

City of Delta Heat Response Plan

BC Provincial Heat Alert and Response System 2022 (BC HARS)

In 2022, BC piloted a two-tier Heat Alert and Response System (HARS) that integrates the existing heat alert criteria currently used by Environment & Climate Change Canada (ECCC) in issuing a **Heat Warning** with new criteria for an **Extreme Heat Emergency**. This system warns the public about heat risk through an organized and defined communication system. This alerting system helps individuals and communities to prepare and protect themselves, both before and during heat events, and alerts decision-makers to take preventive actions to protect public health.

Stage 1: Heat Warning

ECCC will issue a Heat Warning for the Southwest region when there are **two or more consecutive days** during which the daytime maximum temperatures are forecast to reach or exceed **29°C** and night-time lows do not fall below **16°C**.

Heat Warnings will be issued electronically to emergency management representatives registered on Environment Canada's EC Alert Me system (ecalertme.weather.gc.ca), and publicly on the WeatherCAN app and their public weather alerts webpage (weather.gc.ca/warnings).

Before issuing a Heat Warning, ECCC may send a **Weather Notification** email to health sector and emergency management personnel when forecast data is certain enough to warrant an elevated likelihood of a heat event. For the first event of the year, ECCC may issue a public-facing **special weather statement** and include some strategic pre-event messaging.

Stage 2: Extreme Heat Emergency

The Extreme Heat Emergency criteria are met when the forecast or observed temperatures surpass Heat Warning criteria, and there is a high certainty that temperatures will substantively increase day over day for **three or more** consecutive days.

When there is potential for a Heat Warning to evolve into an Extreme Heat Emergency, the BC Heat Committee¹ will convene and reach consensus before issuing an Extreme Heat Emergency alert. Once the BC Heat Committee confirms that the Extreme Heat Emergency criteria level has been reached, the BC HARS notification system will be triggered. Vancouver Coastal Health and Fraser Health will then issue an Extreme Heat Alert to the public. Health Emergency Management BC will forward the Extreme Heat Alert to Emergency Management BC and Local Government Emergency Planners

Alerts will be issued through the national public wireless alerting system, Alert Ready. Once the Extreme Heat Emergency alert is issued there will be provincial and regional coordination calls, and coordinated press releases.

Figure 1. BC Heat Alert Response System 2022

Alert level	Heat Warning	Extreme Heat Emergency
Public health risk	Moderate (5% increase in mortality)	Very high (20% or more increase in mortality)
Descriptor	Very hot	Dangerously hot
Historic frequency	1-3 per summer season	1-2 per decade
Criteria	Southwest = 29-16-29 Fraser = 33-17-33 Southeast = 35-18-35 Northeast = 29-14-29 Northwest = 28-13-28	Heat Warning criteria have been met and forecast indicates that daily highs will substantively increase day-over-day for 3 or more consecutive days

