to engage in health (wellness) check-in activities with the known heat-vulnerable populations they support or interact with.	<ul style="list-style-type: none"> <li>• Engage community partners who interact with or have a mandate to support heat-vulnerable populations in advance. See Section 7.3 Implement a Community Partner Engagement Plan</li> <li>• Encourage community partners to regularly reach out to their members, especially those who may be more isolated during an EHE</li> <li>• Confirm local organizations have a copy of the Community Partner Extreme Heat Playbook</li> </ul>
7.11	Consider Activating	This strategy is an	<ul style="list-style-type: none"> <li>• Coordinate “Just in Time” training for</li> </ul>

	Health (Wellness) Check-ins	<p>additional protective measure to complement the health and wellness check-ins lead by community partners. The goal is to check in on individuals living alone, not able to access cooling resources, and who may not be included in the community partner's awareness</p>	<p>wellness checks for local support organizations in advance of heat season. Consider Search and Rescue organizations as a potential resource. Incremental overtime may be financially supported by EMCR as identified in Appendix 13 - Financial Assistance for Heat Emergency Response and Cost Recovery Addendum</p> <ul style="list-style-type: none"> <li>• Launch a health check-in, neighborhood heat patrol program and heat buddy program awareness campaign</li> <li>• Promote community partner-lead health (wellness) check-ins through an EHE engagement meeting. See Section 7.10 Promote Community Partner-Lead Health (Wellness) Check-ins for more information.</li> </ul>
7.12	Consider Activating an Overnight Cooling Centre	<p>An overnight cooling centre may be necessary when residents are unable to cool their homes overnight to safe temperatures for sleeping</p>	<ul style="list-style-type: none"> <li>• Identify overnight Cooling Centres in advance and consider factors such as location, maximum capacity, space planning, designated areas for privacy and baby care, and cultural sensitivity</li> <li>• Develop poverty-informed communication strategies</li> <li>• Consider utilizing local motels and hotels that have vacancy</li> <li>• Procure overnight cooling centre supplies and services in advance (e.g., beds, bedding, staffing, security, cleaning, first aid, emergency response planning)</li> <li>• Discuss with local community partners and Interior Health Healthy Communities to assess the need for activating an overnight cooling centre.</li> </ul>

## **APPENDIX 9 – SUMMARY OF EXTREME HEAT COMMUNITY PARTNER INFORMATION**

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Community partners who interact with heat-vulnerable populations can be valuable allies during EHEs. They may have a better understanding of local challenges, the ability to raise awareness, educate the public, and conduct outreach.

Community Partners include local agencies, organizations, community groups, and businesses in the Sunshine Coast who have been identified as extreme heat community partners. It is advisable for the SCRD to continue reaching out and involve them in EHE community planning and response activities.

## **APPENDIX 10 – EXTREME HEAT COMMUNITY PARTNER CHECKLISTS**

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The following checklists contained in this appendix are organized by phase/alert and designed to be shared with local community partners:

- » Pre-Planning
- » Level 1 Heat Warning
- » Level 2 Extreme Heat Emergency
- » Post Season Review

# COMMUNITY PARTNER EXTREME HEAT PRE-SEASON CHECKLIST

**TRIGGER: EVERY MARCH 1<sup>ST</sup>**

- Create or review and update your heat response plan and any other relevant heat plans including business continuity plans in consultation with key partners
  - Consider assessing your facilities for vulnerabilities during a heat event
  - Identify clear triggers and heat risk reduction strategies
  - Create/check contingency planning for air-conditioning and power supply in your buildings
- Organize / participate in exercises and forums to discuss and improve individual and collective responses to extreme heat
- Create or review and update your heat outreach plans and communication strategies geared towards any susceptible and high-risk populations that you support
- Ensure that all relevant staff are subscribed to receive relevant alerts (subscribe to Voyent Alert, the [SCRD Facebook page](#), and the [WeatherCAN APP](#))
- As required, participate in coordination calls for situational updates and awareness
- Build heat health awareness for staff and clients
  - Identify and share relevant information sources for your clients who may be at risk of extreme heat and prepare any additional messaging, as needed
  - Order and display heat health communication material in venues, and distribute to strategic teams or employees who interface with the high-risk or susceptible populations identified
  - Encourage clients to identify a heat buddy to check-in with each other during heat events
  - Encourage clients to create a [personal heat preparedness plan](#) using the [PreparedBC Extreme Heat Preparedness Guide](#)
- Compile information regarding, and assess locations of cool public spaces and designated cooling centres (for accessibility, hours, and appropriate spaces for high-risk or susceptible populations)
- Consider long-term planning opportunities to reduce the impacts of extreme heat, for example, greening of property and building design considerations
- Engage staff to identify opportunities to promote heat health and enhance activities to respond to extreme heat
- Identify established and informal networks to connect and engage with indigenous and culturally diverse communities
- Identify established and informal networks to connect and engage with those that may be socially isolated or not connected within the community
- Consider what channels and networks you can establish now with local authority or regional coordination and communication during a heat event
- If your organization serves vulnerable clients, look for opportunities to share targeted information
- If your organization anticipates having outreach capacity during heat events,
  - Develop partnerships with health authorities or other agency partners to collaborate on information sharing for targeting of outreach activities during the events
  - Consider learning about wellness checks (and how to do them) and integrating this into your outreach
- If your organization would like to welcome the public into your facility to cool down, consider creating a "Come inside and cool down" sign to post in a visible location during the heat season

# COMMUNITY PARTNER LEVEL 1 HEAT WARNING CHECKLIST

**TRIGGER:** The ECCC will issue a heat warning through the [weather alerts webpage](#) or the [WeatherCAN app](#) when the following criterion is met:

**Daytime maximum temperatures are Forecasted to reach or exceed 29 °C for 2 consecutive days AND the overnight minimum temperature is ≥16 °C**

- Monitor local weather conditions on the ECCC website, through the [WeatherCAN app](#), or [Twitter](#)
- Review Extreme Heat Pre-Season checklist and implement action items as necessary**
- Release heat warning key messaging via applicable websites, social media, email lists, or mailing lists
- Consider adjusting work schedules to cooler parts of the day as necessary
- Consider rescheduling major events (particularly outdoor events or venues without air conditioning) to cooler times of the day
- Take usual steps to stay cool
- Distribute heat health communication materials and restock as necessary
  - Distribute [Health Canada's Staying Healthy in the Heat Poster](#)
  - Distribute [HealthLink BC Heat-related Illness pdf](#)
- Act in accordance with internal heat response plans for a Heat Warning event
- Seek out opportunities to participate in coordination calls for situational updates and awareness
- Conduct community outreach, focusing on identified susceptible and high-risk populations that your organization or group supports
  - Be mindful of cultural safety
  - Raise awareness about the risks of heat
  - Gather information on outstanding needs
  - Share information about available resources
- Determine if any outstanding needs can be met internally. If not, reach out to the EOC to communicate extenuating needs
- Connect with the SCRD to inform of community needs for establishing cooling centres/shelters that are culturally and socially appropriate for the most susceptible and high-risk individuals you are in contact with
- Share local cooling centre and available resource information through all available communication channels. Consider:
  - Posters, flyers, pamphlets
  - Social Media (e.g., Facebook, Instagram, and Twitter)
  - Phone trees / neighbour check in
  - Websites
  - In person / phone call visits or appointments
- If feasible, inform on potential options for coordinating free transportation for accessing cooling centres
- Provide consistent heat health messages during in person visits and phone calls
- Restock heat health communication materials as needed
- If within scope and capacity, consider establishing temporary cooling spaces
- If your organization would like to welcome the public into your facility to cool down, consider posting a "Come inside and cool down" sign in a visible location

# COMMUNITY PARTNER LEVEL 2 EXTREME HEAT EMERGENCY CHECKLIST

**TRIGGER:** The ECCC will issue a heat warning through the [weather alerts webpage](#) or the [WeatherCAN app](#) when the following criterion is met:

**Heat Warning criteria has been met AND forecast indicates that daily highs will substantially increase day over day for ≥3 consecutive days**

- Monitor local weather conditions on the ECCC website, through the [WeatherCAN app](#), or [Twitter](#)
- Review the Extreme Heat Warning Checklist and implement action items as necessary**
- Act in accordance with internal heat response plans for an Extreme Heat Emergency event
- Participate in coordination calls for situational awareness and to answer or ask questions directly
- If applicable and appropriate, conduct wellness checks for those individuals in your networks that are high risk of severe outcomes
  - Consider multiple times a day, especially in the evening
- As feasible, increase messaging about the dangers of an Extreme Heat Emergency through all available communication channels. Consider:
  - Posters, flyers, pamphlets
  - Social Media (e.g., Facebook, Instagram, and Twitter)
  - Phone trees / Neighbour check-in
  - Websites
  - In person / phone call / visits or appointments
- Cancel or reschedule major events to cooler times of the day or to a venue with air conditioning
- Do **NOT** rely on fans as the primary cooling method. Fans recirculate air and they do not effectively reduce body temperatures.
- If within scope and capacity, consider expanding hours of temporary cooler spaces into the evening and / or overnight
- If your organization would like to welcome the public into your facility to cool down, consider posting a “Come inside and cool down” sign in a visible location
- After determining any outstanding needs that cannot be met internally, reach out to the EOC to communicate extenuating needs

## **COMMUNITY PARTNER POST SEASON REVIEW CHECKLIST**

**TRIGGER:** Mid-September to October, when scheduling enables

- Conduct a debrief with staff and volunteers
- If applicable, consider undertaking local recovery activities, as required
- Consider scheduling an After-Action Review to document lessons learned / observed
- Create a plan to implement any learnings into internal heat response plans / practices
- Connect with community members within your organization's networks about how they are recovering from the heat
- Identify and respond (as feasible) to any new or emerging needs within your organization's networks
- Build on momentum of post-season activities to continue creating a more resilient community with heightened awareness about heat health, community resources and support available during extreme heat events
- Share any insights / learnings / observations with the community EOC

## **APPENDIX 11 – MANAGING HEAT RISK DURING COMMUNICABLE DISEASE EVENTS**

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The following checklist for managing heat risk during a COVID-19 pandemic may be used as a planning tool for managing potential communicable diseases. Note that not all suggestions may be applicable.

The BC Centre for Disease Control also has a document providing guidance for community cooling centres regarding keeping people safe from Covid-19 that may be applicable to managing communicable diseases: <http://www.bccdc.ca/Health-Info-Site/Documents/Guidance-for-Cooling-Centres-COVID-19.pdf>

## PLANNING CHECKLIST

# MANAGING HEAT RISK DURING THE COVID-19 PANDEMIC

This checklist is for local and national authorities coordinating heatwave preparedness and response measures.

It provides a list of measures to consider when adapting heatwave plans and interventions in the context of the COVID-19 outbreak.



**Disclaimer:** The suggestions in this checklist will not be applicable in all contexts. Please review these measures and use the context of your city or locality as a guide to which actions you should implement.

These suggestions focus mainly on heat action measures which may be affected by COVID-19, and may require adaptation to the local context. Interventions that are unlikely to be affected are not listed here. For general heat action guidance see additional resources listed at the end of this document. These ideas are based on existing guidance and peer-reviewed information, as well as expert opinion.



### VULNERABLE GROUPS AND SOCIAL SERVICES

The people who are most vulnerable to hot weather and COVID-19 include older people (over age 65); those with pre-existing medical conditions such as heart disease, respiratory illness or diabetes; those taking certain medications; those who are overweight and obese; those who are marginalized and isolated, including those experiencing homelessness; pregnant women and people wearing personal protective equipment (PPE) in places that are not temperature controlled.

People infected with, or recovering from, COVID-19 are presumed more vulnerable to heat stress, including outdoor workers returning to the workplace.

Vulnerable populations may be in more precarious social and economic conditions due to COVID-19, including from lost wages, increased isolation, and strains or gaps in social networks. This can increase vulnerability to heat risk by limiting healthcare access, transport options, food security and utility access.

- Identify your high risk communities by reviewing where local heat islands occur, and where this may overlap with high incidence or risk of COVID-19.
- Increase the use of [telephone outreach programmes](#) for regular check-ins with the most vulnerable during hot weather to reduce the need for face-to-face interactions due to COVID-19. Social service partners, general practitioners and local authorities can help with setting up a system. If there is a system already in place, consider advertising it to increase enrolment.
- Review plans for in-home safety checks. Ensure the health and safety of outreach staff and volunteers and the people they visit through training and the provision of PPE.
- Coordinate with formal and informal social service systems to identify vulnerable individuals and reach them more effectively with key messages and support.
- Review and expand social safety net programmes to support at-home cooling strategies for the most vulnerable people. For example, energy subsidies could be provided to at-risk households to ensure they can afford home cooling measures.

[See Q&As on social services and vulnerable groups +](#)



## PUBLIC COMMUNICATIONS

- Keep messaging clear and short, use plain language and avoid unnecessary jargon. Appropriate language versions may be necessary to reach high risk communities.
- Mention that COVID-19 transmission does not decrease during hot weather. [Exposure to sun and hot temperatures will increase heat stress and does not prevent or cure COVID-19.](#)
- Adjust standard heatwave messaging to include examples of guidance that can be followed while adhering to physical distancing, including information on changes in access to public spaces and cooling facilities.
- Increase awareness that people infected with, or recovering from, COVID-19 are likely more vulnerable to heat stress.
- Ensure that frontline COVID-19 responders who are in contact with the public are well informed about heatwave risks and convey approved messages to the most vulnerable.
- Identify and address local risk perceptions, myths, and concerns about heatwaves and COVID-19.
- Consider the ways in which heatwave messaging may be received or acted upon differently due to the ongoing COVID-19 pandemic. Proactively address these concerns in public messaging and provide clarity on the mitigating measures that are in place. For example, people may be reluctant to go to cooling centres or to seek emergency medical help, even when critical.
- Use a range of communication channels (newspapers, radio, television, social media, etc.) to maximize the reach of messaging on heatwaves while maintaining physical distancing measures for COVID-19.



## COORDINATION

- Coordinate with relevant authorities and implementing partners in advance of a heatwave to review COVID-19 restrictions, how these impact local heatwave risks and management plans.
- Coordinate with the national meteorological service to align hot weather advisory messages and make any adjustments to advisory thresholds considering additional vulnerabilities due to COVID-19
- Coordinate public messaging across different levels of government to minimize the risk of heatwave messaging contradicting COVID-19 messaging.
- Integrate heat risk planning into ongoing COVID-19 coordination discussions.
- Coordinate with health services and utility providers (see below).



## HEALTH SERVICES

- Prepare health facilities for a surge in admissions in the event of a heatwave, which may be on top of a surge due to COVID-19. Ensure that triage staff can distinguish between hyperthermia and fever.
- Ensure that telehealth systems are prepared to handle an influx of calls about heat stress symptoms and provide at-home cooling advice where possible.
- Deploy mobile cooling units in hospitals and clinics in hospitals and clinics without air-conditioning to reduce heat stress on patients with the respiratory symptoms of COVID-19, and on staff wearing PPE.
- Ensure that critical care facilities – such as hospitals, care homes and retirement villages – have back-up power supplies for critical functions including cooling, refrigeration, as well as water security; test these systems. As there may be delays in the supply chain due to COVID-19, consider ordering critical spare parts to have on standby.
- Mass casualties could result from a combination of COVID-19 and a severe heatwave. [See example good practice.](#)

See Q&As on PPE and heat stress, clinic heat stress, and checklist for family doctors →



## INDOOR COOLING

- Advertise and communicate low-cost, low-tech indoor cooling options, particularly to vulnerable populations, such as closing windows and blinds during the day, creating nighttime cross breezes, drinking cool water before feeling thirsty, and wetting clothing.
- All air conditioning and industrial ventilation systems for both residential and high occupancy buildings should be inspected, maintained, and cleaned regularly to prevent COVID-19 transmission.
- The use of fans is advised where there is only one person in a room. In collective spaces, when several people are present in this space, the use of fans for air circulation/cooling is not advised particularly in spaces with minimal outside air exchange. If fans are used, take steps to minimize air blowing from one person directly at another to reduce the potential spread of any airborne or aerosolized viruses.

