



Attachment 2

*July 26th, 2023 Council Report on
Extreme Heat Response*

REPORT

Office of the Chief Administrative Officer

Fire and Rescue

Climate Action, Planning and Development

Electrical

To: Mayor Johnstone and Members of Council **Date:** June 26, 2023

From: Lisa Spitale, Chief Administrative Officer **File:**
On behalf of SMT

Item # 2023-468

Subject: City Staff's Heat Plan Response to Extreme Heat in New Westminister:
Accelerated Funding for Summer 2023 – Recommendation from the Utility
Commission

RECOMMENDATIONS

THAT Council endorse the recommendation from the Utility Commission set out in this report; and

THAT Council endorse the accelerated Heat Plan response workplan and the \$268,000 one-time budget increase to be funded from the Climate levy, collected from electric utility bills in the Climate Action Reserve Fund; and

THAT Council direct staff to pursue the following Next Steps as outlined in this report:

(a) Direct staff to seek endorsement of the budget amount from the Utility Commission;

(b) Direct staff to bring this report back at the July 10, 2023 Regular Council meeting for Council approval or rejection

PURPOSE

The purpose of this report is twofold: one, to provide Council with the recommendations from the Utility Commission regarding the City's response to extreme heat; and two, to provide Council with staff's Heat Plan with an accelerated workplan and one-time budget request for summer 2023.

EXCUTIVE SUMMARY

At the June 12th Council meeting, Council considered a motion - *Implementation of a temporary Low-Income Energy Assistance Program in 2023* - and directed that the Utility Commission review the motion and provide Council with a recommendation.

At the June 20th Utility Commission meeting, the Commission reviewed the Council motion and a memo from City staff outlining the existing heat plan initiatives currently underway to address extreme heat.

The Utility Commission approved a motion supporting staff's existing heat response initiatives and asked that Council support a one-time budget increase if staff could accelerate the Heat Plan for the 2023 summer. The Utility Commission asked that staff inform them of the one-time budget amount.

After the Utility Commission meeting, staff from the Fire Department, in particular the Emergency Management Office (EMO), and the Climate Action, Planning and Development (CAPD) Department, in particular the Climate Action team, the Social Planning team and Building Inspections, have been working to develop an accelerated Heat Plan workplan for the 2023 summer. The accelerated workplan involves focusing on the community's most vulnerable populations.

The workplan assumes extra staff resources for EMO, project budget enhancement for Climate Action Team, administrative support for the Seniors Services Society and the purchase and installation of air conditioners. This accelerated workplan will build on the current short term efforts such as the pilot project at Ross Tower, creating cool rooms in common areas inside identified buildings and continued collaboration with Fraser Health. The accelerated workplan is aligned with a host of longer term initiatives as well.

As this report is an on-table report, staff are recommending that Council *endorse* (rather than approve) the accelerate heat response workplan and the one-time budget request of \$268,000. Staff also recommend that the budget recommendation be brought back to the Utility Commission for their sign off; and finally that these recommendations be brought back to the July 10, 2023 Regular meeting for Council's formal approval or rejection of the accelerated heat plan workplan and one-time budget request.

BACKGROUND

At the June 12, 2023 Regular Council meeting, Council approved that the following motion be forwarded to the Utility Commission for their review and comment.

Council Motion: Implementation of a temporary Low-Income Energy Assistance Program in 2023

Whereas New Westminster had the highest per capita death rate during the 2021 "Heat Dome" which according to the BC Coroner's office killed 28 residents, many of whom were renters living in tree-canopy deficient neighbourhoods;

Whereas according to the BC Coroner's Office most decedents were in homes without adequate cooling systems such as air conditioners or fans; and

Whereas the 'Heat Dome' event had significant financial and operational impacts on New Westminster's first responders including our fire and police departments; and

Whereas in 2023 the City of New Westminster injected \$26 million dollars into our Climate Action Reserve for which no funds have been allocated and this in addition to the \$1.9M we anticipate collecting this year by way of a Climate Action Levy charged to all New Westminster electrical utility ratepayers;

THEREFORE BE IT RESOLVED that effective June 1st, 2023 the New West Electrical Utility be directed to provide a one-time reimbursement of up to \$500 to low income residents to install a new or replace an older non-functioning air conditioning unit; and

BE IT FURTHER RESOLVED that New West Electrical Utility establish a low-income energy assistance program effective June 1st to provide up to \$500 in credits for eligible residents who are facing markedly higher energy bills due to increased consumption during the summer season (June through September); and

BE IT FURTHER RESOLVED that the definition of low-income mirror that of the Province of BC which is defined as individuals with an income of \$39,115 or less, and families with a household income of \$50,170 or less in 2022; and

