From:	"Mochrie, Paul" <paul.mochrie@vancouver.ca></paul.mochrie@vancouver.ca>
To:	"Direct to Mayor and Council - DL"
Date:	6/15/2022 3:27:56 PM
Subject:	Updates to Extreme Heat Response Plans for 2022
Attachments:	CMO - Memo - Updates to Extreme Heat Response Plans for 2022 - 2022.06.pdf

Dear Mayor and Council,

The attached memo is to provide an update on the City's Extreme Heat Response Plans for 2022.

- □ Following the heatwave of 2009, staff worked with VCH and partners to develop the Extreme Heat Initial Response Guideline.
- □ Following the extreme heat event in 2021, VEMA led a comprehensive review of the Cityl response protocols, including VCH, City departments and emergency services.
- This memo provides an overview of learnings from heat events in 2021 and a summary of changes to extreme heat response plans in 2022.

Please let me know if you have any questions.

Best, Paul

Paul Mochrie (he/him) City Manager City of Vancouver paul.mochrie@vancouver.ca



The City of Vancouver acknowledges that it is situated on the unceded traditional territories of the x<sup>w</sup>məθk<sup>w</sup>əýəm (Musqueam), Skwxwú7mesh (Squamish), and səlilwəta<del>l</del> (Tsleil-Waututh) Nations.



# MEMORANDUM

June 14, 2022

- TO: Mayor and Council
- CC: Karen Levitt, Deputy City Manager Armin Amrolia, Deputy City Manager Katrina Leckovic, City Clerk Lynda Graves, Administration Services Manager, City Manager's Office Maria Pontikis, Chief Communications Officer, CEC Anita Zaenker, Chief of Staff, Mavor's Office Neil Monckton, Chief of Staff, Mayor's Office Alvin Singh, Communications Director, Mayor's Office Magnus Enfeldt, Chief Safety Officer Sandra Singh, General Manager, Arts, Culture, and Community Services Donnie Rosa, General Manager, Vancouver Board of Parks and Recreation Lon LaClaire, General Manager, Engineering Services Karen Fry, Fire Chief, Vancouver Fire and Rescue Services Adam Palmer, Police Chief, Vancouver Police Department Daniel Stevens, Director, Vancouver Emergency Management Agency FROM: Paul Mochrie **City Manager**
- SUBJECT: Updates to extreme heat response plans for 2022

RTS #: N/A

The purpose of this memo is to update Mayor and Council on changes to the City's extreme heat response plans for the summer of 2022. This memo builds on the "Planning for Extreme Heat and Air Quality Mitigation in Vancouver" memo from Theresa O'Donnell, General Manager, Planning, Urban Design and Sustainability, dated March 10, 2022.

## Existing extreme heat plans

Following the heatwave of 2009, staff worked with Vancouver Coastal Health and other partners to develop our extreme heat response plan (Extreme Heat Initial Response Guideline). The plan identifies response actions taken at two levels of extreme heat (a *Heat Warning* and a higher severity event now referred to as an *Extreme Heat Emergency*, formerly known as an *Extreme Heat Alert*). Since the development of Vancouver's Extreme Heat Initial Response Guideline, Vancouver has adjusted plans based on learnings from heat events, guidance from Vancouver Coastal Health and Environment and Climate Change Canada, and updated alert criteria. This



occurred most recently following the heat events of 2021. The plan has also been expanded to include response to wildfire smoke events. The City has activated the plan for numerous Heat Warning (level 1) events over the years. The first activation for an Extreme Heat Emergency (level 2) was during the 2021 Heat Dome.

This memo provides a brief overview of what we learned from the heat events in 2021 and then provides a summary of changes to extreme heat response plans in 2022.