See Q&As on low-tech cooling options and air-conditioning/ventilation →



## UTILITIES

- Ensure the providers of life-sustaining utilities (water, energy and internet/communications) do not cut customers' services if they fail to pay their bills.
- Anticipate and prepare for energy demand shifts from commercial and industrial centers to residential centers - as well as the return to commercial and industrial centers as restrictions are lifted.
- Plan for how to continue COVID-19 operations in the event of a heat triggered power-outage that may affect critical services.
- In neighbourhoods with limited access to utilities – such as informal settlements – strategies to increase access to these life-sustaining services should be implemented (for example, installing additional standpipes, delivering safe water by tanker, cooling facilities, etc.)



## OUTDOOR PUBLIC SPACES

- Encourage the use of outdoor cool spaces during hot weather and heatwaves, while respecting local rules to minimize COVID-19 transmission.
- Display signage on physical distancing and enforce where appropriate.
- Identify additional outdoor public spaces that can be used for cooling to reduce crowding and reconsider any exclusionary policies (e.g. opening hours or entrance fees) that may discourage the most vulnerable from accessing the space.
- Increase the availability of outdoor public spaces in dense urban areas. Examples include temporarily closing or limiting vehicle access to certain streets to become pedestrian areas, and installing temporary shade structures.
- Consider extending opening hours of parks and outdoor cool spaces to increase access and limiting opening hours of outdoor open markets during the hottest part of the day.
- Close high-touch structures like playgrounds and exercise equipment to prevent the spread of COVID-19.
- Follow local guidance on the use of swimming pools and recreational waters, while following COVID-19 control measures. [See example local guidance here.](#)
- Handwashing sinks in public toilet facilities and drinking water fountains should remain open and be disinfected frequently (at least once a day.) Hands free technologies are optimal where available.

See Q&As on outdoor cool spaces →



## COOLING CENTRES

- Review the availability of listed cooling centres and check whether they are still willing/able to offer cooling spaces. Assess the need for additional cooling centres to account for reduced occupancy at existing locations.
- Consider physical layout of facilities and needs for separating spaces, clearly marking one-way circulation paths, etc. which increase physical distance.
- Prioritize cooling center access to those who are most vulnerable to extreme heat in the event that demand exceeds occupancy restrictions.
- Collect contact information according to local protocols for all visitors to cooling centres in case of the need for contact tracing.
- Work with health authorities to provide cooling facilities for COVID-19 patients with mild symptoms. Raise awareness of the difference between signs of heat stress and fever.
- Offer voluntary registration for the most vulnerable to receive heatwave check-ins, where systems exist.
- Post signs at entrances and in strategic places at all cooling centres providing guidance on recognizing the symptoms of COVID-19 as well as highlighting the importance of hand hygiene, respiratory hygiene, cough etiquette, and wearing face masks.
- Provide educational materials about COVID-19, as well as the details of mental health and social support resources.
- Ensure that everyone at the cooling centre is wearing a face mask and maintaining a social sufficient space between people (e.g. 1.5-2 metres / 6-10 feet) as locally recommended, unless they are from the same household. Simple face masks should be made available for anybody who needs one.
- Ensure staff and volunteers are equipped with and trained to use appropriate PPE.
- Plan for potential staff sickness absences and cross-train essential staff to ensure continuity of operations.
- Ensure the adequate supply of water for drinking/cooling and handwashing/hygiene.
- Ensure that each cooling centre is frequently cleaned and disinfected to minimize the spread of COVID-19, following local guidelines.

See Q&As on cooling centres and air-conditioning/ventilation →



## WORKFORCE

- Set up internal communication systems to ensure all relevant staff are aware of, and regularly updated on, guidance and risks related to COVID-19 and heat.
- For construction, gardening, delivery, civil protection, and other outdoor workers, consider changing working hours to cooler parts of the day (morning and early evening), introducing shifts and cooling breaks, encouraging hydration by drinking water before service and before feeling thirsty, as well as onsite physical distancing measures to reduce the risk of spreading COVID-19.

## ADDITIONAL RESOURCES

[Heat and COVID-19 Q&A Series](#)  
Global Heat Health Information Network (2020)

[WHO Country & Technical Guidance - Coronavirus disease \(COVID-19\)](#)  
WHO (2020)

[Health advice for hot weather during the COVID-19 outbreak](#)  
WHO (2020)

[Public health advice on preventing health effects of heat](#)  
WHO (2011)

[Heatwaves and Health: Guidance on Warning-System Development](#)  
WHO / WMO (2015)

[Heatwave Guide for Cities](#)  
Red Cross Red Crescent Climate Centre (2019)

## **APPENDIX 12 – EHE GUIDE TO HEALTH (WELLNESS) CHECKS**

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Heat-vulnerable populations can be at a higher risk of experiencing heat-related illness. One way to reduce the public health impacts of EHEs is to check in regularly with susceptible people to see how they are coping. However, not everyone knows who is at most risk, how to recognize heat-related illness, or what to do in risk situations. The following tool from the National Collaborating Centre for Environmental Health (NCCCEH) was designed to help guide people doing heat checks by providing all the key information and guidance in a 5-page package. The tool was co-developed with Dr. Glen Kenny and his heat stress research group at the University of Ottawa.



# Health checks during extreme heat events

A guide for doing in-person or remote health checks

Extreme heat events can lead to dangerous indoor temperatures in homes without functioning air conditioning. Health checks are used to assess how people at high risk of heat-related illness are doing during extreme events. In-person health-checks are best, but a remote health check is better than no health check.

## Rapid risk assessment checklist

This guide has five pages with important information for doing health checks during extreme heat events.

PAGE 1  
Rapid risk assessment checklist

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PAGE 2  
Recognizing and responding to heat-related illness

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PAGE 3  
In-person health checks

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PAGE 4  
Remote health checks

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PAGE 5  
Measuring body and room temperature

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To assess whether someone is at risk, check all the personal factors that apply on the following list. **The more boxes checked, the higher the potential risk.**

<input type="checkbox"/> Older adult (60 years+)	The body's ability to cool itself is impaired as people age.
<input type="checkbox"/> Mental illness or cognitive impairment	Conditions such as schizophrenia, depression, anxiety, and dementia can reduce awareness of heat-related risks.
<input type="checkbox"/> Chronic disease	Chronic diseases such as diabetes, heart disease, respiratory disease, and cancer can limit the body's ability to cool.
<input type="checkbox"/> Living alone or socially isolated	People who live alone or do not have strong social connections are at higher risk because they have fewer people looking out for them.
<input type="checkbox"/> Substance dependency or use	The ability to sense and respond to heat can be affected by use of drugs or alcohol, especially for those who are dependent.
<input type="checkbox"/> Impaired or decreased mobility	People with impaired or reduced mobility might be less able to take protective measures during extreme heat events.
<input type="checkbox"/> Medication use	Some prescription medications for common conditions can cause dehydration and affect the body's ability to cool itself.
<input type="checkbox"/> Poor physical fitness	People who are not engaged in regular physical activity are less able to keep cool in the heat.

## Recognizing and responding to heat-related illness

**Heat-related illness occurs when the body overheats.** It is caused by prolonged exposure to high temperatures, and can be made worse by high humidity. The signs and symptoms of heat-related illness can range from mild to severe and can progress rapidly. If you are unsure, treat it like a life-threatening emergency and start cooling measures.

### Severe heat-related illness

**Severe heat-related illness is a life-threatening emergency.** Act immediately to get help and start emergency cooling measures.

#### Signs and symptoms

Any of the following can be signs of **severe** heat-related illness:

- Fainting or loss of consciousness
- Unusual confusion or disorientation
- Severe nausea and vomiting
- Difficulty speaking
- Unusual coordination problems
- Hot, flushed skin or very pale skin
- Not sweating
- Rapid breathing and faint, rapid heart rate
- Body temperature >39°C (102°F)
- Very low, dark urine output

### Moderate heat-related illness

Moderate heat-related illness can rapidly become severe heat-related illness. Immediate cooling is important to prevent progression.

#### Signs and symptoms

Any of the following can be signs of **moderate** heat-related illness:

- Nausea
- Light-headedness
- Weakness
- Extreme fatigue, malaise
- Very thirsty or dry mouth
- Difficulty swallowing
- Heat rash, unusual swelling, or cramps
- Rapid heart rate
- Body temperature >38°C (100°F)
- Reduced, dark urine output

### Mild heat-related illness

Mild heat-related illness can rapidly become severe heat-related illness. Immediate cooling is important to prevent progression.

#### Signs and symptoms

Any of the following can be signs of **mild** heat-related illness:

- Feeling unwell
- Dizziness
- Headache
- Irritability
- Fatigue
- Thirst
- Skin feels very warm and sweaty
- Increase in resting heart rate
- Reduced urine output



#### Emergency measures

If someone is experiencing severe heat-related illness, **take all the following actions:**

- Call 911 immediately
- Stay with the individual until emergency services arrive
- Move to a cooler area, if possible
- Remove excess clothing
- Have the individual rest comfortably flat on their back facing up or in a semi-upright position and offer water
- Apply cool, wet towels or ice packs around the body, especially to the neck, armpits, and groin, until emergency services arrive

#### Immediate measures for mild to moderate heat-related illness

If someone is experiencing mild to moderate heat-related illness, **take as many of the following cooling actions as possible:**

- Relocate individual to a cooler area
- Remove excess clothing and provide low-level fanning
- Activate air conditioning or open windows in different areas to create a cross-breeze
- Keep the individual resting comfortably flat on their back facing up or in a semi-upright position.
- Encourage sitting upright and drinking water
- Apply cool, wet towels or ice packs around the body, especially to the neck, armpits, and groin
- Call 911 if symptoms persist or get worse





## In-person health checks



Before doing a health check, read page 2 on **Recognizing and responding to heat-related illness**

### What you should have for an IN-PERSON HEALTH CHECK

- This 5-page document, either printed or digital
- Fully charged cell phone for emergency calls
- Information about others to contact if the individual is at risk
- Ear or mouth thermometer for taking body temperature
- Environmental thermometer for taking room temperature
- Wash cloths or towels for soaking in cool water
- Spray bottle
- Bottled water
- Ice packs and extra ziplock bags

### Guidance for in-person health checks

- ▶ Do health checks at least twice daily, because heat-related illness can come on fast. Do one check during the evening hours when it is hottest indoors.
- ▶ When you enter the home, make sure the person is not in immediate distress and can communicate with you. **If someone is in immediate distress or cannot communicate with you, follow emergency measures** (page 2).
- ▶ Assess the situation with your own senses. Does the individual look or seem unwell? Does the environment feel hot? **If someone seems unwell and the environment is hot, take immediate measures to start cooling** (page 2) and alert others to the situation. Ask the individual for emergency contacts if you do not have this information.
- ▶ If you see no immediate risk, consider the rapid risk assessment checklist (page 1). If you do not know the individual well, ask them some questions to help with your risk assessment.
- ▶ Ask the individual about whether they have had any signs and symptoms of heat-related illness (page 2) since their last health check.
- ▶ If possible, use personal and environmental thermometers to help you understand the situation. See table on page 5 for information on measuring temperatures and cooling strategies.
- ▶ If you feel that the situation could become risky, alert others. Ask the individual for emergency contacts if you do not have this information.
- ▶ If you feel confident that the situation is safe, let the individual know when to expect the next health check, if possible.



## Remote health checks



### In-person health checks are best

It is much more difficult to assess how someone is coping with extreme heat during a health check by phone or digital media. However, remote health checks are better than no health checks. **If you cannot get through to the individual for a remote health check, take action.** Call someone who can help to arrange an in-person health check, such as a relative, a neighbour, a friend, or 911.



Before doing a health check, read page 2 on **Recognizing and responding to heat-related illness**

### What you should have for a REMOTE HEALTH CHECK

- This 5-page document, either printed or digital
- Residential address of the individual in case you need to call 911
- Information about others to contact if the individual is at risk
- Some personal information about the individual such as age and general health

### Guidance for remote health checks

- ▶ Do health checks at least twice daily, because heat-related illness can come on fast. Do one check during the evening hours when it is hottest indoors.
- ▶ Start by asking the individual simple questions about themselves and their general wellbeing. Listen carefully to how they respond, considering the signs and symptoms of heat-related illness (page 2).
- ▶ Ask the individual about the general temperature of their home. If they have a thermostat or thermometer, ask them to tell you the current temperature. See table on page 5 for information on indoor temperatures.
- ▶ Ask about how much water or other fluids they have been drinking. Recommend that the individual drink water regularly through all hours of the day.
- ▶ Ask about how they have been sleeping in the heat and what they have been doing to stay cool overnight.
- ▶ Make suggestions for keeping themselves and their home cool. See table on page 5 for information on cooling strategies.
- ▶ If you feel that the situation could become risky, alert others. Ask the individual for emergency contacts if you do not have this information.
- ▶ If you feel confident that the situation is safe, let the individual know when to expect the next health check, if possible.



## Measuring body and room temperature

If you can get information on body temperature or room temperature, it may help you to assess the situation during health checks. Use the following tables to guide you.

### Body temperature



- A normal body temperature is 36.5-37.0°C (97.7-98.6°F).
- A resting body temperature over 38°C (100.4°F) may indicate moderate heat-related illness.
- **A resting body temperature over 39°C (102.2°F) requires immediate emergency attention.**

### Indoor temperature



- Indoor temperatures of 26°C (78.8°F) and below are usually safe.
- Risk of heat-related illness starts to increase at indoor temperatures over 26°C (78.8°F) for susceptible people.
- **Risk of heat-related illness increases significantly at sustained indoor temperatures over 31°C (87.8°F) for susceptible people (page 1).**

### Reducing body temperature

- Take off extra layers of clothing to expose as much skin as possible.
- Have access to cool drinking water and drink regularly, even when not feeling thirsty.
- Prepare damp towels in a plastic bag and put them in the fridge to apply on the body regularly.
- Take cool showers or baths or sit with feet in cool water.
- Fill a spray bottle with cool water for misting.
- Limit physical activity and exposure to the outdoors during the hottest hours.

### Reducing indoor temperatures

- Turn on an air conditioner, if available.
- Turn on fans if the room temperature is below 35°C.
- Move to a cooler space within the home, if safe to do so.
- Draw curtains, shades, or shutters to help block direct sunlight.
- Cover windows with a blanket or cardboard if there are no curtains or shades.
- Close windows during the heat of the day to trap cooler air indoors.
- Open windows overnight or whenever there is a cool breeze, keeping safety in mind.
- Turn off heat-generating devices such as appliances, electronics, lights, etc.