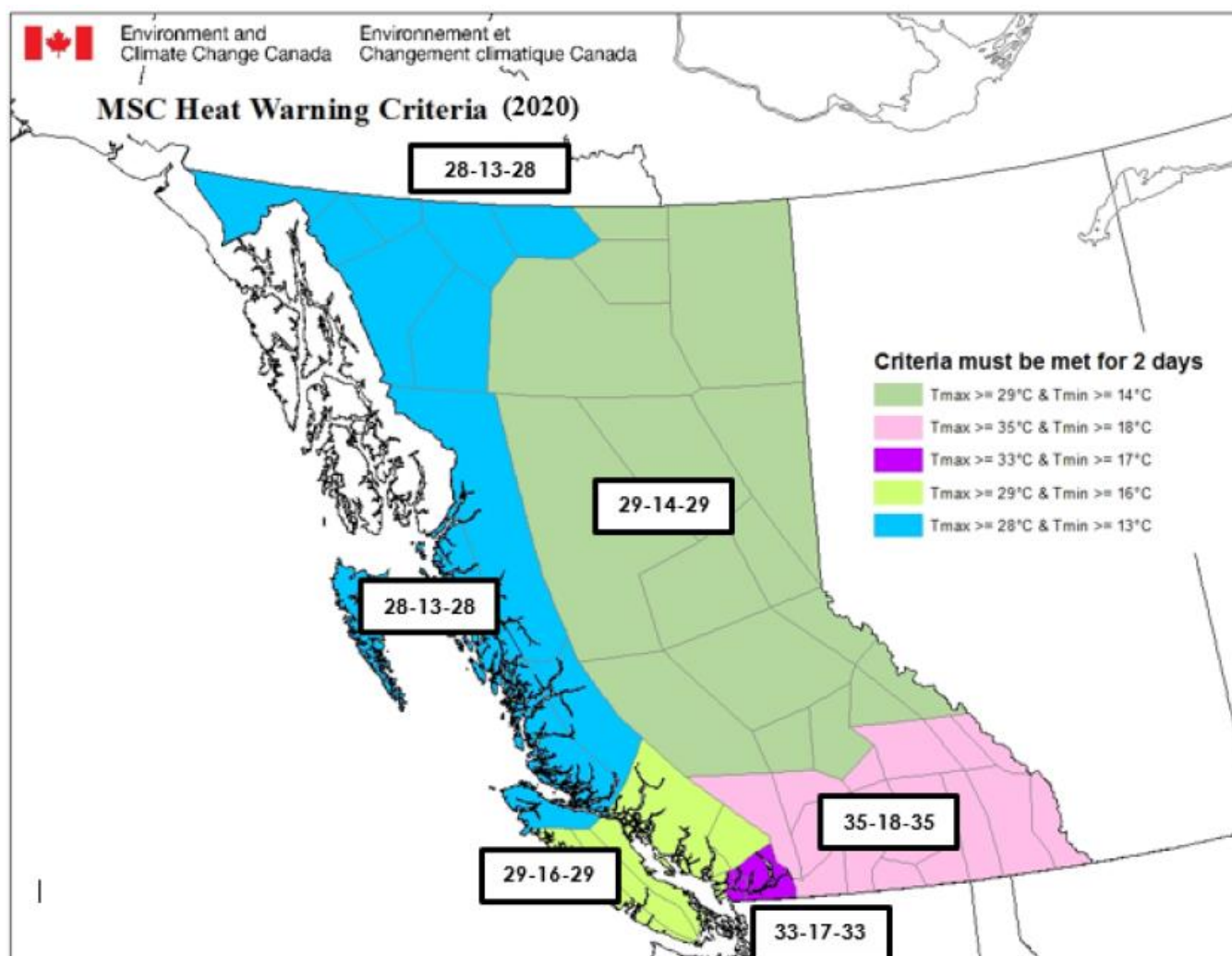
The ECCC heat alerting system includes daytime and nighttime temperature criteria (in degrees Celsius) that trigger warnings (the high-low-high approach). The triggers for Delta in the table above are 29-16-29.

NOTE: Due to its coastal location **Delta is in ECCC’s Southwest region** (shown as lime green in Figure 2), with lower trigger temperatures for heat alerts, and the Delta-Surrey border marks the change to the Fraser region (shown as purple in Figure 2), which has higher trigger temperatures. Delta is also

¹ BC HEAT Committee is led by BC Centre for Disease Control, BC Ministry of Health, and Emergency Management BC, and includes representatives from each BC regional health authority, First Nations Health Authority, BC Emergency Health Service, BC Housing, Emergency Management BC, Environment and Climate Change Canada, Office of the Provincial Health Officer, and WorkSafe BC.

within Fraser Health Authority's jurisdiction. Delta's unique geography means that the communities of Ladner and Tsawwassen, which are closer to the water and more rural, often have lower temperatures than many parts of North Delta, which may be several degrees hotter due to the urban heat island effect. This happens when heavily urbanised spaces have reduced airflow, less green space, more concrete surfaces which absorb radiant heat, limited tree-shaded areas, and more human created heat sources. **This may impact decision-making when allocating resources during an extreme heat event as there may need to be a greater emphasis on mitigation in North Delta.**

Figure 2. ECCC Heat Warning Regions



City Actions and Priorities

Pre-Season:

Pre-planning and community outreach prior to the summer season will help ensure the City and its residents are aware and prepared for an extreme heat event.