## What we learned from the heat events in 2021

Following the heat events of 2021, VEMA conducted a cross-department after action review (AAR) as part of standard process following emergency incidents. The purpose of an AAR is to receive input from staff and organizations involved in the response, understand strengths and areas for improvement, and identify actions to address these. The AAR report identified a number of recommendations divided into four thematic areas:

- Expanding partnerships and response coordination These recommendations recognized the capacity within community to support extreme heat response and the role local government has in enabling and supporting that effort.
- Indoor Cooling These recommendations pertain to increasing access and accessibility to indoor cooling as the primary measures to reduce death from heat events.
- Access to water, washrooms, outdoor cooling. This theme focussed on actions to expand on outdoor cooling infrastructure and access to water, including shaded areas, access to washrooms, and misters.
- 4. Communication and Alerting These recommendations focused on the opportunities to strengthen dissemination of heat information before and during heat events, increasing accessibility of information through translation and dissemination via multiple channels, and clarifying language for alerting with Vancouver Coastal Health and Environment and Climate Change Canada.

Many of the advancements to our plans represented in this memo were identified through the AAR process and additional input from community organizations and advisory committees.

## Summary of changes

## BC Extreme Heat Alert Response System (HARS)

Building on the HARS that was in place for the lower mainland, the Province launched an expanded HARS covering all areas of British Columbia this spring. The 2022 BC HARS is currently considered a pilot and may be adjusted further. Some key changes include a new alert name and alert criteria and the addition of broadcast intrusive alerts.

#### New alert names and criteria

Like the previous HARS, the new version has two levels of heat alerting. However, the names and trigger criteria have been updated as shown in Table 1 below.

The lower severity alert name remains unchanged though the criteria have been updated for 2022: a Heat Warning will be called when the temperature is forecast at 29°C for two consecutive days with a nighttime low being 16°C or higher. The more severe alert has been renamed to an *Extreme Heat Emergency* to better reflect the public health risk associated with this dangerous level of heat (previously: *Extreme Heat Alert*). The criteria have also been modified to "a period where daily highs will substantively increase day-over-day for 3 or more consecutive days." The provincial Health Effects of Anomalous Temperatures (HEAT) committee will convene regularly following a Heat Warning to assess the need for an *Extreme Heat Emergency* Alert.

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
Historical frequency	1-2 per year	1-2 per decade
Criteria	Southwest BC: 29-16-29 Fraser: 33-17-33 Southeast: 35-18-35 Northeast: 29-14-29 Northwest: 28-13-28 Note, the criteria differ in different regions of BC due to differing seasonal norms, adaptability, and access to cooling.	Heat Warning criteria have been met and forecast indicates that daily highs will substantively increase day-over-day for 3 or more consecutive days.

# Table 1 BC Heat Alert and Response System pilot 2022

## Broadcast intrusive alerts for Extreme Heat Emergencies

In previous years, Heat Warnings were communicated to the public by Environment and Climate Change Canada through various standard weather-related channels. Extreme Heat Emergencies (then referred to as Extreme Heat Alerts) were communicated by regional health authorities through their channels, such as via news releases, website, and social media channels. While the criteria were different, both alerts could be in place at the same time which diluted the call to action of the more severe alert.

As part of the new BC HARS, Environment and Climate Change Canada will take the lead on communicating both levels of heat alerts to the public. As part of this change, a broadcast intrusive alert will also be issued during an Extreme Heat Emergency. This will be sent to all compatible mobile phones and TV/radio channels in the alert area using the national <u>Alert</u> <u>Ready</u> system. Mobile phone users do not need to subscribe to this alert.

Following an Extreme Heat Emergency alert, the City of Vancouver will issue a non-intrusive public safety advisory through the <u>Alertable app</u> to communicate Vancouver-specific response measures to the public. The public safety advisory will complement the broadcast intrusive alert but will only be sent to individuals who have downloaded the Alertable app.

# Heat Response Coordination in Vancouver

During the lower-level Heat Warnings, the Vancouver Emergency Management Agency will continue to support response coordination, as in previous years, through VEMA-led coordination calls with City departments involved in the response.

Starting in 2022, when an Extreme Heat Emergency is called, the City's emergency operations centre (EOC) will now *automatically* activate to coordinate and support City departments and liaise with community organizations involved in the response. This will provide a more rapid increase of our coordination capability in support of the organization and our partners, as well as the ability to escalate additional support needs to Emergency Management BC, when required. As part of the EOC activation, VEMA will staff a community partner liaison position to ensure coordination and information sharing with community organizations involved in the response.

