
TO: CHIEF ADMINISTRATIVE OFFICER **DATE:** 2021 Sep 16

FROM: DIRECTOR - PUBLIC SAFETY AND
COMMUNITY SERVICES

SUBJECT: 2021 HEAT EVENTS

PURPOSE: To provide Council a Summary Report regarding the 2021 Extreme Heat Events.

RECOMMENDATIONS:

1. **THAT** this report be received for information purposes.
2. **THAT** a copy of this report be forwarded to the Public Safety Committee.

REPORT**1.0 INTRODUCTION**

The summer of 2021 was extraordinary due to the multiple challenges that were faced by municipalities in the province of British Columbia including those in the lower mainland. The ongoing Covid-19 global pandemic and the severe wildfire season were exacerbated by an unprecedented series of extreme heat events. These historical and record breaking successive heat events clearly demonstrated the significant and tragic consequences of climate change as well as the planning and preparation necessary to adequately respond to these events in the future.

This report provides a Summary Report (attachment #1) of the 2021 heat events and the actions and activities undertaken by staff during these events.

2.0 POLICY SECTION**Goal**

1. A Safe Community
 - Emergency preparedness – Enhance plans, procedures and services so that we are better prepared to respond to emergencies and are able to maintain City services

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- Emergency services – Provide responsive emergency services
- Community amenity safety – Maintain a high level of safety in City buildings and facilities for the public and City staff

2. A Healthy Community

- Healthy life – Encourages opportunities for healthy living and well-being
- Healthy environment – Enhance our environmental health, resilience and sustainability

3.0 BACKGROUND

There were three separate extreme heat events in 2021:

1. June 24th to July 2nd - (*Heat Dome*)
2. July 29th to Aug 1st - (*Heat Wave #1*)
3. Aug 10th to August 15th - (*Heat Wave #2*)

The attached Summary Report prepared by the City of Burnaby Emergency Management Coordinator, provides detailed information regarding these events and the response by staff to assist those vulnerable in the community to the adverse effects of prolonged heat exposure, such as the elderly, infants and the young, socially disadvantaged individuals, etc.

The City response to these heat events was a critical priority and involved the direct and robust engagement and participation by staff from the following City Departments and divisions:

Department	Division
Office of the C.A.O.	<ul style="list-style-type: none">• Chief Administrative Officer
Corporate Services	<ul style="list-style-type: none">• Director• Communications• Marketing• Citizen Support Services
Engineering	<ul style="list-style-type: none">• Director• Facilities Management
Finance	<ul style="list-style-type: none">• Director• Assistant Director, Treasury Services
Human Resources	<ul style="list-style-type: none">• Director• Acting Director• Occupational Health and Safety
Burnaby Public Library	<ul style="list-style-type: none">• Director• Assistant Director

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	<ul style="list-style-type: none"> • Bob Prittie Metrotown Staff • McGill Library staff
Parks, Recreation and Cultural Services	<ul style="list-style-type: none"> • Director • Assistant Director, Recreation • Parks Operations • Edmonds Community Centre staff • Eileen Dailly Staff • Cameron Centre staff • Bonsor Complex staff • Food Services
Planning and Building	<ul style="list-style-type: none"> • Director • Deputy Director • Social Planning
Public Safety & Community Services	<ul style="list-style-type: none"> • Director • Fire Chief • RCMP Officer in Charge (OIC) • RCMP Community Program Officer • RCMP Emergency & Major Events Planning • Chief Licence Inspector • By-law Enforcement Officers • Property Use Coordinators • Risk Manager • Security Specialist • Security Officers • Emergency Management Coordinator

4.0 LESSONS LEARNED

As noted in the attached Summary Report:

The heat dome and two subsequent heat waves experienced in British Columbia within a period of just over 8 weeks adversely affected a population unaccustomed and unprepared for such extreme temperatures. 815 sudden deaths of all cases and ages (BC Coroners Service, 2021) were reported province wide, with 69 per cent, or 569 preliminarily attributed as heat-related deaths by the B.C. Coroners Service. 279 of those deaths, equaling 49 per cent, were in the Fraser Health region (B.C. Coroners Service, 2021).

The tragic and deadly consequences of the heat dome in late June unequivocally demonstrated the need for much more to be undertaken to plan for and respond to, similar events occurring in the future. Subsequent to the heat dome as well as after each of the

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two heat waves, staff undertook post-incident debriefs to determine the areas of response that worked well and which activities were absent or required enhancement. An *After Action Report* (AAR) was prepared for each incident and the AARs were in turn used to prepare the attached Summary Report.

The Summary Report identifies 27 recommendations to enhance the City response to extreme heat events. These recommendations range from immediate actions that have already been completed (example #3. Early engagement with RCMP communications and Community Policing regarding cooling locations) to recommendations which require further exploration and analysis (example #21. Pending data from the B.C. Coroners Service, identify and set-up additional cooling locations in areas where there was a high incidence of death).

Staff will continue to track and implement the 27 recommendations as appropriate and monitor data and material arising from the 2021 extreme heat events from various levels of government and agencies, for any additional relevant "best practices" to enhance the City's extreme heat response to ensure those in need are provided the assistance they require.

5.0 RECOMMENDATIONS

The attached 2021 Heat Events Summary Report provides a detailed summation and analysis of each of the three separate extreme heat events that occurred in 2021. The goal of the report is to ensure not only a fulsome understanding of the individual events, but also more importantly, identify what can be done to enhance the City's response to these future similar events and mitigate the effects on those most impacted. It is recommended that this report be received for information purposes and a copy of this report be forwarded to the Public Safety Committee.

Dave Critchley
DIRECTOR - PUBLIC SAFETY AND COMMUNITY SERVICES

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Copied to: Director Corporate Services
Director Engineering
Director Finance
Director Parks, Recreation and Cultural Services
Director Planning and Building
Chief Librarian
Acting Director Human Resources
Fire Chief
Acting OIC Burnaby Detachment

Attachment: 2021 Heat Events Summary Report