Lead Dept	Action
Comms	Prepare community heat messages and communication strategies to help identify heat risks and mitigation actions. Consider communications in different languages and using accessible multi-media options. See Attachment D – <i>Heat Response Communications & Engagement Plan</i> .
CP&D	Consider long-term planning opportunities to reduce the impacts of extreme heat eg. increasing tree canopy, building design.
Corporate Services	Engage with key partners and community groups that have interface with high-risk or susceptible populations to raise awareness about the risks of extreme heat and provide information about extreme heat response.
	Work with PR&C to develop and maintain a list of community partners that can assist in responding and providing services during heat events.
EMO	Review and update heat response plan in consultation with key partners.
	Organize or participate in exercises and forums to discuss and improve individual and collective responses to extreme heat.
	In conjunction with Emergency Preparedness Week (first week of May), implement a social media campaign to get people thinking about heatwaves and how to protect themselves and others.
	Order and display heat health communication material in City facilities and distribute to community partners.
Information Services	<i>Beat the Heat</i> telephone hotline (604-946-3200) closed and message set to 'No heat event' (see Attachment E).
PR&C	Check contingency planning for air-conditioning and power supply in City-owned buildings.
	Maintain a list of municipal air-conditioned buildings that could be used as cooling centres.

Lead Dept	Action
	Prepare signage for 24/7 cooling facilities.
	Work with CS to develop and maintain a list of community partners that can assist in responding and providing services during heat events.

Heat Warning:

Once a Heat Warning has been issued, Delta's Emergency Management Office (EMO) will notify and provide situational awareness to **Mayor and Council** and key staff identified in Attachment A.

Lead Dept	Action
Comms	Advertise and publicise cooling centre locations through all feasible media sources.
	Update the <i>Beat the Heat</i> page on Delta's website and provide consistent messaging through social media platforms.
Corporate Services	Work with community partners to identify and reach out to vulnerable people, including seniors, people with disabilities and unhoused people.
EMO	Submit Expense Authorization Form to EMBC to allow Delta to claim expenses incurred as a result of heat warning and emergency alerts (see Attachment F).
	Participate in coordination calls with EMBC and coordinate information flow to and from key Delta staff and Mayor & Council.
Information Services	<i>Beat the Heat</i> telephone hotline (604-946-3200) staffed during normal office hours and message set to 'Heat Warning' (see Attachment E).
PR&C	Review cooling centre facilities, supplies and staff resources.
	Encourage local services, clubs and organizations to reschedule or relocate services or major events.
All	Ensure that staff engaging with the public are aware of City activities and resources available to protect residents from extreme heat.

Extreme Heat Emergency:

Once the BC Heat Committee confirms that the Extreme Heat Emergency criteria level has been reached, the BC HARS notification system will be triggered. Vancouver Coastal Health and Fraser Health will then issue an Extreme Heat Alert to the public. Health Emergency Management BC will forward the Extreme Heat Alert to Emergency Management BC and Local Government Emergency Planners. All actions

identified under Heat Warning will continue in addition to:

Lead Dept	Action
Comms	Encourage wellness checks for seniors living alone and other highly vulnerable people.
	Increase community messaging through social media and standard communication channels.
Corporate Services	Undertake community outreach and work with community partners to reach high risk populations and groups.
EMO	Participate in coordination calls for situational updates with EMBC and coordinate information flow to and from key Delta staff and Mayor & Council.
	Activate EOC to support event if required.
DPD	Staff monitor after hours 24/7 information and dispatch hotline.
Human Resources & PR&C	Coordinate staffing for 24/7 cooling centres.
Information Services	<i>Beat the Heat</i> telephone hotline (604-946-3200) staffed 24/7 and message set to 'Extreme Heat Emergency' (see Attachment E).
PR&C	Open 24/7 cooling centres at McKee Seniors Recreation Centre, Kennedy Seniors Recreation Centre, and KinVillage Community Centre (Attachment C).
	Redeploy Delta Seniors Buses to transport residents to and from cooling centres.
	Where feasible and available, install portable water stations and/or misting stations at key locations throughout the community.

Deactivation:

The BC HEAT Committee will determine the appropriate timing for ending the Extreme Heat Emergency alert. When recommended by BC HEAT Committee, ECCC will confirm the de-escalation of the Extreme Heat Emergency via a special weather statement and notification through the ECCC Alert Me system, WeatherCAN app and the public weather alerts webpage.

Messaging will be sent from the EMO to key staff that the extreme heat emergency is over and request that staff immediately demobilize all assets related to the activation of cooling centres. The EMO will work with Communications to repeal the posting of the heat advisory notice(s) and issue notification of the cancellation and the standing down of all heat related support measures (including cooling centres). Additional actions:

- Undertake after-action review and update heat response plans and activities as required (EMO).
- Engage with local service providers and community members about how they managed through the heat event and respond to new or emerging needs (CS/PR&C).

LIST OF ATTACHMENTS:

- A. Key Staff Contact List
- B. Municipal Cooling Centres for Stage 1 Heat Warning Events
- C. 24/7 Municipal Cooling Centres for Stage 2 Extreme Heat Emergency Events
- D. Heat Response Communications & Engagement Plan
- E. *Beat the Heat* Telephone Hotline
- F. Municipal Cost Eligibility Assessment for Heat Events

ATTACHMENT 'A'

KEY STAFF CONTACT LIST

Once a Heat Warning or Extreme Heat Emergency alert has been issued, Delta's Emergency Management Office will notify and provide situational awareness to **Mayor and Council** and key staff listed below:

DEPARTMENT	CONTACT
Emergency Management Office	Dave Ayton
Office of the City Clerk	Michelle Jansson
Office of the City Manager	Sean McGill
Deputy City Manager/Director of Community Planning & Development	Marcy Sangret
Climate Action & Environment	Mike Brotherston
Corporate Services	Mel Cheesman
Engineering	Steven Lan
Finance	Melanie Kerr
Fire & Emergency Services	Chief Guy McKintuck
Human Resources	Samantha Pillay
Parks, Recreation & Culture	Carmen Gonzales
Information Services	Darin Young
Police	Chief Neil Dubord
Property Use & Compliance	Hugh Davies
Strategic Initiatives & Communications	Michael Gomm
Communications Manager	Deanie Wong

ATTACHMENT 'B'

MUNICIPAL COOLING CENTRES FOR STAGE 1 HEAT WARNING EVENTS

Following notification of a Heat Warning alert, information about municipal facilities with air conditioning and swimming pools/water parks will be advertised through a variety of media sources.