Vancouver Fire and Rescue Services and Vancouver Police Department will also activate their department operations centres (DOCs) to coordinate their response and coordinate with the EOC.

## First Responders

In 2021, Vancouver Fire and Rescue Services (VFRS) and Vancouver Police Department (VPD) experienced significant impacts to service levels due to very high wait times for BC Ambulance Service and BC Coroners Service response. For example, VFRS crews were required to remain at the scene of a medical call for extended periods while waiting for an ambulance to arrive; likewise, VPD officers were required to remain at the scene of a death until the BC Coroner was able to release them. Some officers remained at the scene of a death for their entire shift. While both BC Ambulance Service and the BC Coroners Service have increased resources and implemented plans to reduce significant delays in future heat events, VFRS and VPD have also adjusted extreme heat plans and protocols to better manage resources.

#### Vancouver Fire and Rescue Services

Following the service impacts experienced during 2021, VFRS developed a Heat Emergency Response Plan to mitigate service impacts during Extreme Heat Emergencies. The plan includes:

- 1. Activating the VFRS Department Operations Center in the early stages of an Extreme Heat Emergency to manage VFRS resources
- 2. Staffing up additional units before the call volume increases
- 3. Setting trigger points to discontinue response to low priority incidents
- 4. Modifying unit allocation levels to limit the amount of apparatus that are dispatched to certain call types in order to preserve staff and equipment for higher priority calls
- 5. Cycling units in and out of events experiencing long ambulance wait times so staff have recovery time

VFRS has also purchased additional portable air conditioning units for fire halls as most do not contain built-in cooling systems. As a result, VFRS staff are often exposed to worksite temperatures far in excess of the acceptable comfort limits stated by WorkSafe BC. Portable/standalone air conditioners help provide crews with a small post event recovery space

which ensures they are ready to respond to the next emergency. However, all VFRS worksites require installation of built-in permanent cooling solutions.

## Vancouver Police Department

Similar to VFRS, Vancouver Police Department plans built on the measures they implemented during last year's Heat Dome, including:

- 1. Activating the VPD Department Operations Centre proactively when an Extreme Heat Emergency is called
- 2. Staffing up additional units before call volumes increase
- 3. Adjusting response protocols to ensure units are available for high-severity incidents

#### **Cooling Centres**

Spending time in cool spaces is one of the primary measures to prevent heat-related illness<sup>1</sup>. A number of civic facilities are activated as cooling centres during Heat Warnings and during Extreme Heat Emergencies to provide people a place to spend time in a cool space. A number of community organizations also provide cool spaces.

#### **Civic Cooling Centres**

For the summer 2022, the City has increased the number of cooling centres at civic facilities by 30%. This was done through the purchase and installation of portal air conditioning units at 7 community centres that do not have built-in air conditioning and the addition of two more libraries to the list of cooling centres. Staff identified seven priority neighbourhoods for the expansion of cooling centre capacity and other extreme heat supports. These neighbourhoods were identified based on a number of factors, including concentration of emergency room visits during the 2021 heat events (see appendix, Map 1), areas of Vancouver with higher afternoon temperature (see appendix, Map 2), and areas of higher social and/or material deprivation.

During a Heat Warning, 19 of the 20 community centre locations will operate as cooling centres between 9am and 8pm. Carnegie Community Centre will be open later, from 9am to 11pm. These civic cooling centres will be supplemented by the 19 libraries during their regular hours.

During an Extreme Heat Emergency, the hours at all community centres cooling centres will be extended to 10pm (Carnegie Community Centre will continue to close at 11pm) and three locations will be open overnight. Hours at some library locations will also be extended.

A complete list of Civic Cooling Centre locations is shown in the appendix in Table 2.