National Collaborating Centre  
for Environmental Health  
Centre de collaboration nationale  
en santé environnementale

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Vancouver, BC V5Z 4R4  
www.nccceh.ca

**APPENDIX 13 – FINANCIAL ASSISTANCE FOR HEAT EMERGENCY  
RESPONSE AND RECOVERY COSTS ADDENDUM**

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Effective Date: June 23, 2022

<b>Financial Assistance for Emergency Response and Recovery Costs Addendum - Eligibility Assessment for Heat Emergency</b>			
<p><i>Task numbers may be requested when Environment and Climate Change Canada issues a Heat Warning or an Extreme Heat Emergency, in support of a community's response. The best way to ensure the eligibility of your expense is to submit an Expense Authorization Form (EAF) to EMBC for approval. The EAF provides the details of the expenditure, its rationale, and an estimate of the total expense for the response activity. Incremental costs will be considered for an extreme heat emergency, a forecasted extreme heat emergency, or heat warning where actions are taken as outlined in the BC Provincial Heat Alert and Response System (HARS).</i></p>			
<b>Expense Item</b>	<b>Response Item</b>	<b>Eligible</b>	<b>Not Eligible</b>
Bottled Water	Materials	<ul style="list-style-type: none"> <li>Bottled water made available at community cooling centre facilities</li> <li>Bottled water distributed during health and wellness checks where water is not readily available</li> </ul>	<ul style="list-style-type: none"> <li>Bottled water purchased for distribution to private residences or locations that have water readily available</li> </ul>
Staff Overtime	Wages and Overtime	<ul style="list-style-type: none"> <li>Incremental overtime for current staff to keep civic facilities open as cooling centres outside of normal operating hours</li> <li>Incremental costs for the wages of temporary auxiliary staff hired under contract specifically to support a designated cooling centre facility</li> </ul>	<ul style="list-style-type: none"> <li>Overtime wages that cannot be attributed to event</li> <li>Regular wages and benefits of employees</li> <li>Base operating costs, such as salaries or regular wages of employees, Compensatory Time Off (CTO) or banked overtime</li> <li>Excessive overtime and benefit rate payments</li> </ul>
Day and night facility for use as Cooling Centres  Cooling Centres are not Group Lodging Facilities	Facility Rental	<ul style="list-style-type: none"> <li>Rental of a non-local authority or First Nation facility for the provision of a cooling centre</li> <li>Incremental janitorial and utilities costs</li> <li>Incremental security costs</li> </ul>	<ul style="list-style-type: none"> <li>Rental of community-owned facility or loss of use charges</li> </ul>
Transportation to and from Cooling Centres	Emergency Response Measures  Community Partner incremental costs need to be run through contracting Local Government or First Nation	<ul style="list-style-type: none"> <li>Commercial transportation of community members to and from cooling centers as needed in communities where no reliable public transportation exists or deemed to be not appropriate by a First Nation or Local Authority</li> <li>Mileage reimbursement at Provincial government rates for vehicles operated by a First Nation and local authority for the transportation of community to and from cooling centres where no reliable transportation exists</li> <li>Use of Taxis will be considered on a case-by-case basis</li> </ul>	<ul style="list-style-type: none"> <li>Transportation costs where other reasonable alternatives exist</li> </ul>
Emergency Services	Fire Services	<ul style="list-style-type: none"> <li>Incremental costs to fire services responding to increased heat related medical calls, specifically, operational response to assist with supporting medical emergencies</li> </ul>	<ul style="list-style-type: none"> <li>Routine operations supporting medical response</li> </ul>

Messaging	Emergency Response Measures	<ul style="list-style-type: none"> <li>Print, radio, and social media messages to local population amplifying ECCC and/or HEMBC messaging</li> </ul>	<ul style="list-style-type: none"> <li>Messaging unrelated to heat wave response and/or unapproved by ECCC and/or HEMBC</li> </ul>
Support for wellness checks	Materials Wages or overtime	<ul style="list-style-type: none"> <li>Incremental overtime for Local and First Nations Government staff to provide "Just in Time" training for wellness checks</li> <li>Incremental costs for Local and First Nations Governments to provide additional materials, additional transport costs, or tools to do wellness checks (e.g., thermometer and bottles of water)</li> <li>When working under the request of a First Nation or Local Government, incremental costs incurred by a Community Partner or NG Organization</li> </ul>	<ul style="list-style-type: none"> <li>Training that can be planned for in advance of a heatwave</li> </ul>
Community Partner organization requested by a First Nation or Local Government to operate cooling centers	Wages or overtime for organizations contracted by First Nations and Local Governments  *Costs should be run through contracting Local Government or First Nation	<ul style="list-style-type: none"> <li>Incremental overtime for organizational staff keeping facilities open as cooling centres outside of normal operating hours</li> <li>Incremental janitorial and utilities costs</li> </ul>	<ul style="list-style-type: none"> <li>Regular salaries or straight time for current staff; benefits and taxes; and the incremental payroll expenses</li> </ul>
Cultural Supports	Community Navigator	<ul style="list-style-type: none"> <li>Incremental costs for Community Navigator(s) connecting public with supports provided by First Nations Health Authority (FNHA), First Nations Emergency Services Society (FNESS), Indigenous Services Canada (ISC), and/or other Cultural organizations</li> </ul>	
Cultural Supports	Cultural Activity Locations Support(CALS)	<ul style="list-style-type: none"> <li>Incremental costs for activities aimed at providing culturally appropriate services at cooling centres</li> <li>Incremental costs associated with a dedicated space within or close to a cooling centre, or when requested by a community, a separate designated gathering space where culturally appropriate services can be provided</li> </ul>	<ul style="list-style-type: none"> <li>Rental of a community-owned facility or loss of use charges</li> </ul>
Cooling device rental for Cooling Centres		<ul style="list-style-type: none"> <li>Cost of cooling device rentals</li> <li>Incremental utility expenses</li> </ul>	<ul style="list-style-type: none"> <li>Cooling device costs submitted in the absence of a prior approved EAF</li> </ul>
Basic snacks and bottled water at day and night facilities	Materials	<ul style="list-style-type: none"> <li>Snacks for the general public at community cooling centre facilities</li> <li>For example, fresh fruit and vegetables, muffins, yogurt, or comfort snacks such as donuts, popcorn</li> <li>Culturally appropriate snacks as determined by a First Nation or Local Authority</li> </ul>	<ul style="list-style-type: none"> <li>Food purchased for distribution to private residences</li> <li>Meals provided at day and night facilities</li> </ul>

## APPENDIX 14 – SUMMARY OF BEST PRACTICES

	SECTION	TITLE	BEST PRACTICE / KEY INFORMATION
	3.1.1	Plan Evaluation Strategies	Engage people with lived experience of vulnerability to extreme heat to provide feedback on heat risk reduction strategies and communications
	3.1.2	Hotwashes and Debriefs	Conduct a debrief every time the EOC is activated and a hotwash after every operational period
	4.1	Legislation to Manage Extreme Heat Events	A declaration of a SOLE is <u>NOT</u> required for a local authority to activate its Emergency Operations Centre (EOC) and to engage in heat warning and extreme heat emergency planning and response activities.
	4.4	BC Heat Alert Response System (HARS)	Always monitor weather events and forecasts to anticipate potential EHEs even though official notification will come through ECCC
	4.4.2	Level 2 Extreme Heat Emergency for the Southeast Region	Early summer extreme heat events may pose a greater public risk as populations may be less prepared and have less time acclimatize
	4.5	Organizational Chart	This is for guidance only. An EOC activation may not always be required and depending on the situation, not all functions may be required, and one person can be responsible for more than one function
	4.5	Organizational Chart	Consider activating a Liaison Officer, Risk Management Officer, Information Officer, and an advance planning unit for effective extreme heat planning
	5.2.2	2021 Statistics Canada Census Age and Socioeconomic Data	See the Community Information Annexes for all community specific Statistics Canada Census and vulnerability information.
	5.2.2	2021 Statistics Canada Census Age and Socioeconomic Data	Use the Canada census data to help inform the community heat vulnerability assessment as well as develop the targeted public education campaign
	5.2.2.1	Children Under 5 years old and Adults 65+ years old	32.9% of the residents in the Sunshine Coast are 65 years of age or older
	5.6.3.1.1	Public Transportation Services	The SCRCD has a free bus program to assist individuals on a low income. Approximately 20,000 tickets are distributed per year and are available at certain service providers.
	5.7	Potential Competing Priorities	Utilize resources such as BC Emergency Management System (BCEMS) to help prioritize threats
	5.7	Potential Competing Priorities	Heat poses a higher risk to health safety than poor air quality
	6.1.3	A Lack of Air Conditioning in Residential Homes and NGO Buildings	Indoor temperature was the greatest predictor in heat-related deaths during the 2021 heat dome (BC Housing, 2022)
	7.2	Pre-identify Cool Public Spaces and Evaluate Designated Cooling Centres	Establish a standardized symbol and signage for community cooling centres and post at the entrance to community facilities.  <b>COME INSIDE AND COOL DOWN</b>

			The Sunshine Coast Regional District
	7.2.1	Extend Hours to Pre-Existing Cool Public Spaces	Indoor temperatures of 26 °C or higher is dangerous for vulnerable people (PreparedBC, 2022, p.9)
	7.2.2	Ensure Cool Public Spaces and Designated Cooling Centres are Welcoming to All	Obtain pre-authorization for service and resource expenses. Not all expenses may be considered eligible for cost reimbursement by EMCR. See Appendix 13 – EMCR Financial Assistance for Heat Emergency Response and Cost Recovery Addendum for more information.
	7.2.2	Ensure Cool Public Spaces and Designated Cooling Centres are Welcoming to All	Incremental costs for cultural supports such as for Community Navigator(s), activities aimed at providing culturally appropriate services at cooling centres, and incremental costs associated with a dedicated space within a cooling centre or separate designated gathering space to provide culturally appropriate services are EMCR eligible emergency heat expenses
	7.6	Promote a Neighborhood Heat Patrol Program & Heat Buddy Program	Heat Health Check-In Information <a href="#">NCEH Health Checks During Extreme Heat Events Guide Vancouver Coastal Health Heat Check-in Support Framework for Non-Government Organizations</a>
	7.11	Consider activating Health Check-ins	The BC Coroner's Report concluded 56% of 2021 heat dome decedents lived alone
	7.11	Consider Activating Health Check-ins	18.1% of the residents in the CSRD live alone. This data helps to inform decision makers regarding the number of residents who may be potentially vulnerable to social isolation
	7.11	Consider Activating Health Check-ins	The BC Coroner's Report concluded half of the 2021 heat dome decedents were found at their place of residence during a wellness check
	7.11	Consider Activating Health Check-ins	Health check-ins should be performed as often as possible, at least two times during the heat of the day and at least once during the evening when it is warmest indoors.
	7.12	Consider activating an Overnight Cooling Centre	The BC Coroner's Report concluded 93% of decedents did not have air conditioning present in their residence

## APPENDIX 15 - WEBSITE URLS

Please ensure the website URLs are checked as part of the regular plan maintenance.

### Situation Awareness

Resource	Website URL
BC Air Quality Index – North Okanagan	<a href="https://www.env.gov.bc.ca/epd/bcairquality/data/aqhi.html?id=AQHI-NORTH_OKANAGAN">https://www.env.gov.bc.ca/epd/bcairquality/data/aqhi.html?id=AQHI-NORTH_OKANAGAN</a>
BCCDC Heat Impacts Prediction System (BCHIPS)	<a href="http://maps.bccdc.ca/bchips/">http://maps.bccdc.ca/bchips/</a>
Drive BC, MOTI	<a href="https://drivebc.ca/">https://drivebc.ca/</a>
ECCC Seasonal-specific weather alerts	<a href="https://weather.gc.ca/warnings/index_e.html">https://weather.gc.ca/warnings/index_e.html</a>
ECCC Weather Alert Notification App	<a href="https://www.canada.ca/en/environment-climate-change/services/weather-general-tools-resources/weathercan.html">https://www.canada.ca/en/environment-climate-change/services/weather-general-tools-resources/weathercan.html</a>
Government of Canada – Public Weather Alerts for BC	<a href="https://weather.gc.ca/warnings/index_e.html?prov=bc">https://weather.gc.ca/warnings/index_e.html?prov=bc</a>
Government of Canada Air Quality Health Index	<a href="https://weather.gc.ca/airquality/pages/index_e.html">https://weather.gc.ca/airquality/pages/index_e.html</a>
Wildfire Activity, Wildfire Services	<a href="https://www2.gov.bc.ca/gov/content/safety/wildfire-status/wildfire-situation">https://www2.gov.bc.ca/gov/content/safety/wildfire-status/wildfire-situation</a>

### Heat Funding and Capacity Building

Resource	Website URL
Union of B.C. Municipalities Community Emergency Preparedness Fund	<a href="https://www.ubcm.ca/cepf">https://www.ubcm.ca/cepf</a>
Infrastructure Canada: Disaster Mitigation and Adaptation Fund	<a href="https://www.infrastructure.gc.ca/dmaf-faac/faq-eng.html - eligibility">https://www.infrastructure.gc.ca/dmaf-faac/faq-eng.html - eligibility</a>
Investing in Canada Plan	<a href="https://www.infrastructure.gc.ca/plan/about-invest-a-propos-eng.html">https://www.infrastructure.gc.ca/plan/about-invest-a-propos-eng.html</a>

### Heat Management Planning – BC Centre For Disease Control (BCCDC)

Resource	Website URL
BCCDC – Developing a Municipal Heat management plan: A Guide for Medium-sized Municipalities	<a href="http://www.bccdc.ca/resource-gallery/Documents/Guidelines_and_Forms/Guidelines_and_Manuals/Health-Environment/Developing_a_municipal_heat_management_plan.pdf">http://www.bccdc.ca/resource-gallery/Documents/Guidelines_and_Forms/Guidelines_and_Manuals/Health-Environment/Developing_a_municipal_heat_management_plan.pdf</a>
BCCDC – Municipal Heat management planning in BC, Canada (pdf)	<a href="http://www.bccdc.ca/resource-gallery/Documents/Guidelines_and_Forms/Guidelines_and_Manuals/Health-Environment/BC_Municipal_Heat_management_planning.pdf">http://www.bccdc.ca/resource-gallery/Documents/Guidelines_and_Forms/Guidelines_and_Manuals/Health-Environment/BC_Municipal_Heat_management_planning.pdf</a>
BCCDC – Prepare for an Extreme Heat Events (pdf)	<a href="https://towardtheheart.com/assets/uploads/1655849929xSsG942qkDGjOA7r9KlImm0p65AQA3zfjraFsM.pdf">https://towardtheheart.com/assets/uploads/1655849929xSsG942qkDGjOA7r9KlImm0p65AQA3zfjraFsM.pdf</a>
BCCDC – Prepare for an Extreme Heat Event: A Guide for Health and Service Providers (pdf)	<a href="https://towardtheheart.com/assets/uploads/1655849587taBIBnH79XmpXCHKhLIhuD9VZUV9jfAL6PPnte9.pdf">https://towardtheheart.com/assets/uploads/1655849587taBIBnH79XmpXCHKhLIhuD9VZUV9jfAL6PPnte9.pdf</a>
BCCDC – Preparing for Heat Events	<a href="http://www.bccdc.ca/health-info/prevention-public-health/preparing-for-heat-events">http://www.bccdc.ca/health-info/prevention-public-health/preparing-for-heat-events</a>

## Heat Management Planning – Vancouver Coastal Health Authority

Resource	Website URL
VCHA Extreme Heat Resources	<a href="https://www.vch.ca/en/extreme-heat">https://www.vch.ca/en/extreme-heat</a>
VCHA Wildfire Smoke Safety Information	<a href="https://www.vch.ca/en/wildfire-smoke">https://www.vch.ca/en/wildfire-smoke</a>
VCHA Childcare Facilities and Wildfire Smoke	<a href="https://www.vch.ca/en/document-library/child-care-smoke">https://www.vch.ca/en/document-library/child-care-smoke</a>

## Heat Management Planning – Ministry of Health / EMCR

Resource	Website URL
Ministry of Health / EMCR: Extreme Heat: Preparedness for Provincial Ministries and Agencies	<a href="https://www2.gov.bc.ca/assets/gov/public-safety-and-emergency-services/emergency-preparedness-response-recovery/provincial-emergency-planning/extreme_heat_preparedness_for_ministries_and_agencies.pdf">https://www2.gov.bc.ca/assets/gov/public-safety-and-emergency-services/emergency-preparedness-response-recovery/provincial-emergency-planning/extreme_heat_preparedness_for_ministries_and_agencies.pdf</a>

## Heat Response Resources – BC Housing

Resource	Website URL
BC Housing Extreme Heat and Wildfire Smoke	<a href="https://www.bchousing.org/projects-partners/extreme-heat">https://www.bchousing.org/projects-partners/extreme-heat</a>
BC Housing – Heat and Pets: Hot Weather Do’s and Don’ts	<a href="https://www.bchousing.org/sites/default/files/media/documents/Heat-and-Pets-Dos-and-Donts.pdf">https://www.bchousing.org/sites/default/files/media/documents/Heat-and-Pets-Dos-and-Donts.pdf</a>
BC Housing – Heat and Pets: Heatstroke and Heat Exhaustion	<a href="https://www.bchousing.org/sites/default/files/media/documents/Heat-and-Pets-HeatStroke-Heat-Exhaustion.pdf">https://www.bchousing.org/sites/default/files/media/documents/Heat-and-Pets-HeatStroke-Heat-Exhaustion.pdf</a>
BC Housing - Planning and Communicating with Tenants	<a href="https://www.bchousing.org/projects-partners/extreme-heat/tenants">https://www.bchousing.org/projects-partners/extreme-heat/tenants</a>
BC Housing - Tips to Beat the Heat (pdf)	<a href="https://www.bchousing.org/sites/default/files/media/documents/tips-to-beat-the-heat-english.pdf">https://www.bchousing.org/sites/default/files/media/documents/tips-to-beat-the-heat-english.pdf</a>
BC Housing - Wellness Check-in Card for Tenants (pdf)	<a href="https://www.bchousing.org/sites/default/files/media/documents/wellness-card-for-tenants.pdf">https://www.bchousing.org/sites/default/files/media/documents/wellness-card-for-tenants.pdf</a>
BC Provincial Heat Alert and Response System Tool Kit (pdf)	<a href="http://www.bccdc.ca/resource-gallery/Documents/Guidelines_and_Forms/Guidelines_and_Manuals/Health-Environment/Provincial-Heat-Alerting-Response-System.pdf">http://www.bccdc.ca/resource-gallery/Documents/Guidelines_and_Forms/Guidelines_and_Manuals/Health-Environment/Provincial-Heat-Alerting-Response-System.pdf</a>
Fraser Health – Extreme Heat and People Experiencing Homelessness	<a href="https://www.fraserhealth.ca/health-topics-a-to-z/sun-safety/extreme-heat-and-people-experiencing-homelessness--a-primer-for-community-organizations-.Y1yISRDmJr4">https://www.fraserhealth.ca/health-topics-a-to-z/sun-safety/extreme-heat-and-people-experiencing-homelessness--a-primer-for-community-organizations-.Y1yISRDmJr4</a>