RECREATION AND COMMUNITY CENTRES		
FACILITY	ADDRESS	PHONE NUMBER
North Delta:		
North Delta Rec. Centre	11415 84 Avenue, North Delta	604-952-3045
Kennedy Seniors Rec. Centre	11760 88 Avenue, North Delta	604-594-2717
Sungod Rec. Centre	7815 112 Street, North Delta	604-952-3075
Ladner:		
Ladner Leisure Centre	4600 Clarence Taylor Crescent, Ladner	604-946-3310
McKee Seniors Rec. Centre	5155 47 Avenue, Ladner	604-946-1411
Tsawwassen:		
Winkill Aquatic & Fitness Centre	5575 9 Avenue, Tsawwassen	604-952-3005
South Delta Rec. Centre	1720 56 Street, Tsawwassen	604-952-3020
KinVillage Community Centre	5410 10 Avenue, Tsawwassen	604-943-0225
OUTDOOR POOLS AND WATER PARKS		
FACILITY	ADDRESS	HOURS OF OPERATION
North Delta Outdoor Pool	11415 84 Avenue, North Delta	604-952-3045
Lions Wellness Park	9150 112 Street, North Delta	delta.ca for info
Memorial Park – Ladner Rotary Splash Park	5010 47 Avenue, Ladner	delta.ca for info
Ladner Outdoor Pool	5105 47 Avenue, Ladner	604-946-9226
Diefenbaker Park – Rotary Waterworks Playground	5579 1 Avenue, Tsawwassen	delta.ca for info
PUBLIC LIBRARIES		
FACILITY	ADDRESS	HOURS OF OPERATION
George Mackie Library	8440 112 Street, North Delta	604-594-8155
Ladner Pioneer Library	4683 51 Street, Ladner	604-946-6215
Tsawwassen Library	1321A 56 Street, Tsawwassen	604-943-2271

ATTACHMENT 'C'

24/7 MUNICIPAL COOLING CENTRES FOR STAGE 2 EXTREME HEAT EMERGENCY EVENTS

Following notification of an Extreme Heat Emergency alert, Delta staff will activate 24-hour cooling centres within the community to ensure individuals with no access to air conditioning have an opportunity to receive respite from the heat overnight. Cooling centres will be staffed by City of Delta staff, Delta Emergency Support Services Volunteers and Delta Police Department COPs Volunteers.

FACILITY	ADDRESS
Kennedy Seniors Recreation Centre	11760 88 Avenue, North Delta
McKee Seniors Recreation Centre	5155 47 Avenue, Ladner
KinVillage Community Centre	5410 10 Avenue, Tsawwassen

Cooling centres will provide bottled water and a designated air conditioned area of respite with chairs, cots (as available) and passive entertainment (books, puzzles etc.).

The cooling centres will also provide areas for pets, and with the support of the Delta Community Animal Shelter, will utilize the City's Emergency Support Services Pet Plan to accommodate the care and keeping of household pets.

Transportation:

During a Stage 2 Extreme Heat Emergency, Delta's Senior's Buses will be redeployed to provide transportation to and from cooling centres in Delta. Bookings can be made through the *Beat the Heat* telephone hotline 604-946-3200.

ATTACHMENT 'D'

HEAT RESPONSE COMMUNICATIONS & ENGAGEMENT PLAN

Purpose:

Develop an educational and awareness campaign to engage Delta residents on the risks associated with extreme heat events and provide information on how to prepare and keep safe including:

- Information on City cooling centres, telephone support line, free bus service, and other resources available to the public to help mitigate the effects of high/extreme heat.

Objectives:

- Educate and engage with residents about heat risks during the summer season and getting prepared for potential high/extreme heat events.
- Share information on the City's heat response plan and *Beat the Heat* strategy to highlight free resources available to help residents deal with and mitigate the effects of any future high/extreme heat events.
- Encourage Delta residents and businesses to consider their role in reducing risks and protecting themselves during high/extreme heat events.
- Promote how Delta is preparing to assist Delta residents should another high/extreme heat event occur this summer.