## **Community Cooling Spaces**

In addition to civic cooling centres, staff are also exploring partnership opportunities with community groups and businesses to include non-civic facilities as formal cooling centres. Engagement with community serving organizations has demonstrated that many Neighbourhood Houses, Indigenous service agencies, cultural organizations, faith-based groups

<sup>&</sup>lt;sup>1</sup> Vancouver Coastal Health (2022). Extreme Heat web page. <u>http://www.vch.ca/public-health/environmental-health-inspections/healthy-environments/climate-change-and-health/extreme-heat</u>. Accessed June 13, 2022.

and seniors centres already provide informal cooling spaces to their members and users across the city during extreme heat events. The intent behind partnering is to support these organizations and enable additional locations to come online. This will help increase the density of cooling spaces throughout the city and will enable the City to promote these partner locations to a broader audience. The work with these community organizations is critical in reaching those disproportionately impacted by extreme heat and demonstrates the incredible work of these organizations to serve their communities.

#### Keeping cool outdoors

The City has also implemented a number of measures to keep cool outdoors. Many of these have increased in capacity since 2021. These measures include shaded spaces, misting stations, spray parks and wading pools, and the activation of irrigation for cooling in some parks.

#### **Shaded spaces**

Residents who are outside can seek shade in parks, beaches, parklets and other shaded spaces. For 2022, the City is promoting two weather protected spaces under Cambie Street and Burrard Street bridges as spaces that offer seating protected from the rain and sun.

As part of the COVID-19 response, the City has been partnering with social service organizations to create parklets to support expanded outdoor seating and space for programming. In total, the City has 12 social service parklets, many of which are in the DTES.

Staff are currently working with select partners to explore how their parklets can help provide respite for communities during the extreme heat response. For example, partners can help by putting up canopy tents and umbrellas in their parklet, as well as by providing access to water, washrooms and health information.

Staff continue to work with property owners to activate additional outdoor cooling space. Additional locations may come on-line throughout the summer and in future years.

## **Misting stations**

The City and Vancouver Park Board are deploying an additional 7 new misters in 2022, an increase of 88% to our primary misting locations. The majority of new misters are being placed in parks and some locations have been moved to areas of greater need. Misters are installed at the beginning of the summer each year and remain in place until fall. See Table 3 in appendix for current locations.

During an Extreme Heat Emergency, two heavy misters may be deployed to high-need locations. These misters require street closure and installation of higher-capacity equipment that generates a more significant, heavy mist. Once running, these misters emit a continuous mist until turn off at the end of the day. These heavy misters will operate during daytime hours only. In 2021, the heavy misters were piloted using VFRS equipment and have now been added to our plans. Based on feedback from VFRS and Engineering, Engineering Services is exploring options to improve heavy misters by utilizing new equipment with a lower flow rate that will still provide sufficient misting and cooling capability while conserving water and being easier to install and manage.

## Water Features in Parks

In 2021, the heat dome event occurred before spray parks were scheduled to be activated for the season. Vancouver Park Board has updated plans and many of these water features, including 12 spray parks, have been activated earlier this year to ensure they're ready for an early-season heat event. Wading pools will be open by July 5<sup>th</sup>.

During an Extreme Heat Emergency, and following the success of a trial in 2021, Vancouver Park Board will also activate irrigation systems during the day in some parks. This will provide an additional option to help people stay cool. These irrigation systems will be activated on a schedule (e.g. for 15 minutes each hour) during the day.

#### Access to Water

In addition to spending time in cool spaces, drinking plenty of water is also a critical measure to prevent heat-related illness<sup>1</sup>. Water is available at water fountains throughout the City and Engineering Services continues to assess options to expand this network. During heat events, bottled water is also distributed through our civic cooling centres and via community partners in the DTES.