## Heat Response Resources – Canada Safety Council

Resource	Website URL
Canada Safety Council – Hot Car Warning	<a href="https://canadasafetycouncil.org/hot-car-warning/">https://canadasafetycouncil.org/hot-car-warning/</a>

## Heat Response Resources – Government of Canada

Resource	Website URL
Government of Canada – Staying Healthy in the Heat Fact Sheet	<a href="https://www.canada.ca/en/health-canada/services/publications/healthy-living/fact-sheet-staying-healthy-heat.html">https://www.canada.ca/en/health-canada/services/publications/healthy-living/fact-sheet-staying-healthy-heat.html</a>
Government of Canada – Sun Safety	<a href="https://www.canada.ca/en/health-canada/services/sun-safety.html">https://www.canada.ca/en/health-canada/services/sun-safety.html</a>

## Heat Response Resources – Health Canada

Resource	Website URL
Health Canada – Heat Alert and Response System to Protect Health: Best Practices Guidebook	<a href="https://www.canada.ca/en/health-canada/services/environmental-workplace-health/reports-publications/climate-change-health/heat-alert-response-systems-protect-health-best-practices-guidebook.html">https://www.canada.ca/en/health-canada/services/environmental-workplace-health/reports-publications/climate-change-health/heat-alert-response-systems-protect-health-best-practices-guidebook.html</a>
Health Canada – Acute Care During Extreme Heat – Recommendations and Information for Health Care Workers (pdf)	<a href="https://www.canada.ca/content/dam/hc-sc/migration/hc-sc/ewh-semt/alt_formats/hecs-sesc/pdf/pubs/climat/actue_care-soins_actifs/actue_care-soins_sante-eng.pdf">https://www.canada.ca/content/dam/hc-sc/migration/hc-sc/ewh-semt/alt_formats/hecs-sesc/pdf/pubs/climat/actue_care-soins_actifs/actue_care-soins_sante-eng.pdf</a>
Health Canada – Adapting to Extreme Heat Events: Guidelines for Assessing Health Vulnerability (pdf)	<a href="https://www.canada.ca/content/dam/hc-sc/migration/hc-sc/ewh-semt/alt_formats/hecs-sesc/pdf/pubs/climat/adapt/adapt-eng.pdf">https://www.canada.ca/content/dam/hc-sc/migration/hc-sc/ewh-semt/alt_formats/hecs-sesc/pdf/pubs/climat/adapt/adapt-eng.pdf</a>
Health Canada – Communicating the Health Risks of Extreme Heat Events	<a href="https://www.canada.ca/en/health-canada/services/environmental-workplace-health/reports-publications/climate-change-health/communicating-health-risks-extreme-heat-events-toolkit-public-health-emergency-management-officials-health-canada-2011.html">https://www.canada.ca/en/health-canada/services/environmental-workplace-health/reports-publications/climate-change-health/communicating-health-risks-extreme-heat-events-toolkit-public-health-emergency-management-officials-health-canada-2011.html</a>
Health Canada – Staying Healthy in the Heat (pdf)	<a href="https://www.canada.ca/content/dam/hc-sc/documents/services/publications/healthy-living/fact-sheet-staying-healthy-heat/fact-sheet-staying-healthy-heat.pdf">https://www.canada.ca/content/dam/hc-sc/documents/services/publications/healthy-living/fact-sheet-staying-healthy-heat/fact-sheet-staying-healthy-heat.pdf</a>
Health Canada Ordering System	<a href="https://www.hc-publication-sc.hc-sc.gc.ca/paccb-dgapcc/cmcd-dcmc/webpubs.nsf/7?ReadForm&amp;cat=00065&amp;lang=eng&amp;">https://www.hc-publication-sc.hc-sc.gc.ca/paccb-dgapcc/cmcd-dcmc/webpubs.nsf/7?ReadForm&amp;cat=00065&amp;lang=eng&amp;</a>

## Heat Response Resources – HealthLinkBC

Resource	Website URL
HealthLinkBC – Beat the Heat (pdf available in multiple languages)	<a href="https://www.healthlinkbc.ca/more/health-features/beat-heat">https://www.healthlinkbc.ca/more/health-features/beat-heat</a>
HealthLinkBC – Heat-related Illness (pdf available in multiple languages)	<a href="https://www.healthlinkbc.ca/healthlinkbc-files/heat-related-illness">https://www.healthlinkbc.ca/healthlinkbc-files/heat-related-illness</a>
HealthLinkBC – Medicines that Increase the Chance for a Heat-Related Illness	<a href="https://www.healthlinkbc.ca/health-topics/medicines-increase-chance-heat-related-illness">https://www.healthlinkbc.ca/health-topics/medicines-increase-chance-heat-related-illness</a>
HealthLinkBC – Safety for the Perinatal Population During Extreme Heat (pdf available in multiple languages)	<a href="https://www.healthlinkbc.ca/healthlinkbc-files/safety-perinatal-population-during-extreme-heat">https://www.healthlinkbc.ca/healthlinkbc-files/safety-perinatal-population-during-extreme-heat</a>
HealthLinkBC – Safety for Infants and Young Children During Extreme Heat (pdf available in multiple languages)	<a href="https://www.healthlinkbc.ca/healthlinkbc-files/safety-infants-and-young-children-during-extreme-heat">https://www.healthlinkbc.ca/healthlinkbc-files/safety-infants-and-young-children-during-extreme-heat</a>
HealthLinkBC – Sun Safety for Children (pdf available in multiple languages)	<a href="https://www.healthlinkbc.ca/healthlinkbc-files/sun-safety-children">https://www.healthlinkbc.ca/healthlinkbc-files/sun-safety-children</a>

## Heat Response Resources – OSHA

Resource	Website URL
OSHA – Heat	<a href="https://www.osha.gov/heat-exposure">https://www.osha.gov/heat-exposure</a>
OSHA – Quick Card – Protecting Workers from Heat Stress	<a href="https://www.osha.gov/sites/default/files/publications/osha3154.pdf">https://www.osha.gov/sites/default/files/publications/osha3154.pdf</a>

## Heat Response Resources – PreparedBC

Resource	Website URL
PreparedBC – Extreme Heat webpage	<a href="https://www2.gov.bc.ca/gov/content/safety/emergency-management/preparedbc/know-your-hazards/severe-weather/extreme-heat">https://www2.gov.bc.ca/gov/content/safety/emergency-management/preparedbc/know-your-hazards/severe-weather/extreme-heat</a>
PreparedBC – Extreme Heat Preparedness Guide (pdf)	<a href="https://www2.gov.bc.ca/assets/gov/public-safety-and-emergency-services/emergency-preparedness-response-recovery/embc/preparedbc/preparedbc-guides/preparedbc_extreme_heat_guide.pdf">https://www2.gov.bc.ca/assets/gov/public-safety-and-emergency-services/emergency-preparedness-response-recovery/embc/preparedbc/preparedbc-guides/preparedbc_extreme_heat_guide.pdf</a>
WorkSafe BC – Heat stress	<a href="https://www.worksafebc.com/en/health-safety/hazards-exposures/heat-stress">https://www.worksafebc.com/en/health-safety/hazards-exposures/heat-stress</a>

## Financial Assistance

Resource	Website URL
EMBC Financial Assistance for Emergency Response and Recovery Costs – A guide for BC Local Authorities and First Nations (revised January 2008)	<a href="https://www2.gov.bc.ca/assets/gov/public-safety-and-emergency-services/emergency-preparedness-response-recovery/embc/dfa/financial_assistance_guide.pdf">https://www2.gov.bc.ca/assets/gov/public-safety-and-emergency-services/emergency-preparedness-response-recovery/embc/dfa/financial_assistance_guide.pdf</a>

## Media Resources

Resource	Website URL
Extreme heat social media package	<a href="https://www2.gov.bc.ca/gov/content/safety/emergency-management/education-programs-toolkits/social-media-toolkits/extreme-heat?keyword=extreme&amp;keyword=heat&amp;keyword=risk">https://www2.gov.bc.ca/gov/content/safety/emergency-management/education-programs-toolkits/social-media-toolkits/extreme-heat?keyword=extreme&amp;keyword=heat&amp;keyword=risk</a>

## Miscellaneous

Resource	Website URL
Rampulla J. (2004). Hyperthermia & Heat Stroke: Heat-related conditions	<a href="https://www.bhchp.org/sites/default/files/BHCHPManual/pdf_files/Part2_PDF/Hyperthermia.pdf">https://www.bhchp.org/sites/default/files/BHCHPManual/pdf_files/Part2_PDF/Hyperthermia.pdf</a>
Climate Atlas of Canada	<a href="https://climateatlas.ca/">https://climateatlas.ca/</a>
National Collaborating Centre for Environmental Health – Health Checks During Extreme Heat Events (pdfs available in multiple languages)	<a href="https://ncceh.ca/documents/guide/health-checks-during-extreme-heat-events">https://ncceh.ca/documents/guide/health-checks-during-extreme-heat-events</a>
Office of the Seniors Advocate BC – Hot Weather Preparedness Press Release (pdf)	<a href="https://www.seniorsadvocatebc.ca/app/uploads/sites/4/2022/07/NR-BKG-Heat-Wave-July-22-Final.pdf">https://www.seniorsadvocatebc.ca/app/uploads/sites/4/2022/07/NR-BKG-Heat-Wave-July-22-Final.pdf</a>
Global Heat Health Information	<a href="http://www.ghhin.org/assets/Checklist-COVID-HEAT-final.pdf">http://www.ghhin.org/assets/Checklist-COVID-HEAT-final.pdf</a>

Network – Planning Checklist: Managing Heat Risk During The Covid-19 Pandemic	
BC Centre for Disease Control – Guidance for Community Cooling Centres During B.C.’s Restart Plan	<a href="http://www.bccdc.ca/Health-Info-Site/Documents/Guidance-for-Cooling-Centres-COVID-19.pdf">http://www.bccdc.ca/Health-Info-Site/Documents/Guidance-for-Cooling-Centres-COVID-19.pdf</a>

## Public Education / Personal Preparedness

Extreme Heat Preparedness Guide	<a href="https://www2.gov.bc.ca/assets/gov/public-safety-and-emergency-services/emergency-preparedness-response-recovery/embc/preparedbc/preparedbc-guides/preparedbc_extreme_heat_guide.pdf">https://www2.gov.bc.ca/assets/gov/public-safety-and-emergency-services/emergency-preparedness-response-recovery/embc/preparedbc/preparedbc-guides/preparedbc_extreme_heat_guide.pdf</a>
Household Preparedness Guide	<a href="https://www2.gov.bc.ca/assets/gov/public-safety-and-emergency-services/emergency-preparedness-response-recovery/embc/preparedbc/preparedbc-guides/preparedbc_extreme_heat_guide.pdf">https://www2.gov.bc.ca/assets/gov/public-safety-and-emergency-services/emergency-preparedness-response-recovery/embc/preparedbc/preparedbc-guides/preparedbc_extreme_heat_guide.pdf</a>
Fill-in-the-blanks Home Emergency Plan	<a href="https://www2.gov.bc.ca/assets/gov/public-safety-and-emergency-services/emergency-preparedness-response-recovery/embc/preparedbc/preparedbc-guides/preparedbc_household_plan.pdf">https://www2.gov.bc.ca/assets/gov/public-safety-and-emergency-services/emergency-preparedness-response-recovery/embc/preparedbc/preparedbc-guides/preparedbc_household_plan.pdf</a>
BC Hydro Heating and Cooling Tips and Technologies	<a href="https://www.bchydro.com/content/BCHydro/en/powersmart/residential/tips-technologies.html?param=heating">https://www.bchydro.com/content/BCHydro/en/powersmart/residential/tips-technologies.html?param=heating</a>
Clean BC Better Homes – Apply for Rebates	<a href="https://www.betterhomesbc.ca/applications/">https://www.betterhomesbc.ca/applications/</a>

## Non-Government Organizations / Personal Preparedness

Residential Care Heat Preparedness	<a href="https://www.islandhealth.ca/sites/default/files/community-care-facilities-licensing/residential-care-bulletin-spring-2022.pdf">https://www.islandhealth.ca/sites/default/files/community-care-facilities-licensing/residential-care-bulletin-spring-2022.pdf</a>
NCCEH Health Checks During Extreme Heat Events	<a href="https://ncceh.ca/documents/guide/health-checks-during-extreme-heat-events">https://ncceh.ca/documents/guide/health-checks-during-extreme-heat-events</a>
Vancouver Coastal Health: Heat Check-in Support Framework for Non-governmental Organizations	<a href="https://www.vch.ca/sites/default/files/import/documents/Heat-check-in-support-framework.pdf">https://www.vch.ca/sites/default/files/import/documents/Heat-check-in-support-framework.pdf</a>

## Residential Utility Bill Financial Assistance

BC Hydro Customer Crisis Fund and How to Apply	<a href="https://app.bchydro.com/accounts-billing/bill-payment/ways-to-pay/customer-crisis-fund.html">https://app.bchydro.com/accounts-billing/bill-payment/ways-to-pay/customer-crisis-fund.html</a>
BC Housing – Rental Assistance Program	<a href="https://www.bchousing.org/housing-assistance/rental-assistance-programs/RAP">https://www.bchousing.org/housing-assistance/rental-assistance-programs/RAP</a>

**Residential Energy Rebates** - or google "British Columbia energy rebates" for current rebates available

BC Hydro Rebates for Energy-Efficient Products	<a href="https://www.bchydro.com/powersmart/residential/rebates-programs/product-rebates.html">https://www.bchydro.com/powersmart/residential/rebates-programs/product-rebates.html</a>
BC Hydro Rebates for Home Renovations	<a href="https://www.bchydro.com/powersmart/residential/rebates-programs/home-renovation.html?gclid=Cj0KCOjwqP2pBhDMARIsAJ00CzrH1upV1HPTvfC-iVZTzExh7r-Waq1h85mDKjVd7E1ijxkejP-Sx_IaAri2EALw_wcB">https://www.bchydro.com/powersmart/residential/rebates-programs/home-renovation.html?gclid=Cj0KCOjwqP2pBhDMARIsAJ00CzrH1upV1HPTvfC-iVZTzExh7r-Waq1h85mDKjVd7E1ijxkejP-Sx_IaAri2EALw_wcB</a>
BC Hydro Residential Rebates and Free Programs	<a href="https://www.bchydro.com/powersmart/residential/rebates-programs.html?gclid=Cj0KCOjwqP2pBhDMARIsAJ00Czrj0RzrslSHHhSsjNIBRXjg9QVZFhpCbDseG09k7ibFVBVab0XTIcgaAs-IEALw_wcB">https://www.bchydro.com/powersmart/residential/rebates-programs.html?gclid=Cj0KCOjwqP2pBhDMARIsAJ00Czrj0RzrslSHHhSsjNIBRXjg9QVZFhpCbDseG09k7ibFVBVab0XTIcgaAs-IEALw_wcB</a>
CleanBC Better Homes Energy Conservation Assistance Program	<a href="https://www.betterhomesbc.ca/rebates/energy-conservation-assistance-program/">https://www.betterhomesbc.ca/rebates/energy-conservation-assistance-program/</a>
Fortis Rebates and Offers	<a href="https://www.fortisbc.com/rebates-and-energy-savings/rebates-and-offers?l=">https://www.fortisbc.com/rebates-and-energy-savings/rebates-and-offers?l=</a>
Government of Canada Greener Homes Grant	<a href="https://natural-resources.canada.ca/energy-efficiency/homes/canada-greener-homes-initiative/canada-greener-homes-grant/canada-greener-homes-grant/23441">https://natural-resources.canada.ca/energy-efficiency/homes/canada-greener-homes-initiative/canada-greener-homes-grant/canada-greener-homes-grant/23441</a>