Key Messages:

- High/extreme heat events can be hazardous and it is important to know the risks and learn how to be prepared both at home and while outside. Learn the risks and how to protect yourself at [Delta.ca/beattheheat](https://delta.ca/beattheheat).
- Are you prepared in the event of high/extreme heat? We're sharing tips to help you stay cool and beat the heat this summer! Visit [Delta.ca/beattheheat](https://delta.ca/beattheheat) to learn more.
- With warm weather finally here, we have some tips to help you and your loved ones stay safe and cool. Learn more at [Delta.ca/beattheheat](https://delta.ca/beattheheat)
- With high temperatures expected this weekend, be sure to stay hydrated and cool. Learn how to prepare for extreme heat and how to stay cool. Delta's Cooling Centres will be open 24/7 for residents to seek relief from the heat. More info: [Delta.ca/beattheheat](https://delta.ca/beattheheat)

Timeframe:

- Campaign Duration: **May to September**
- Launch online engagement, web page and social media: May

Target Audience:

- Delta residents, local media, community partners (Deltassist, Delta Libraries, Seniors Centres, etc., to help reach local seniors & vulnerable residents), Chamber of Commerce, Tsawwassen

Business Improvement Association, Ladner Business Association, North Delta Business Association, City staff and City Council.

Deliverables:

1. Delta.ca Webpage: [Delta.ca/beattheheat](https://delta.ca/beattheheat)

- Features interactive map of Delta cooling centres, information on heat risks and how to prepare for a heat event.
- Create graphic to feature on home page banner of Delta.ca under City Updates that links to *Beat the Heat* webpage.

2. Social Media Campaign

- Create and share content across platforms weekly to educate and raise awareness regarding risks associated with high/extreme heat events and how to keep cool.
- During a heat event, provide daily updates on Delta's social media channels.
- Share urgent update posts on Facebook community pages (i.e. Ladner's Landing, North Delta Community Corner, Tsawwassen LOOP) for extra exposure.
- Utilize both the City's and Mayor's social platforms and tag community partners for extra traction and promotion.
- Hashtags: #BeatTheHeat #DeltaBC

3. Posters

- *Beat the Heat* and *Cooling Centre* posters featured on [Delta.ca/beattheheat](https://delta.ca/beattheheat).
- Posters can be put up at City facilities, libraries, community centres, senior's facilities, non-profit community partners and other public spaces (as deemed necessary by relevant departments).

4. News release

- Should Delta expect an extreme heat event, the City will prepare and issue a news release with key information on free resources available to target local media and help increase community awareness.

5. Reader boards/Community Message Boards

- Create graphic for reader board to submit to PR&C (Message Board Form) to promote [Delta.ca/beattheheat](https://delta.ca/beattheheat) and cooling centre info (when appropriate) on all Delta community reader boards.

6. Delta Fire & Emergency Services "Be Prepared" Public Education Sessions

- Include information about coping with high/extreme heat and distribute information booklets.

Evaluation:

- Total number of page hits on delta.ca/beattheheat.
- Amount of email correspondence and social media comments received in response to Delta's *Beat the Heat* campaign.
- Local media coverage of City's *Beat the Heat* strategy and corresponding City cooling centres and information.
- Social media analytics to demonstrate reach.
- Feedback from City Council.

ATTACHMENT 'E'

***BEAT THE HEAT* TELEPHONE HOTLINE**

A dedicated *Beat the Heat* telephone hotline line has been established: **604-946-3200**.

During a Heat Warning, the phone will be staffed during normal office hours and will provide general information about preparing for and dealing with the heat.

During an Extreme Heat Emergency, the phone will be staffed 24/7 (after hours calls will be transferred to Delta Police non-emergency line) to provide information on cooling centres in Delta, booking transportation to cooling centres, and general heat information.

Phone messaging:

- No heat event: Thank you for calling the City of Delta's *Beat the Heat* telephone hotline. Since we are currently not experiencing a heat event, the service is closed. For more information please visit [delta.ca/beat the heat](https://delta.ca/beat-the-heat).
- Heat Warning: Thank you for calling the City of Delta's *Beat the Heat* telephone hotline. We can provide information about cooling centres in Delta and general information about heat events and how to protect you and those around you. Please hold while we direct you to an operator. If this is after office hours, please leave your name and contact number and we will call you back tomorrow.
- Extreme Heat Emergency: Thank you for calling the City of Delta's *Beat the Heat* telephone hotline. We can provide information about cooling centres in Delta, booking transportation to cooling centres, and general information about extreme heat and how to protect you and those around you. Please hold while we direct you to an operator. If the line is busy, please leave your name and contact number and we will call you back shortly.