Following success with water donated from the Food Bank in 2021 and some challenges identified with logistics during 2021, Supply Chain has developed a bottled water deployment plan, including:

- 1. Trial-run of transportation logistics in spring 2022
- 2. Pre-season pickup of donated water from vendors (10 pallets), stored at Central Stores
- 3. Rapid distribution to partners (e.g. DTES Community Centres, Atira Hub) when Heat Warnings and Extreme Heat Emergencies are called
- 4. Partnership with Atira Supply Hub to distribute to community organizations in the DTES
- 5. Replenishment of stockpile immediately on deployment
- 6. Backup sources of bottled water should primary source be interrupted or unavailable

The City continues to have an extensive network of drinking fountains, both permanent fountains and temporary fountains deployed during the summer. Throughout the summer of 2022, Engineering Services is partnering with UBC to assess the drinking fountain network and understand areas of greatest need. This will inform future investments in drinking fountain infrastructure.

#### Supporting residents of Non-Market Housing and SROs

Many of the City's residents most at-risk of extreme heat live in Non-Market Housing and privately-run SROs. These buildings were not designed for long-term occupancy and today's climate challenges, and residents have few resources to implement substantive changes themselves. The City is working with housing, health and community partners to address the intersecting risks for SRO tenants during heat events and ensure equity of access to support for at risk tenants in private, non-profit and government owner SROs.

In 2022, the City is increasing support to residents of Non-Market Housing Operations and SROs by sharing updated directions for wellness checks, piloting the limited distribution of Cool

Kits, providing information to privately owned SROs, and working with the SRO Collaborative to support the implementation of their community response plans.

# Wellness Checks

The health authorities are expected to release updated guidance and training for communitybased wellness checks during heat events. These updated guidelines will be incorporated into procedures at the City's Non-Market Housing and distributed to SRO operators and the SRO Collaborative for consideration in their plans.

# **Cool Kits**

The City is conducting a Cool Kit pilot this summer. This pilot will see the limited distribution of approximately 1,500 Cool Kits to residents of SROs and Non-Market Housing Operations facilities, and some other at-risk groups. Cool Kits contain supplies that people can use to cool down during hot days and identify when their home is dangerously hot. Each kit contains an indoor thermometer, a foot bath, cooling towel, spray bottle, cold packs, and a reusable water bottle to help people lower body temperature and stay hydrated. Staff are working with community partners to target distribution of these kits to priority groups who are at elevated risk of heat-related illness.

# Information to privately run SROs

The City is connecting with privately-owned SRO operators to provide heat safety information and encourage operators to check on heat-vulnerable residents and utilize community-based peer services where available.

## Support to SRO Collaborative emergency response plans

The City has engaged the SRO Collaborative to support the implementation of their community response plans for SROs, developed by tenants to support seniors, elders and people using illicit drugs and alcohol who they witnessed being so significantly impacted in last year's heatwave.

## Checking on people in outdoor public spaces

While the majority of deaths from the June 2021 heat dome occurred inside<sup>2</sup>, people in outdoor spaces are also at risk of heat-related illness and death. The City's heat plan includes staff working outside in community checking on people exhibiting signs of heat-related illness and directing them to cooling centres, water and other support. Park Rangers, outreach workers, community policing volunteers and first responders undertake this work. However, first responders may have limited capacity in Extreme Heat Emergencies, as was seen in 2021, which raises the importance of our outreach workers, park rangers, and community policing volunteers. The City also works closely with non-profit and grassroots organizations in supporting peer and community-based networks to conduct similar monitoring of outdoor spaces. This is done through Elders programs, the Astoria and Fairy Folk gardens, peer-based

<sup>&</sup>lt;sup>2</sup> Egilson, Michael. 2022. Extreme Heat and Human Mortality: A Review of Heat-Related Deaths in B.C. in Summer 2021. <u>https://www2.gov.bc.ca/assets/gov/birth-adoption-death-marriage-and-divorce/deaths/coroners-service/death-review-panel/extreme heat death review panel report.pdf</u>. Retrieved June 10, 2022.

illicit alcohol groups, SRO tenant initiatives, Washroom Trailer Program operators, and overdose prevention sites.

#### **Communications and Public Messaging**

The City is taking a proactive and multi-channel approach, aligned with partners, to education and awareness on heat preparedness, and to communicate key information during a heat event.