## APPENDIX 16 – LIST OF ACRONYMS

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BCEHS	British Columbia Emergency Health Services ( <i>formerly BC Ambulance Service</i> )
BCCDC	British Columbia Centre for Disease Control
BC HEAT	British Columbia Health Effects of Anomalous Temperatures
CSP	Clinical Safety Plan (BCEHS activity)
ECC	Emergency Coordination Centre
ECCC	Environment and Climate Change Canada
EDMA	Emergency Disaster Management Act
EHE	Extreme Heat Event
EMCR	Emergency Management and Climate Readiness
EOC	Emergency Operations Centre
EPA	Emergency Program Act
ESS	Emergency Support Services ( <i>formerly Emergency Social Services</i> )
DEOC	Department Emergency Operations Centre
FNESS	First Nations Emergency Services Society
FNHA	First Nations Health Authority
HECC	Ministry of Health Emergency Coordination Centre
HEMBC	Health Emergency Management British Columbia
HRVA	Hazard, Risk, Vulnerability Assessment
ISC	Indigenous Services Canada
MoECC	Ministry of Environment and Climate Change
PECC	Provincial Emergency Coordination Centre
PHA	Public Health Act
PREOC	Provincial Regional Emergency Operations Centre
RCMP	Royal Canadian Mounted Police
SCRD	Sunshine Coast Regional District
UHI	Urban Heat Island
VHA	Vancouver Health Authority

## APPENDIX 17 – LIST OF TERMINOLOGY

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Business Continuity	A process that identifies the steps required to maintain critical services, viable continuity, and recovery strategies to minimize any potential losses because of an emergency or event.
Cool Public Space	A pre-existing facility or outdoor space that provides an opportunity for individuals to cool down and engage in a recreation, entertainment, or social activity during extreme heat events. This space includes recreation centres, libraries, pools, or malls.
Critical Infrastructure	Processes, systems, facilities, technologies, networks, assets, and services essential to the health, safety, security, or economic well-being of a community; most often associated with transportation, communications, community water delivery, and energy.
Damage Assessment	A determination of the effects of the incident on humans; on physical, operational, economic characteristics; and on the environment.
Designated Cooling Centre	A pre-identified air-conditioned facility, activated by the municipality during extreme heat events, providing individuals with an opportunity to cool down, hydrate, and seek refuge from the heat during the day.
Disaster	Event that causes great damage or loss.
Emergency	Sudden, urgent, usually unexpected occurrence or event requiring immediate action.
Emergency Operations Centre	A central command and control unit / service that plans and supports site level response activities.
Exercise	A process to assess, train, practice, test and improve performance of recovery or continuity of an organization's system.
Extreme Heat Emergency (EHE)	A weather event where the heat warning criteria has been met and the weather forecast indicates that daily highs will substantially increase day-over-day for 3 or more consecutive days. This may occur 1 – 2 times per decade.
Event	Occurrence of a particular set of circumstances.
Hazard	A potential source of harm, or a situation with a potential for causing harm, that has a capacity to produce an adverse effect to things of value including human injury, damage to health, property, or the environment
Heat cramps	A condition caused by salt imbalance resulting from a failure to replace salt through excessive sweating. Symptoms include sharp muscle pains.
Heat edema	A condition where heat causes swelling in people who are not regularly exposed to heat. Symptoms include noticeable swelling in the ankles, feet, and hands.
Heat exhaustion	A serious type of heat illness because of body heat overload. Symptoms may include a core body temperature of >40 °C, complete or partial loss of consciousness and/or reduced mental ability. There are 2 types of heat stroke: <ul style="list-style-type: none"> <li>- Classic = accompanied by little or no sweating, usually occurring in children who are chronically ill or older adults.</li> <li>- Exertional = accompanied by an increase in body temperature because of strenuous exercise or occupational exposure in combination with environmental heat, and where sweating is usually</li> </ul>

	present.
Heat rash	A condition caused by inflammation of clogged sweat glands. Symptoms include tiny red spots on the skin which may give a prickling sensation.
Heat stroke	A heat illness caused by excessive loss of water and salt. Symptoms may include dizziness, nausea, headache, diarrhea, muscle cramps, heavy sweating, and weakness.
Heat warning (SE Region)	A weather statement issued when two or more consecutive days of daytime maximum temperatures are expected to meet 35 °C or warmer and nighttime minimum temperatures are expected to fall to 18 °C or warmer. This may occur 1 – 3 times per season.
Heatwave	An extended period: more than 3 consecutive days where temperatures for a given location are relatively high such that there is an unacceptable level of health effects, including increased mortality. Factors that play a role in the magnitude of a heatwave include humidity, windspeed, nighttime temperatures, and regional variations in relative extreme temperatures.
Impact	The evaluated magnitude or severity of a consequence (e.g., physical, social, or environmental) from a particular hazard event
Incident	An event that might be, or could lead to, an operational interruption, disruption, loss, emergency, or crisis.
Mitigation	Activities taken to reduce the impacts from an EHE.
Overnight Cooling Centre	A pre-identified facility that provides individuals who are unable to adequately cool their residence in the evenings, a safe place to cool down and rest.
Pre-heat Warning	A weather statement that <i>may</i> be issued by the ECCC communicating the potential of a heat warning a few days in advance.
Prevention	Activities taken to minimize the risks of an EHE.
Response	Activities taken to support residents and organizations who are challenged by the extreme heat conditions.
Resiliency	The ability to prepare for and adapt to changing conditions as well as withstand and recover rapidly from disruptions.
Risk	Takes into consideration the likelihood of a hazard occurring and the severity of the potential impacts to things of value such as health, property, environment, and socioeconomics.
Threat	A potential cause of an unwanted incident, which may result in harm to individuals, a system or organization, the environment, or the community.
Vulnerable	Describes people, property, infrastructure, industry, resources, environment, and systems that may be more likely to be impacted by a particular threat or may lack preparedness resulting in a slower response to a disaster.

# ANNEX A: Lower Sunshine Coast

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**Table A-1** The Sunshine Coast Vulnerability Summary

Vulnerability Factors	Sunshine Coast Regional District (SCRD)
<b>Known Heat-Vulnerable Populations Statistics Canada Census 2021</b>	
Adults ≥65 years	10,695
Children under 5 years	1,110
Residents Living Alone	4,960
Single Parent Families	1,205
Poverty Rate (LIM-AT) for the SCRD	12.6%
Poverty Rate (LIM-AT) for Seniors ≥ 65 years	13.6%
Indigenous Population	7.2%
Recent Immigrants (2016 - 2021)	460
Residents without knowledge of French or English	110
Residents working in occupations vulnerable to EHEs*	

2021 Population: 32,170

**Table A-2** SCRD Electoral Areas Vulnerability Summaries

Vulnerability Factors	District of Sechelt	Town of Gibsons	shíshálh Nation	Area A: Egmont / Pender Harbour	Area B: Halfmoon Bay	Area D: Roberts Creek	Area E: Elphinstone	Area F: West Howe Sound
Population, 2021	10,847	4,758	744	3,039	2,969	3,523	3,883	2,407
<b>Known Heat-Vulnerable Populations (Statistics Canada Census 2021)</b>								
Adults ≥65 years	3,975	2,975	175	1,220	940	995	1,005	735
Children under 5 years	370	325	25	90	105	145	140	85
Residents Living Alone	1,780	1,480	125	550	395	430	435	360
Single Parent Families	380	405	60	85	80	155	135	85
Poverty Rate	12%	10.7%	20.8%	16.8%	4.5%	11.8%	10.4%	11.1%
Poverty Rate for Seniors ≥ 65 years	13.5%	12%	24%	16.4%	3.2%	11.8%	10.8%	10.4%
Indigenous Population	4.9%	5.8%	63.4%	10.9%	6.6%	4.4%	5.9%	4.5%
Recent Immigrants (2016 – 2021)	200	135	0	30	30	35	50	55
Residents without knowledge of French or English	60	20	0	15	5	10	5	5
Residents working in occupations vulnerable to EHEs*	220	920	90	510	395	495	420	305
<b>Known Heat-Vulnerable Populations / Locations (Community Partner Engagement)</b> (+ indicates presence of population or location and - indicates absence of population or location)								
Unhoused Populations	Unhoused population numbers can fluctuate throughout seasons, but consideration should be given to most current available data.							
Tourists and Foreign Workers	+	+	+	+	+	+	+	+
Childcare Facilities	+	+	+	-	+	+	+	+
Assisted Living / Care Homes	+	+	+	-	-	-	-	-
Supportive Housing	+	+	+	-	-	-	+	-
Multi-Storied, Multi-Unit Buildings (built 2006 or earlier)	+	+	-	-	-	-	-	-
RV Parks and / or Mobile Home Parks	+	-	+	+	+	-	+	+
<b>Heat Risk Reduction Resources Available (+ increases vulnerability and - decreases vulnerability)</b>								
Local Cool Public Facilities	+	+	TBD	+	+	+	+	+
Local Designated Cooling Centres	+	+	-	+	-	-	-	-
Lake / Creek Access	+	+	TBD	+	+	+	-	+
Shaded Outdoor Parks	+	+	-	+	+	+	+	+
Public Beach Access	+	+	+	+	+	+	+	+
Public Transportation	+	+	+	-	-	+	+	+
Local Health Services	+	+	+	+	-	-	-	-
Community Outreach Services (confirmed)	+	+	TBD	-	-	-	-	-
<b>Potential Competing Priorities (+ increases vulnerability and - decreases vulnerability)</b>								

Outdoor Summer Events	+	+	+	+	+	+	+	+
Interface Wildfire	+	-	+	+	+	+	+	+
Drought	+	+	+	+	+	+	+	+
Poor Air Quality	+	+	+	+	+	+	+	+

*\*Occupations include Trades, transport and equipment operators and related occupations, Natural resources, agriculture, and related occupations*

**Table A-3** Known Heat-Vulnerable Locations

See Quick Start Guide for detailed information on heat vulnerable population locations.

**Table A-4** Summary of Outdoor Events During the Heat Season

DATES	EVENT NAME	COMMUNITY	DETAILS
April - Oct	Davis Bay Farmer's Market	District of Sechelt	
April - Oct	Sechelt Farmer's Market and Artisan's Market	District of Sechelt	Largest outdoor market on the Sunshine Coast with over 60 vendors
May	Hike for Hospice	District of Sechelt	
May	Salmon Release Festival	District of Sechelt	
May – Sept	Drag Racing	District of Sechelt	Street races in May, Aug, and Sept.
May	Attack of Danger Bay	Pender Harbour	5-day longboarding racing event at Pender Harbour
May	Pender Harbour May Day	Pender Harbour	Madeira Park
June	Syiyaya Days	District of Sechelt	Partnership between District of Sechelt and the shíshálh Nation. Begins June 21 (National Indigenous Peoples Day) and wraps up July 1 (Canada Day). Potluck, cultural events, workshops, tours
June	Pender Harbour Blues Festival	Pender Harbour	
June	Egmont Day	Pender Harbour	
June	Gibsons Landing Jazz Festival	Town of Gibsons	
June - August	Gibsons Night Market	Town of Gibsons	Food, crafts, and activities.
June 21	National Indigenous Peoples Day	District of Sechelt	
June	World Ocean's Day Festival	District of Sechelt	Various activities celebrating oceans. Include on site (outdoor) activities and screenings or talks.
July	Davis Bay Sandcastle Competition	District of Sechelt	Entertainment, food vendors
July	Garden Bay Sailing Club	Pender Harbour	Malaspina Regatta
July	Pender Harbour Days	Pender Harbour	Weekend event
July - August	Sechelt Summer Music Series	District of Sechelt	
August long weekend	Rogue Arts Festival	District of Sechelt	Clarke farm
August	Backwoods Jam	Sechelt	Coast Gravity Park
August	Hackett Park Artisan Fair	District of Sechelt	
August	Pender Harbour Rod Run and Show n' Shine	Pender Harbour	3-day event; parade, show, and drag race

August	Sleepy Hollow Rod Run	District of Sechelt	Madeira Park
August	Creek Daze	Robert Creek	
September	Music in the Landing	Town of Gibsons	

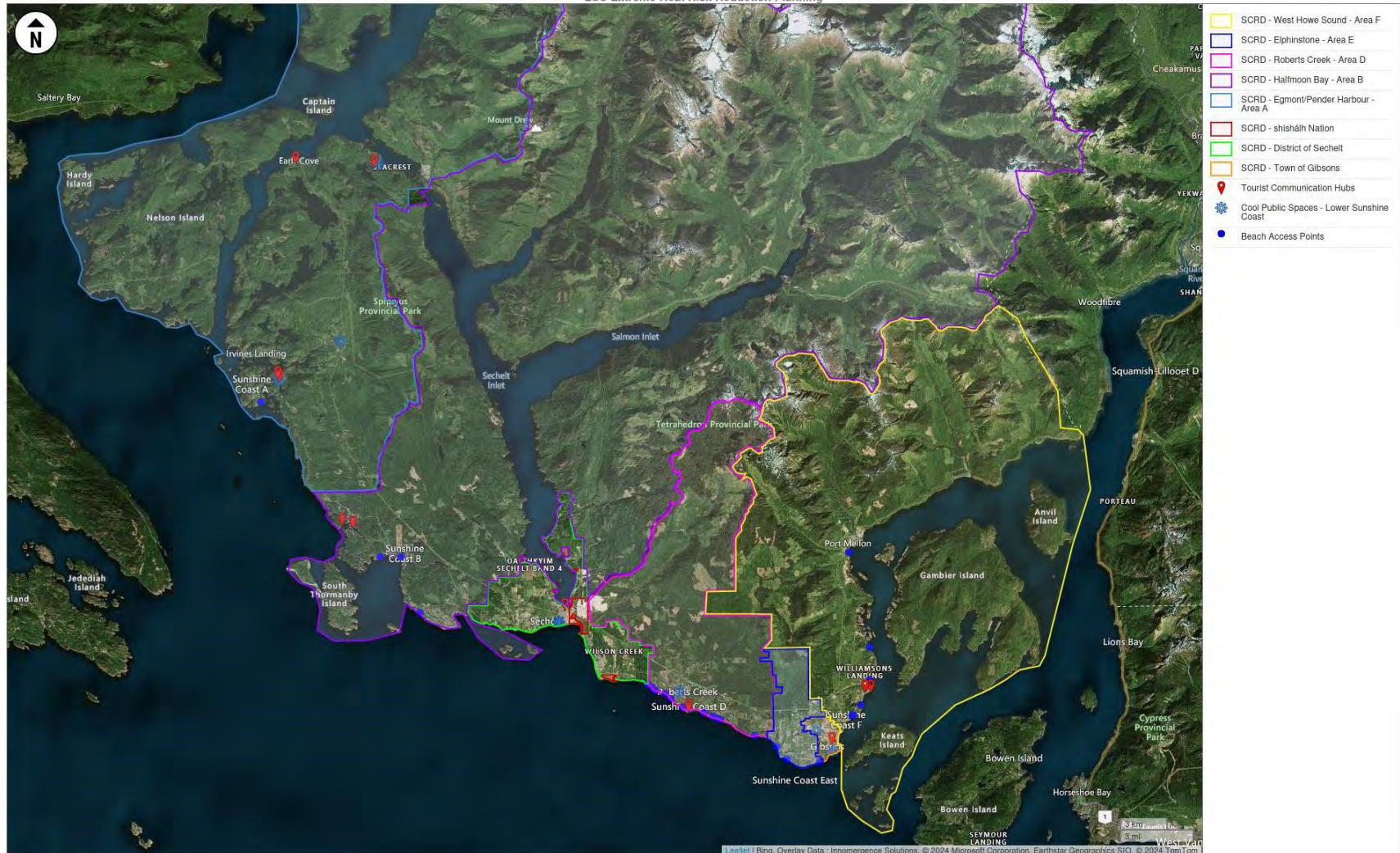


Figure A-1 Sunshine Coast Extreme Heat Risk Reduction Planning Map

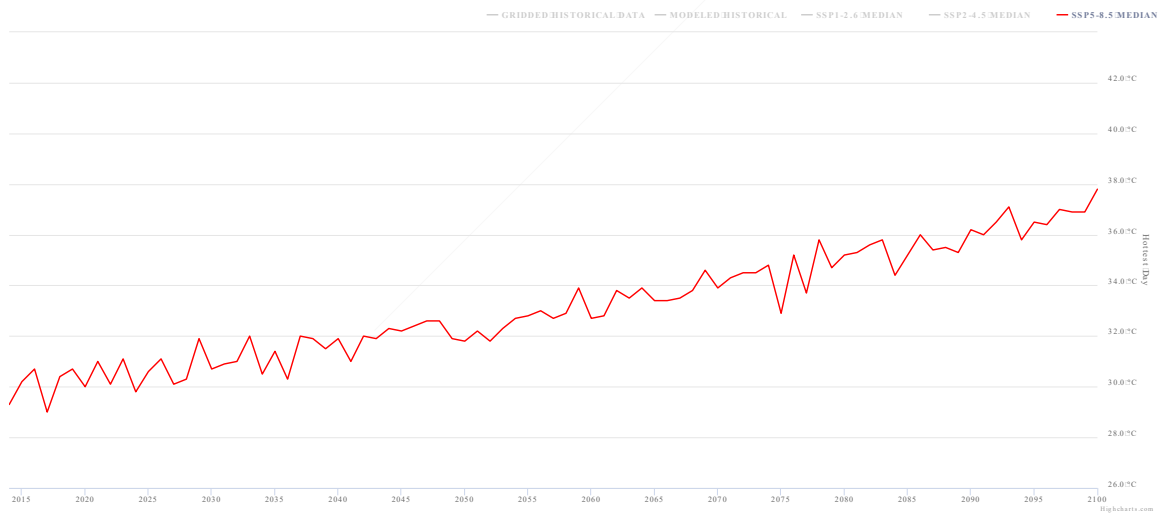
# ANNEX B: District of Sechelt

## 1. Summary of Area

POPULATION (2021 CENSUS)	# OF DWELLINGS (OCCUPIED PRIVATE)	AREA	ADDITIONAL NEIGHBOURHOOD INFORMATION
10,847	5,128	39 sq. km	<ul style="list-style-type: none"> <li>• Village of Sechelt</li> <li>• Selma Park</li> <li>• Davis Bay</li> <li>• Wilson Creek</li> <li>• West Sechelt</li> <li>• East and West Porpoise Bay</li> <li>• Sandy Hook</li> <li>• Tuwanek</li> </ul>