ATTACHMENT 'F'

MUNICIPAL COST ELIGIBILITY ASSESSMENT FOR HEAT EVENTS

The Province will provide financial support for municipalities that incur costs responding to a Heat Warning and/or Extreme Heat Emergency. When a heat alert is issued, Delta's EMO will 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.

Expense Item	Response Item	Eligible	Not Eligible
Bottled water	Materials	<p>Bottled water made available at community cooling centre facilities.</p> <p>Bottled water distributed during health and wellness checks where water is not readily available.</p>	Bottled water purchased for distribution to private residences or locations that have water readily available.
Staff overtime	Wages and overtime	<p>Incremental overtime for current staff to keep civic facilities open as cooling centres outside of normal operating hours.</p> <p>Incremental costs for the wages of temporary auxiliary staff hired under contract to specifically to support a designated cooling centre facility.</p>	<p>Regular salaries or straight time for current staff; benefits and taxes; and the incremental payroll expenses (when working outside of the deployment shift length guidelines are ineligible. For example:</p> <ul style="list-style-type: none"> • The regular salary or hourly wage expense associated with response activities. • Benefits, taxes and overhead or loading costs for current staff. • Payroll expenditures not directly related to response activities (i.e., the backlog of regular work due to time spent working on the event.
Day and night facility for use as a cooling centre	Facility rental	<p>Rental of a non-local authority or First Nation facility for the provision of a cooling centre.</p> <p>Incremental janitorial and utilities.</p> <p>Incremental security costs.</p>	Rental of community-owned facility or loss of use charges.

Expense Item	Response Item	Eligible	Not Eligible
Transportation to and from Cooling Centre	Emergency Response Measures	<p>Commercial transportation of community members to and from cooling centers as needed in communities where no scheduled public or reasonable transportation exists.</p> <p>Mileage reimbursement at Provincial government rates for vehicles operated by a First Nation and local authorities for the transportation of community to and from cooling centers where no scheduled public or reasonable transportation exists.</p>	Transportation costs where other reasonable alternatives exist.
Emergency services	Fire services	Incremental costs to fire services responding to increased heat related medical calls, specifically, operational response to assist.	Routine operations supporting medical response.
Messaging	Emergency response measures	Print, radio, social media messages to local population amplifying ECCC and/or HEMBC messaging.	Messaging unrelated to heat wave response and/or unapproved by ECCC and/or HEMBC.
Volunteer support for wellness checks	Materials. Wages or overtime.	<p>Incremental overtime for Local and First Nations Government staff to provide “Just in Time” training for volunteers on wellness checks.</p> <p>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).</p>	Regular salaries or straight time for current staff; benefits and taxes; and the incremental payroll expenses.
Partner organization support to operate cooling centers	Wages or overtime for organizations contracted by First Nations & Local Government.	<p>Incremental overtime for organizational staff keeping facilities open as cooling centres outside of normal operating hours.</p> <p>Incremental janitorial and utilities.</p>	Regular salaries or straight time for current staff; benefits and taxes; and the incremental payroll expenses.
First Nations supports	Community navigator	Incremental costs for Community Navigator connecting public with supports provided by FNHA, FNESS and ISC.	

Expense Item	Response Item	Eligible	Not Eligible
Cooling device rental for Provincial government partner organizations		Cost of cooling device rentals. Incremental utility expenses.	Cooling device costs submitted in the absence of a prior approved EAF.
Basic snacks and bottled water at day and night facilities	Materials	Snacks to be available for the general public at community cooling centre facilities.	Food purchased for distribution to private residences. Meals provided at day and night facilities.