Building on the communications response from 2021, as well as learnings from last year's eat dome, City communications has expanded content and distribution channels for heat information. This includes:

- 1. A proactive media technical briefing and materials scheduled for late-June, delivered in collaboration with VCH and community partners
- 2. An updated and enhanced web presence at <u>vancouver.ca/hotweather</u>
- 3. Revamped staff communication, training and education on preparing for heat communications season
- 4. Proactive educational posts on social media throughout the summer to spread awareness on heat preparedness tips
- 5. Updated printable map with information on cooling centres, shaded areas and water infrastructure
- 6. Translation offerings for some information, based on input from community partners and in alignment with language access

Additionally, the City is proactively working with community partners to improve service and information offerings to disproportionately impacted communities and demographic groups.

Council is welcome and encouraged to support the City's efforts to reach people by sharing via social channels the <u>vancouver.ca/hotweather</u> URL, amplifying City social media campaigns and posts on heat preparedness, and widely sharing posts with essential information on heat response efforts (e.g. cooling centre hours, water stations) during a heat event.

## **Community Partnerships**

Partnering with community organizations on heat planning and response continues to be a major focus for the City. Population, place-based and neighbourhood specific activities in the planning and response to emergencies strengthens Vancouver's resilience across multiple emergencies, including extreme heat. The City has partnered with VCH to host roundtables with community organizations to strengthen community networks with a focus on seniors, people with disabilities, and Indigenous and cultural communities. This work builds on the Spaces to Thrive Social Infrastructure Strategy and Resilient Vancouver Strategy and has enabled alignment of planning between the City, community organizations and Vancouver Coastal Health.

Significant outcomes to date include increased information sharing for heat planning, identifying community initiatives that address priorities such as wellness checks, culturally appropriate planning and education and opportunities to leverage existing communications channels, programs and transportation assets during heat events. As a result of these discussions, the

City is adding a *community partners liaison* role to its emergency coordination structure to ensure that two-way communication with community partners is maintained before, during and after a heat event.

# **Grants and Funding**

In order to enable and support some of the extreme heat work being conducted by community organizations, staff are recommending Council approve the distribution of \$165K of grants to community organizations. These grants will directly support seniors, people with disabilities, people who use drugs, and Indigenous and racialized communities. The funding will be used to support initiatives to add shade, increase access to water in the DTES, cool indoor spaces by installing mechanical cooling, establish peer support networks, and enable critical outreach and support services over the summer and during any heat events. The council report seeking approval of these grants (RTS 15202) contains details of these grants and will be put forward for consideration at the June 21, 2022, council meeting.

In addition to these grants, the City is providing \$175,000 to pilot a number of heat response initiatives with community organizations such as Indigenous organizations and Neighbourhood Houses. These include supporting training and education of volunteers, the development of plans to provide transportation of at-risk people to cooling centres, and expanding other community-based extreme heat supports.

## Summary

Following the heat events of 2022, staff reviewed the City's response and initiated a project to enhance the City's heat response plans. This project included engaging with community organizations and advisory committees, assessing and update response plans, and increasing extreme heat supports delivered directly to residents and through community partners. This work is ongoing and will continue to evolve throughout the summer and in future years and is completed by longer-term climate adaptation actions.

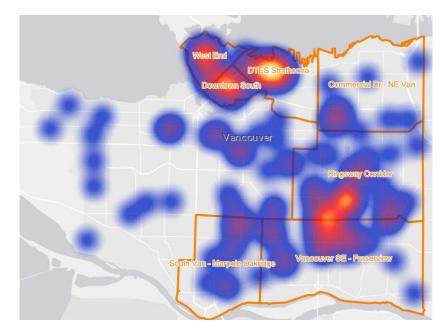
Yours truly,

Paul Mochrie City Manager 604.873.7666 | paul.mochrie@vancouver.ca

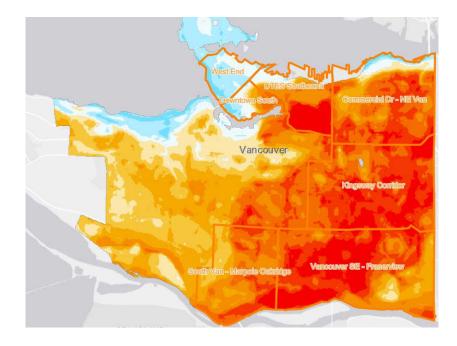
# Appendix

Highlighted neighbourhoods on both maps indicate priority areas for additional City of Vancouver heat response measures in 2022. They also correspond to areas of increased social and/or material deprivation.