## 2. Projected Median Hottest Temperatures Based on a High Carbon Emission Scenario, SSP5-8.5

PERIOD	HOTTEST TEMPERATURE MEDIAN (°C)	HOTTEST TEMPERATURE RANGE (°C)
1971 - 2000	28.8 °C	28.3 °C - 29.3 °C
1991 - 2020	29.7 °C	29.1 °C - 30.1 °C
2051 - 2080	33.3 °C	32.3 °C - 36.1 °C
2071 - 2100	35.5 °C	33.2 °C - 38.5 °C



### **3. Heat Response Community Partner Information**

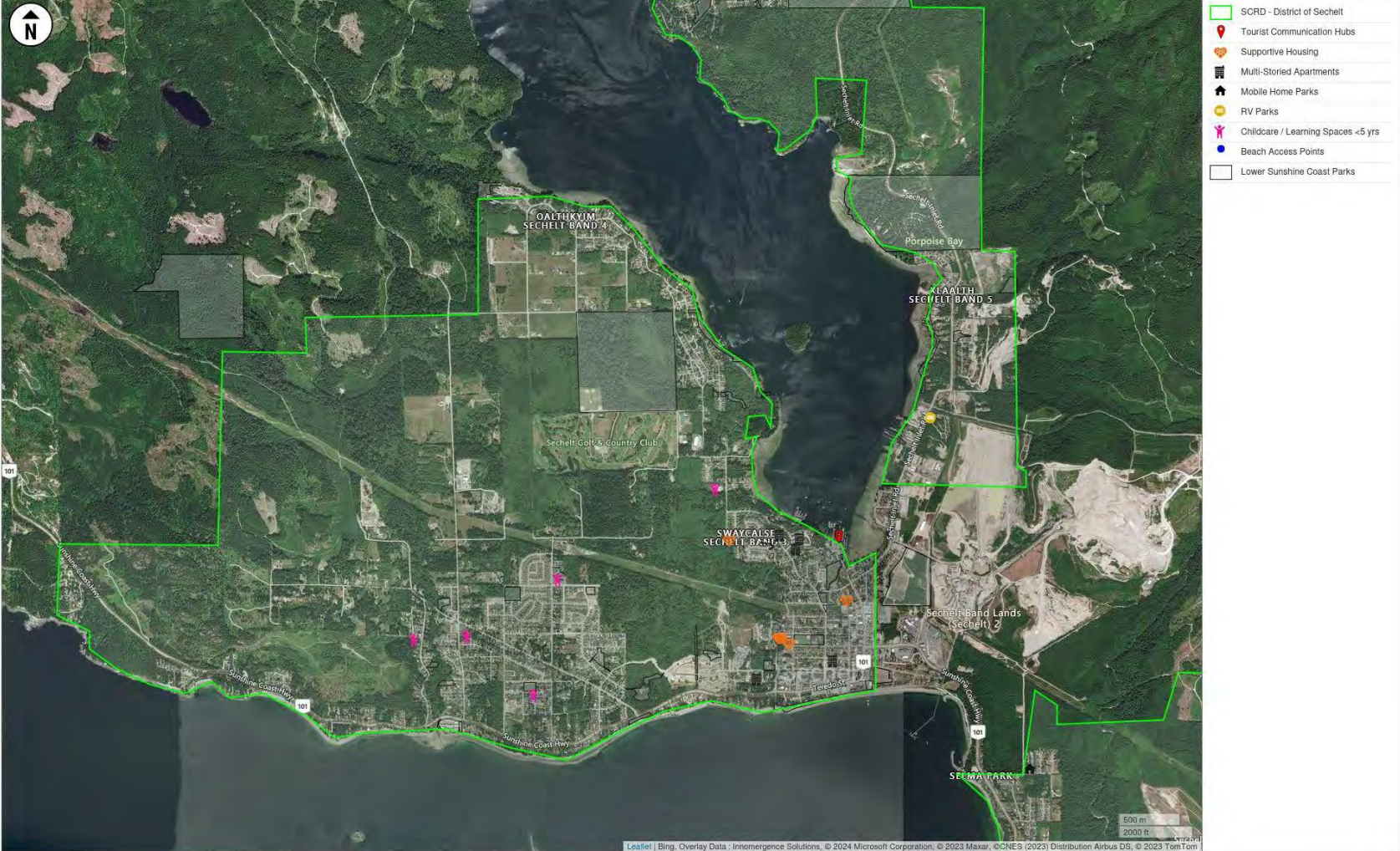
*\*For up-to-date contact information, please see Quick Start Guide.*

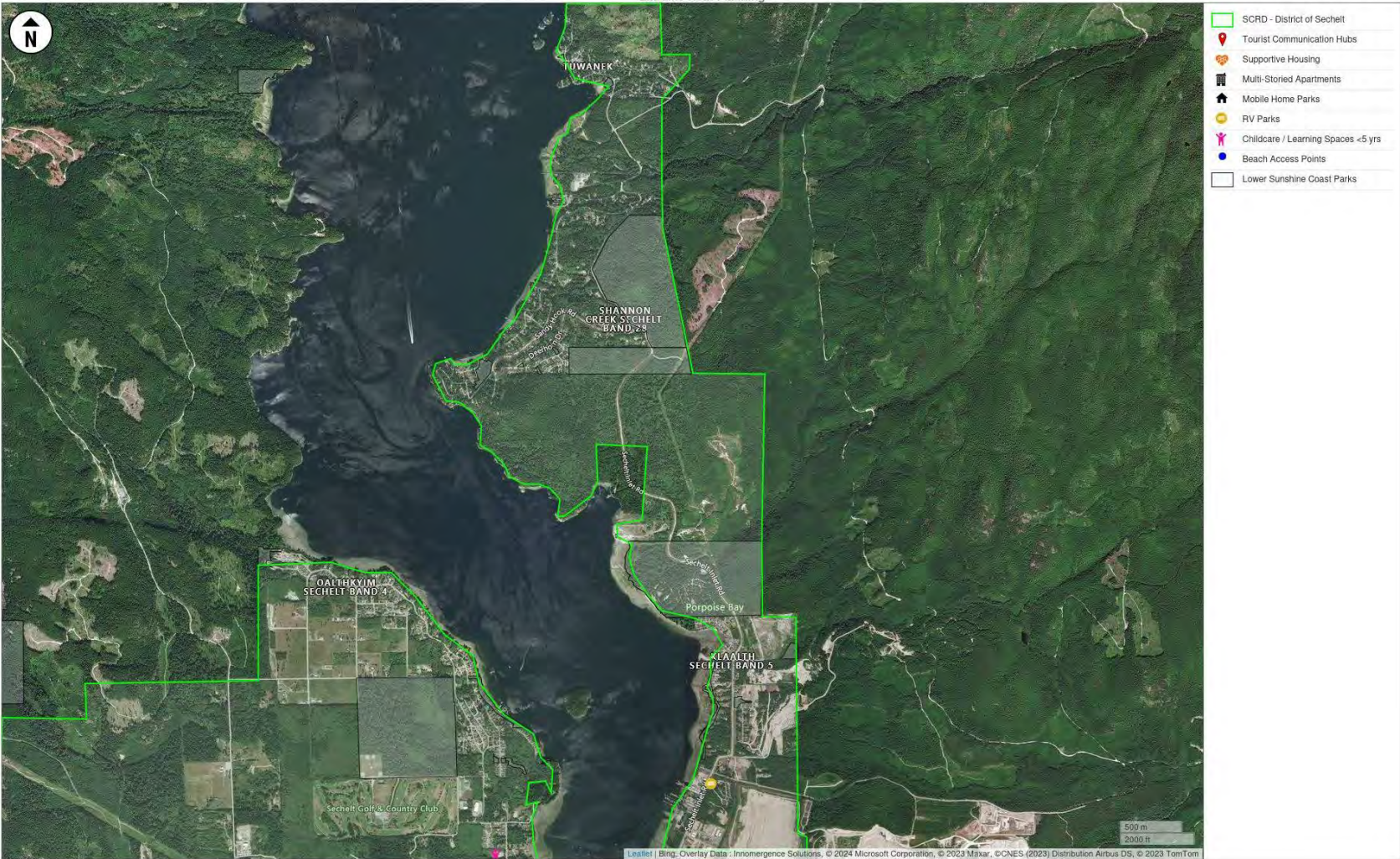
# 4. Extreme Heat Risk Planning Maps

Created by: SAFER

Extreme Heat Planning

January 16 2024 2:17 PM







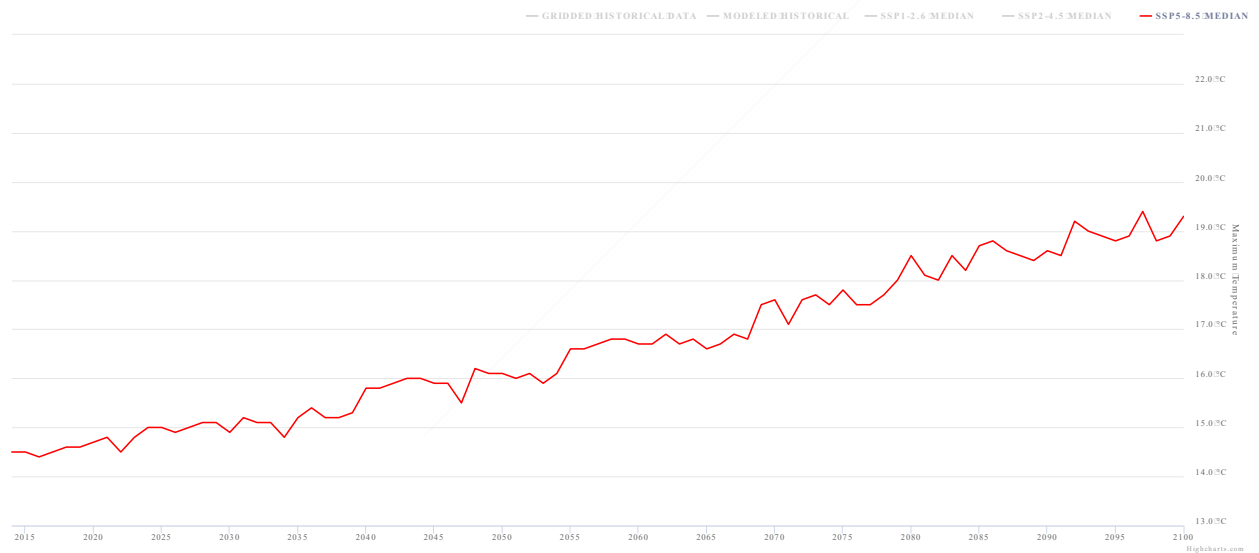
# ANNEX C: Town of Gibsons

## 1. Area

POPULATION (2021 CENSUS)	# OF DWELLINGS (OCCUPIED PRIVATE)	AREA	ADDITIONAL NEIGHBOURHOOD INFORMATION
4,758	2,282	4.33 sq. km	<ul style="list-style-type: none"> <li>Upper Gibsons commercial area and light industrial area</li> <li>Lower Gibsons retail, wharf, seaside walk</li> </ul>

## 2. Projected Median Hottest Temperatures for the Town of Gibsons Based on a High Carbon Emission Scenario, SSP5-8.5

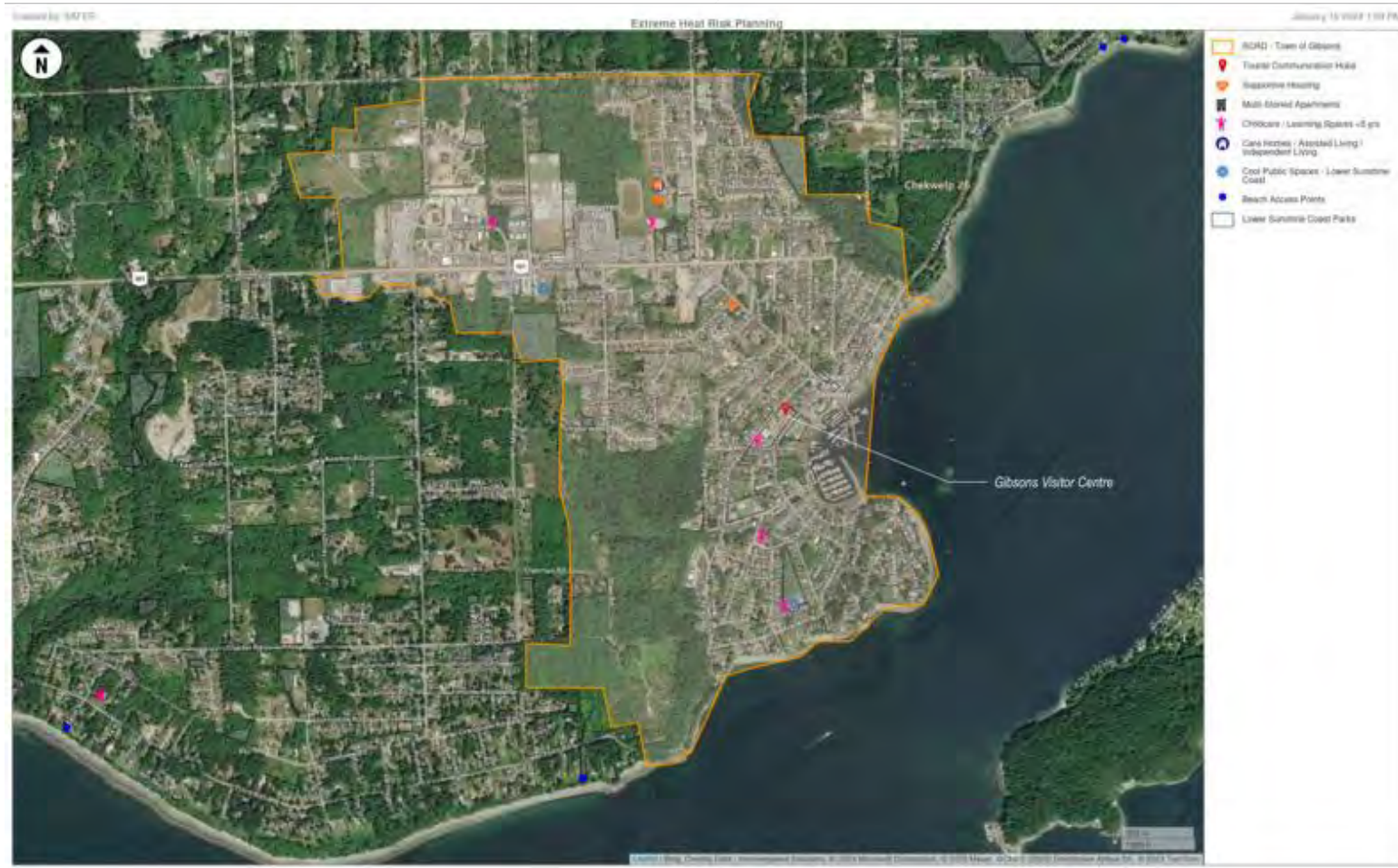
PERIOD	HOTTEST TEMPERATURE MEDIAN (°C)	HOTTEST TEMPERATURE RANGE (°C)
1971 – 2000	28.8 °C	28.3 °C – 29.3 °C
1991 – 2020	29.7 °C	29.0 °C – 30.1 °C
2051 – 2080	33.3 °C	32.2 °C – 36.2 °C
2071 – 2100	35.4 °C	33.1 °C – 38.6 °C