Map 1: Concentration of hear-related hospital emergency room visits during 2021 Heat Dome event (Source: Vancouver Coastal Health)



Map 2: Relative afternoon temperature in Vancouver (red = hotter, blue = cooler)



2021 Cooling Centres	2022 Cooling Centres
10 VPB Community Centres	<ol> <li>17 VPB Community Centres</li> <li>Britannia</li> <li>Champlain (New)</li> <li>Coal Harbour (New)</li> <li>Hastings (New)</li> <li>Hastings (New)</li> <li>Hillcrest</li> <li>Kerrisdale</li> <li>Kensington (New)</li> <li>Killarney</li> <li>Marpole-Oakridge</li> <li>Mount Pleasant</li> <li>RayCam</li> <li>Renfrew (New)</li> <li>Roundhouse</li> <li>Sunset</li> <li>Thunderbird (New)</li> <li>Trout Lake (New)</li> <li>West End</li> </ol>
3 ACCS Community Centres	<ol> <li>3 ACCS Community Centres</li> <li>1. Carnegie</li> <li>2. Evelyne Saller</li> <li>3. Gathering Place</li> </ol>
<ol> <li>17 Libraries</li> <li>1. Britannia</li> <li>2. Central</li> <li>3. Champlain</li> <li>4. Collingwood</li> <li>5. Dunbar</li> <li>6. Firehall</li> <li>7. Fraserview</li> <li>8. Hastings</li> <li>9. Kensington</li> <li>10. Kitsilano</li> <li>11. Marpole</li> <li>12. Mount Pleasant</li> <li>13. nəca?mat ct Strathcona</li> </ol>	<ol> <li>19 Libraries</li> <li>1. Britannia</li> <li>2. Central</li> <li>3. Champlain</li> <li>4. Collingwood</li> <li>5. Dunbar</li> <li>6. Firehall</li> <li>7. Fraserview</li> <li>8. Hastings</li> <li>9. Joe Fortes (new)</li> <li>10. Kensington</li> <li>11. Kitsilano</li> <li>12. Marpole</li> <li>13. Mount Pleasant</li> </ol>

 Table 2 Civic cooling centres locations 2022

<ul> <li>14. South Hill</li> <li>15. Renfrew</li> <li>16. Terry Salman</li> <li>17. West Point Grey</li> </ul>	<ul> <li>14. nəča?mat ct Strathcona</li> <li>15. South Hill</li> <li>16. Oakridge (new)</li> <li>17. Renfrew</li> <li>18. Terry Salman</li> <li>19. West Point Grey</li> </ul> During an Extreme Heat Emergency: <ul> <li>Central Library will be open 9am –10pm daily.</li> <li>The following branch locations will be prioritized for extension of hours: <ol> <li>Hastings</li> <li>Marpole</li> <li>néca?mat ct Strathcona</li> <li>Fraserview</li> <li>Collingwood</li> </ol> </li> </ul>
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Note: locations are subject to change. Any changes will be communicated on vancouver.ca and via other channels.

# Table 3 Misting station locations 2022

2022 Locations	
15 loca	ations
1.	Andy Livingstone Park
2.	China Creek South Park (new)
	Columbia & Powell
4.	Crab Park (new)
	Granville & W10th
6.	Guelph/Dude Chilling Park (new)
	Main & E14th
8.	Nanaimo Park (new)
	Nelson Park
10.	Oppenheimer Park (TBC)
	Robson & Cardero
12.	Thornton Park
13.	W 70th & Hudson (near Marpole Neighbourhood House)
	West Blvd and 45th Ave
	Winona Park (new)

Note: locations are subject to change. Any changes will be communicated on vancouver.ca and via other channels.