### **3. Heat Response Community Partner Information**

*\*For up-to-date contact information, please see Quick Start Guide.*

#### 4. Extreme Heat Risk Planning Map



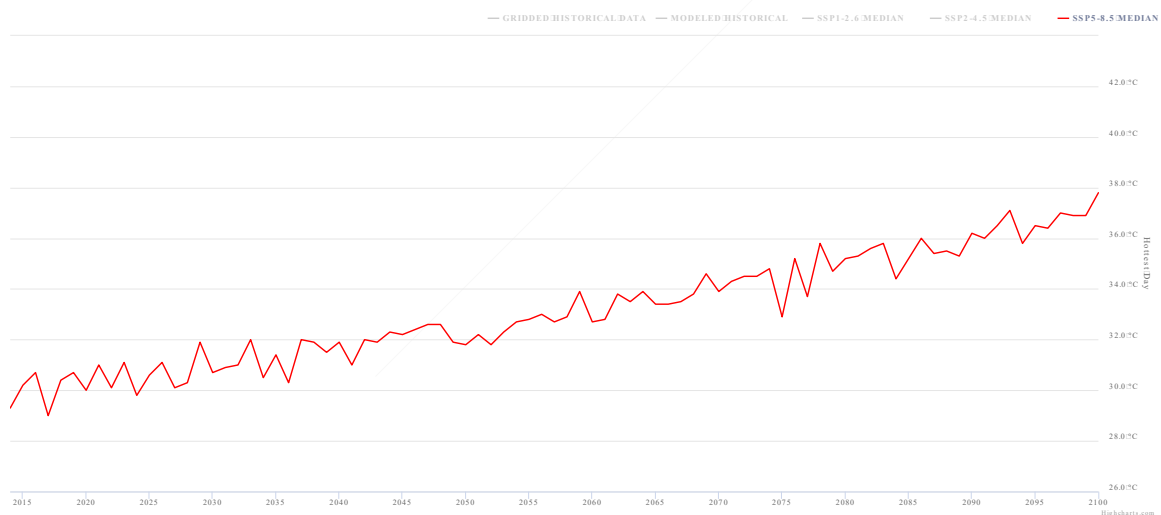
# ANNEX D: shíshalh Nation Government District

## 1. Area

POPULATION (2021 CENSUS)	# OF DWELLINGS (OCCUPIED PRIVATE)	AREA	ADDITIONAL INFORMATION
765	335	10.81 sq. km	<ul style="list-style-type: none"> <li>sNGD holds jurisdiction over its lands and exercises authority to provide services and education to residents</li> <li>Independent self-governing body</li> </ul>

## 2. Projected Median Hottest Temperatures for shíshalh Nation Government District Based on a High Carbon Emission Scenario, SSP5-8.5

PERIOD	HOTTEST TEMPERATURE MEDIAN (°C)	HOTTEST TEMPERATURE RANGE (°C)
1971 – 2000	28.8 °C	28.3 °C – 29.3 °C
1991 – 2020	29.7 °C	29.1 °C – 30.1 °C
2051 – 2080	33.3 °C	32.3 °C – 36.1 °C
2071 – 2100	35.5 °C	33.2 °C – 38.5 °C



### **3. Heat Response Community Partner Information**

*\*For up-to-date contact information, please see Quick Start Guide.*

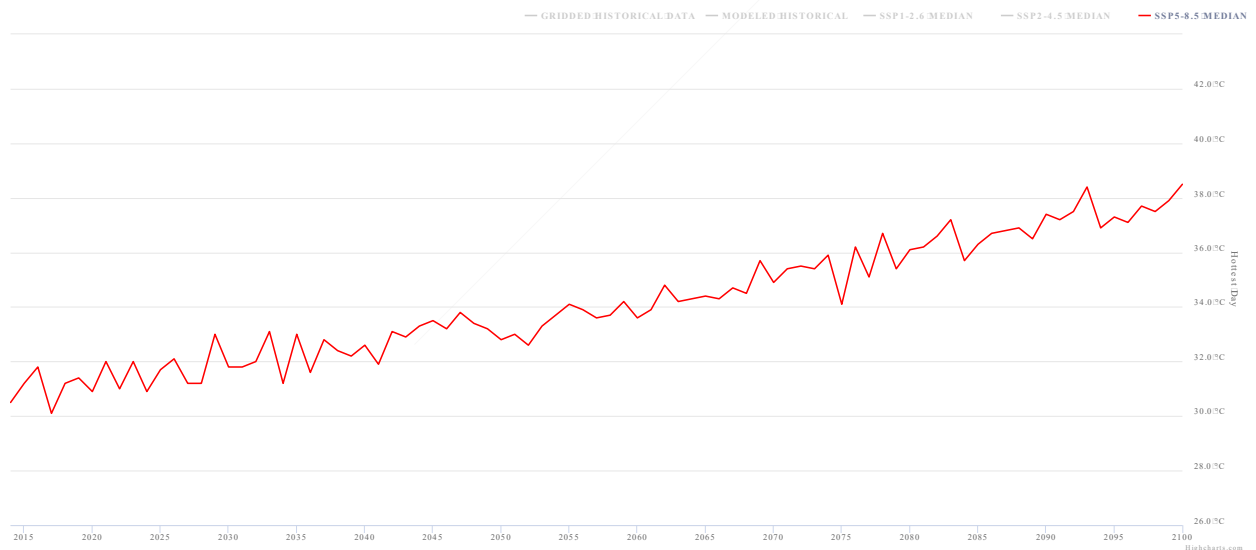
# ANNEX E: Electoral Area A – Egmont/Pender Harbour

## 1. Area

POPULATION (2021 CENSUS)	# OF DWELLINGS (OCCUPIED PRIVATE)	AREA	ADDITIONAL INFORMATION
3,039	1,562	1,9001 sq. km	<ul style="list-style-type: none"> <li>Community of neighborhoods primarily clustered around the harbor include:                             <ul style="list-style-type: none"> <li>o Madeira Park, Beaver Island, Garden Bay, Irvines Landing</li> </ul> </li> <li>Community of neighborhoods further inland / north include:                             <ul style="list-style-type: none"> <li>o Kleindale, Sakinaw Lake, Ruby Lake, Earl's Cove, Egmont, Skookumchuk Narrows, Jervis Inlet waterways</li> </ul> </li> </ul>

## 2. Projected Median Hottest Temperatures for Egmont / Pender Harbour Based on a High Carbon Emission Scenario, SSP5-8.5

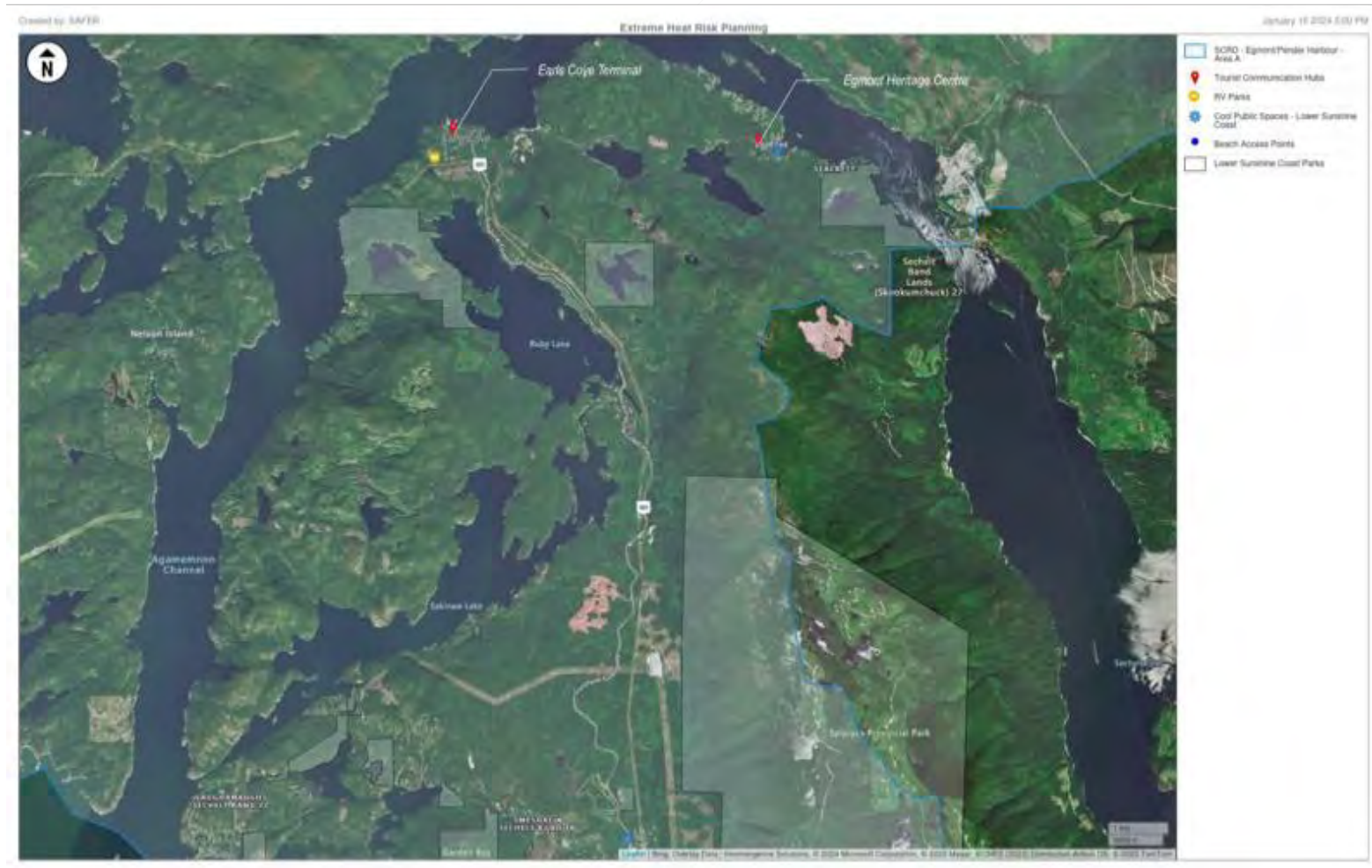
PERIOD	HOTTEST TEMPERATURE MEDIAN (°C)	HOTTEST TEMPERATURE RANGE (°C)
1971 – 2000	29.6 °C	29.2 °C – 30.1 °C
1991 – 2020	30.5 °C	29.8 °C – 31.0 °C
2051 – 2080	34.2 °C	33.1 °C – 37.1 °C
2071 – 2100	36.5 °C	34.0 °C – 39.4 °C



### **3. Heat Response Community Partner Information**

*\*For up-to-date contact information, please see Quick Start Guide.*

#### 4. Extreme Heat Risk Planning Maps





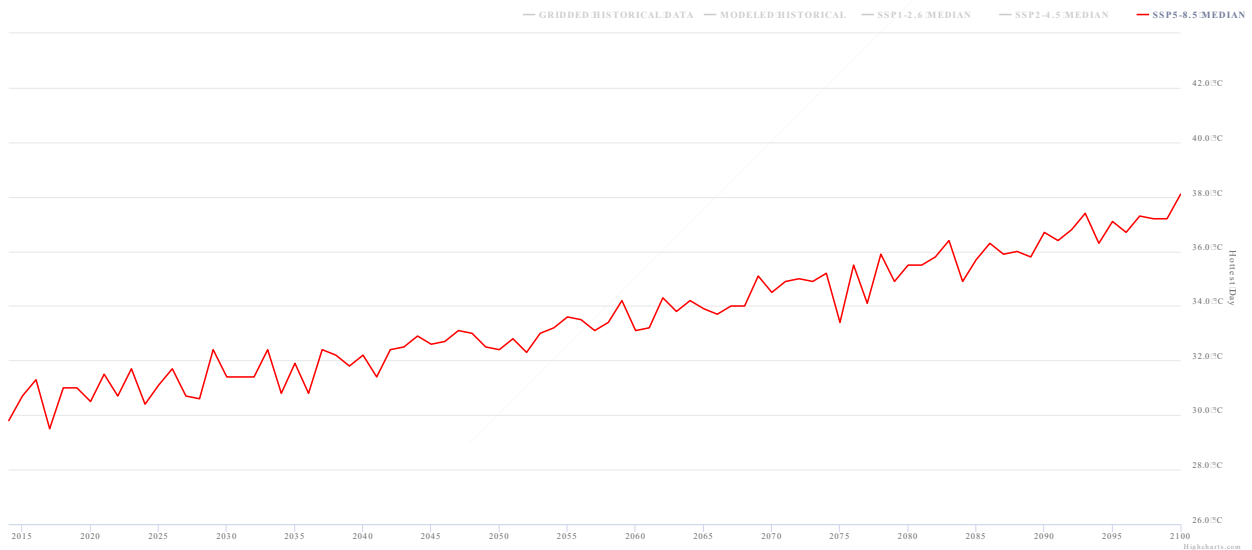
# ANNEX F: Electoral Area B – Halfmoon Bay

## 1. Area Summary

POPULATION (2021 CENSUS)	# OF DWELLINGS (OCCUPIED PRIVATE)	AREA	ADDITIONAL INFORMATION
2,969	1,370	1,271 sq. km	<ul style="list-style-type: none"> <li>Residential community primarily located south of Sunshine Coast Hwy along the shoreline.</li> <li>Significant number of seasonal residents</li> </ul>

## 2. Projected Median Hottest Temperatures for Halfmoon Bay Based on a High Carbon Emission Scenario, SSP5-8.5

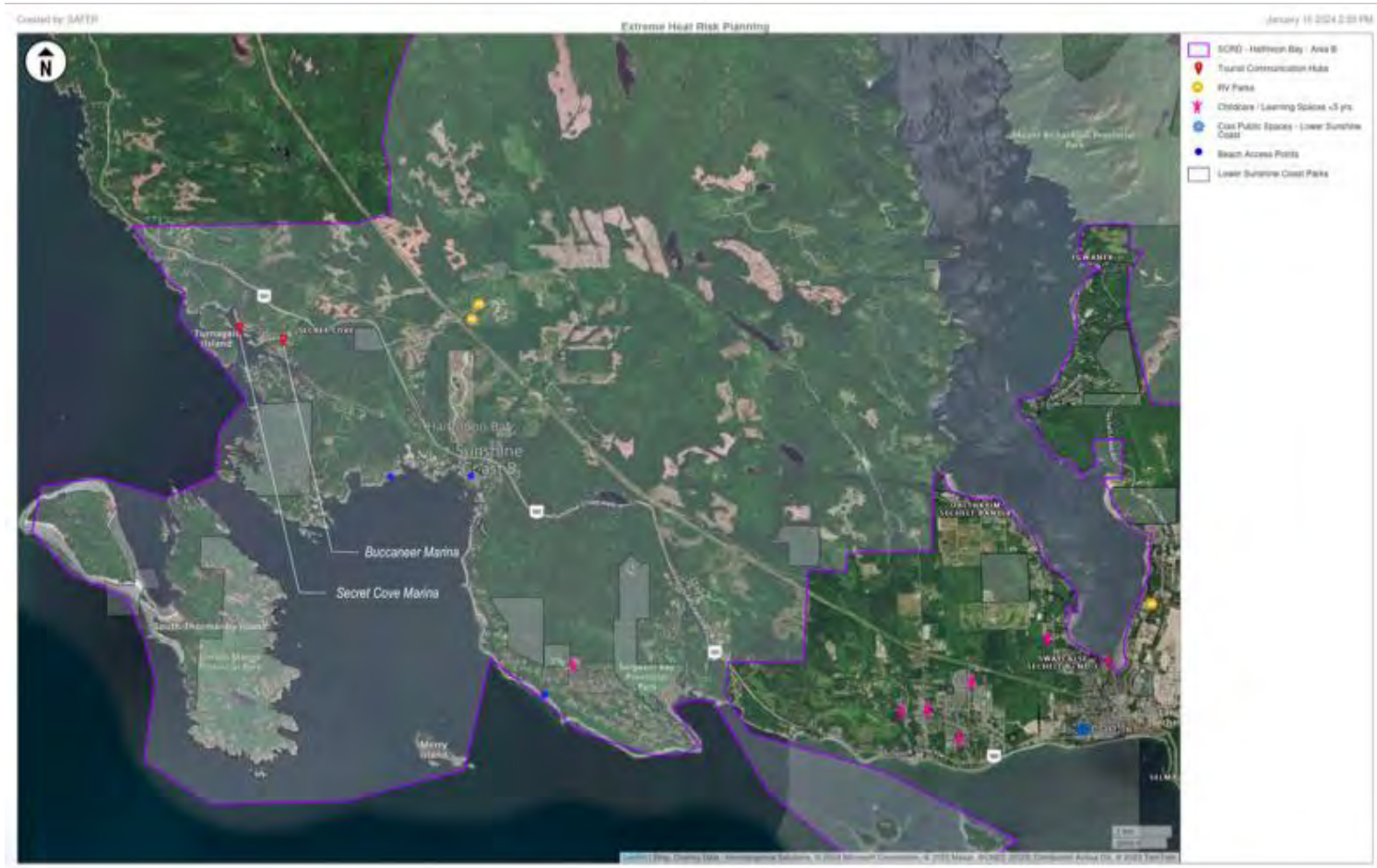
PERIOD	HOTTEST TEMPERATURE MEDIAN (°C)	HOTTEST TEMPERATURE RANGE (°C)
1971 – 2000	29.2 °C	28.9 °C – 29.2 °C
1991 – 2020	30.1 °C	29.5 °C – 30.5 °C
2051 – 2080	33.7 °C	32.8 °C – 36.6 °C
2071 – 2100	33.7 °C	33.7 °C – 38.9 °C



### **3. Heat Response Community Partner Information**

*\*For up-to-date contact information, please see Quick Start Guide.*

#### 4. Extreme Heat Risk Planning Map



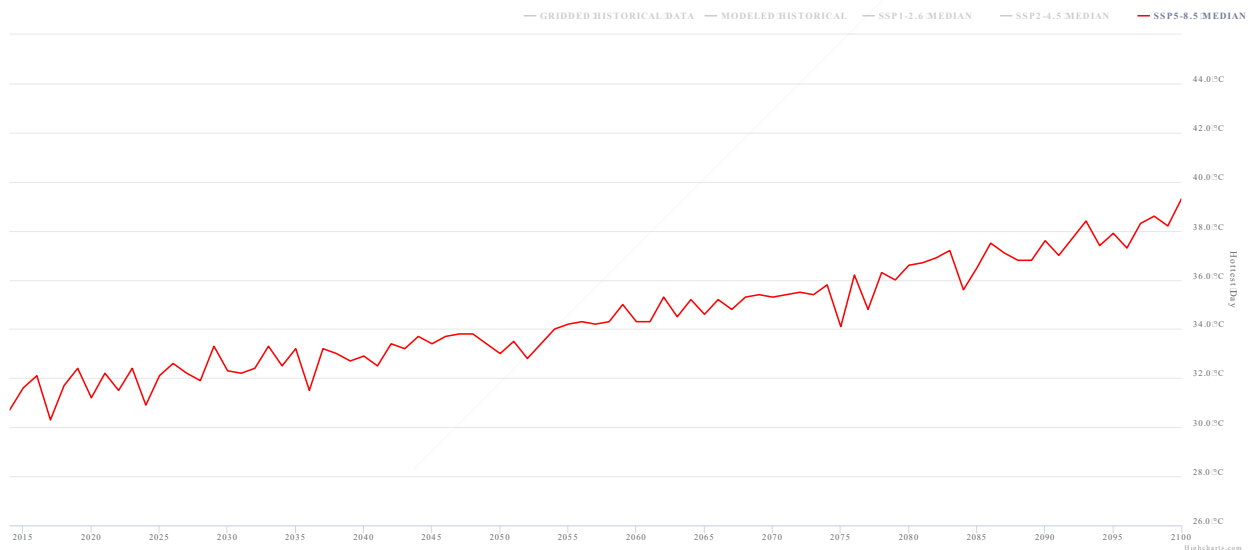
# ANNEX G: Electoral Area D – Roberts Creek

## 1. Area

POPULATION (2021 CENSUS)	# OF DWELLINGS (OCCUPIED PRIVATE)	AREA	ADDITIONAL INFORMATION
2,969	1,370	1,271 sq. km	<ul style="list-style-type: none"> <li>Residential community primarily located south of Sunshine Coast Highway along the shoreline</li> <li>Significant number of seasonal residents</li> </ul>

## 2. Projected Median Hottest Temperatures for Roberts Creek Based on a High Carbon Emission Scenario, SSP5-8.5

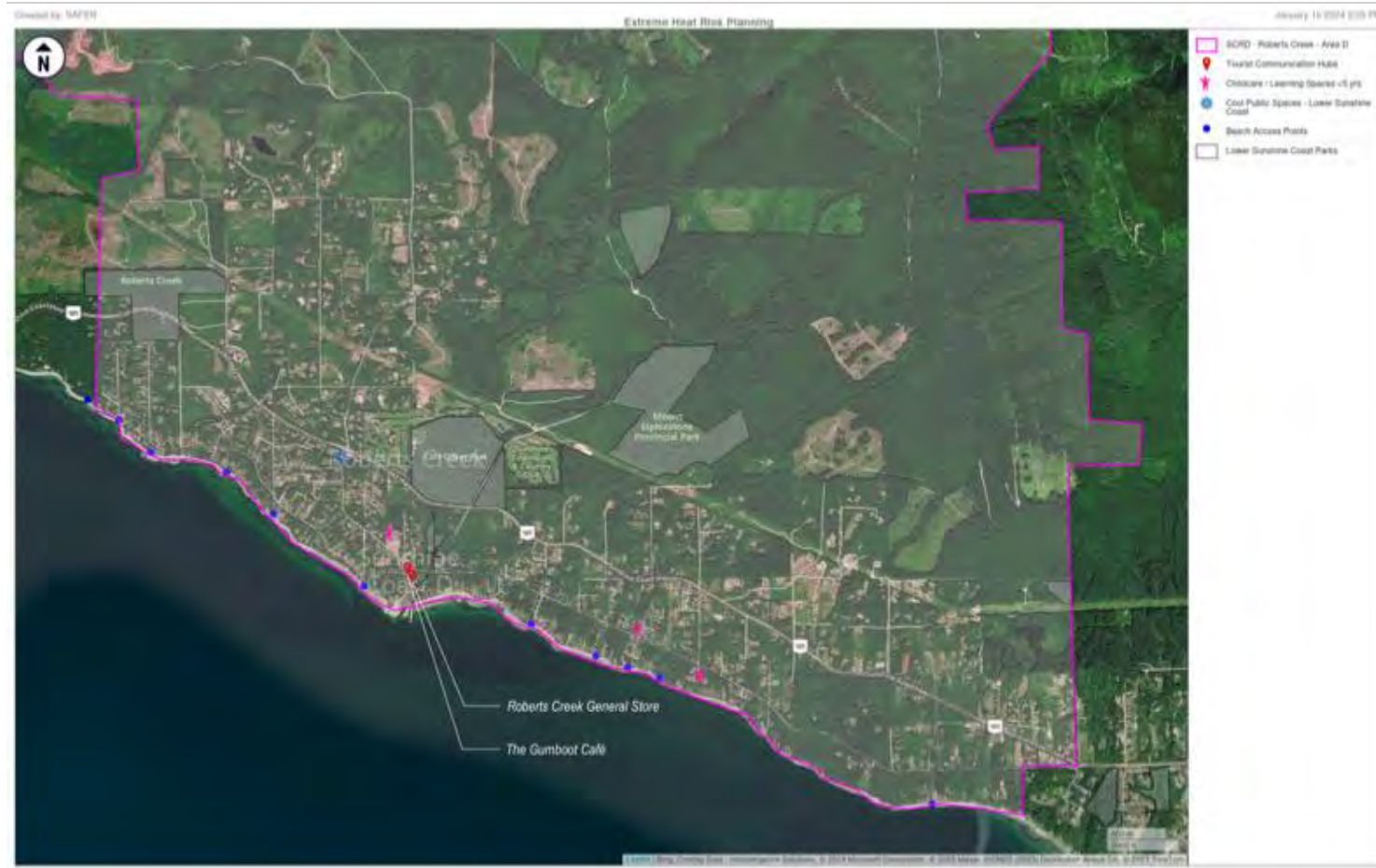
PERIOD	HOTTEST TEMPERATURE MEDIAN (°C)	HOTTEST TEMPERATURE RANGE (°C)
1971 – 2000	30.0 °C	29.6 °C – 30.6 °C
1991 – 2020	31.0 °C	30.3 °C – 31.4 °C
2051 – 2080	34.6 °C	33.5 °C – 37.6 °C
2071 – 2100	36.8 °C	34.4 °C – 39.9 °C



### **3. Heat Response Community Partner Information**

*\*For up-to-date contact information, please see Quick Start Guide.*

#### 4. Extreme Heat Risk Planning Map



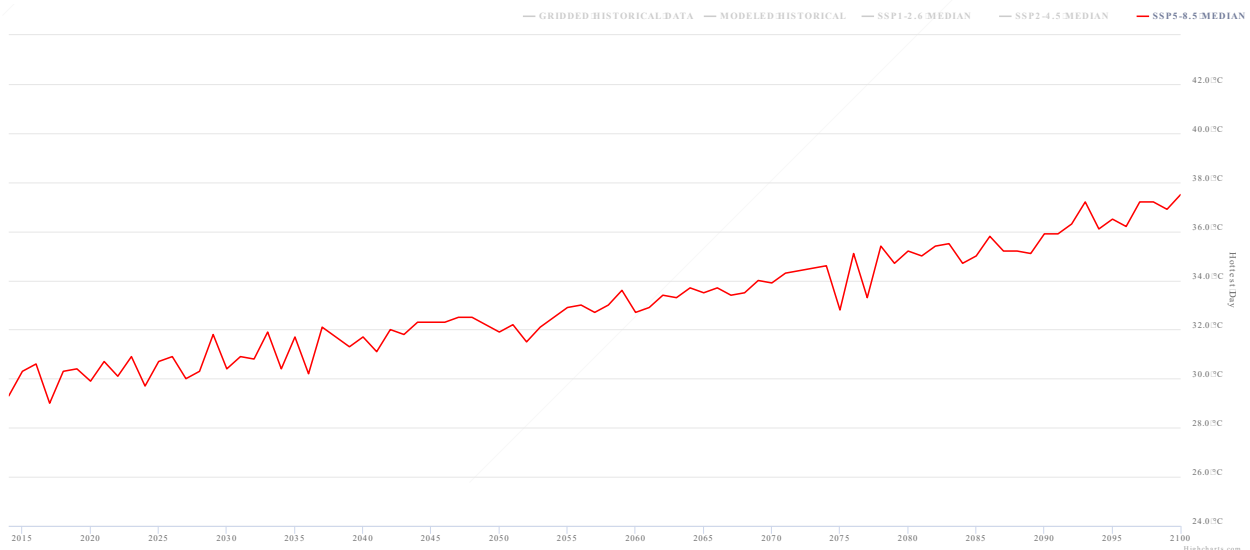
# ANNEX H: Electoral Area E – Elphinstone

## 1. Area

POPULATION (2021 CENSUS)	# OF DWELLINGS (OCCUPIED PRIVATE)	AREA	ADDITIONAL INFORMATION
3,883	1,608	21.6 sq. km	<ul style="list-style-type: none"> <li>Residential community primarily located south of Sunshine Coast Hwy along the shoreline</li> <li>Agricultural plateau with small operating farms</li> </ul>

## 2. Projected Median Hottest Temperatures for Elphinstone Based on a High Carbon Emission Scenario SSP5-8.5

PERIOD	HOTTEST TEMPERATURE MEDIAN (°C)	HOTTEST TEMPERATURE RANGE (°C)
1971 – 2000	28.8 °C	28.3 °C – 29.3 °C
1991 – 2020	29.7 °C	29.0 °C – 30.1 °C
2051 – 2080	33.3 °C	32.2 °C – 36.2 °C
2071 – 2100	35.4 °C	33.1 °C – 38.6 °C



### **3. Heat Response Community Partner Information**

*\*For up-to-date contact information, please see Quick Start Guide.*

# ANNEX I: Electoral Area F – West Howe Sound

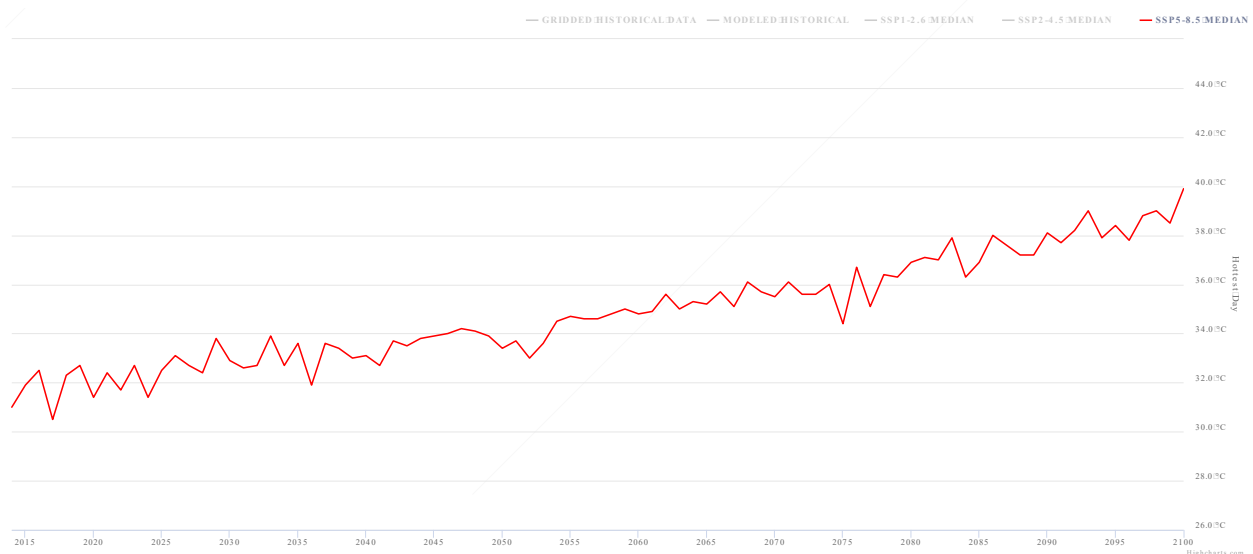
## 1. Area

POPULATION (2021 CENSUS)	# OF DWELLINGS (OCCUPIED PRIVATE)	AREA	ADDITIONAL INFORMATION
2,407	1,111	387 sq. km	<ul style="list-style-type: none"> <li>Communities include Langdale, Pot Mellon, Williamson's Landing, Granthams Landing, Soames Hopkins Landing, Gambier, and Keats Islands</li> <li>Communities stretch along the lower roadway</li> </ul>

## 2. Projected Median Hottest Temperatures for West Howe Sound Based on a High Carbon Emission Scenario SSP-8.5

PERIOD	HOTTEST TEMPERATURE MEDIAN (°C)	HOTTEST TEMPERATURE RANGE (°C)
1971 – 2000	30.3 °C	29.9 °C – 30.9 °C
1991 – 2020	31.2 °C	30.5 °C – 31.7 °C
2051 – 2080	35.0 °C	33.8 °C – 38.1 °C
2071 – 2100	37.2 °C	34.6 °C – 40.4 °C

Port Mellon, BC:



### **3. Heat Response Community Partner Information**

*\*For up-to-date contact information, please see Quick Start Guide.*

#### 4. Extreme Heat Risk Planning Map