BE IT FURTHER RESOLVED that up to \$500,000 be sourced from the Climate Action Reserve Fund to cover the cost of this temporary program; and

BE IT FURTHER RESOLVED that on urgent basis the CAO be authorized, in consultation with the Mayor, to establish the streamlined program eligibility and temporarily reallocate the necessary internal resources to support the operations of this program; and

BE IT FURTHER RESOLVED that the Mayor write a letter to the Premier of BC requesting the 14 recommendations contained in a June 7, 2022 BC Coroner's Office report titled "Extreme Heat and Human Mortality: A Review of Heat-Related Deaths in B.C. in Summer 2021" be fully implemented in an expedited manner.

At the June 20, 2023 Electrical Utility Commission meeting, the Commission approved the following resolution:

MOVED and SECONDED

THAT the Utility Commission recommends Council not implement the Council motion at this time so that staff can undertake work and permit a more completed investigation for equitable access to funding for those most in need, targeting the most vulnerable seniors living in New Westminster, and continue all of our other work with staff's current program for 2023, and to more fully understand the cost implications for implementing this program along with identifying partners to support the program.

And THAT staff provide Council with a budget and a workplan at the June 26, 2023 Council meeting, with the source of funding being the Climate Action Reserve Fund.

Carried.

All Commissioners present voted in favour of the motion.

DISCUSSION

City staff are currently working on several initiatives to address extreme heat. The Emergency Management Office (EMO) has recognized the following characteristics as those that increase a person's risk of morbidity or mortality during an extreme heat event and defines vulnerable populations as: Seniors living in isolation, substance misuse, people with a mental health issue, people with mobility issues, people with medical comorbidity (example receiving chemotherapy for cancer); in combination with a lack of access to air conditioning.

To address the request of an accelerated Heat Plan for the summer of 2023, staff are recommending a 2-stream approach:

Stream 1: focus on the need to keep people alive, focus efforts on targeted buildings and focus on people that are at the highest risk.

Stream 2: longer term to build resiliency and put policies and protocols in place to enhance building envelopes to minimize the demand for fuel to heat and cool. Policies shall incentivize passive cooling techniques, building envelope upgrades, installation of centralized and high efficiency cooling systems, tree planting and use of portable AC as a temporary measure in the most difficult areas.

EMO and Fire Department Stream 1 Actions:

Outlined below is a brief summary of actions:

- The City has an Extreme Heat Response Plan, which incorporates a number of measures, including communication and notification, to safeguard residents, including renters and seniors, during extreme heat events.
- EMO / Fire has partnered with FHA to establish an Emergency Monitoring Center for activation in extreme heat events to care for and monitor patients with mild to moderate heat related injuries.
- EMO / Fire has identified 126 multifamily residences housing the most vulnerable populations.
- Staff has engaged the Seniors Services Society to identify and provide outreach support targeting the most vulnerable seniors.
- EMO will engage the Life Line program to identify vulnerable residents.
- The City supports Connect and Prepare to facilitate social connectedness and emergency preparedness at Ross Tower. This program is being expanded to other rental buildings and senior independent living residences.

- The City has initiated a program with FHA to provide portable AC units to vulnerable residents who cannot access cooling areas because of mobility issues.
- EMO has distributed Heat Preparedness Information brochures to buildings housing vulnerable populations for distribution to property managers and stratas for posting.
- EMO distributes further education to properties and occupants just prior to forecasted heat events.
- The City continues to activate cooling venues during heat events.
- EMO / Fire collaborates with Social Planning to communicate and support faith based and non-profit organizations with water distribution and heat response information.
- EMO works with Parks and Recreation on the outdoor cooling strategy including misters, spray parks, etc.
- EMO works with Parks and Recreation to update the 'Stay Cool' information map for residents.
- Fire, Police and Integrated Services perform roaming patrols during heat events to provide water and outreach support to the unsheltered population.

CAPD Stream 1 Actions:

- The Climate Action Team provides information to residents, through Energy Save New West program communication channels, on no- and low-cost ways to keep cool in their homes.
- The Climate Action Team is conducting a study on incentives and tools which would accelerate energy and emission retrofits of low-rise rental residential buildings.
- The Climate Action Team is gathering case studies on individual unit heat pump retrofit experiences for existing multi-unit residential buildings.

EMO and Fire Stream 2 Actions:

- EMO has informed Parks and Recreation of strategic areas within the City to focus tree planting to reduce the impacts of heat events on vulnerable populations.
- EMO has engaged the City Solicitor to assess the feasibility of imposing regulatory requirements to building structure and/or creating Heat Plans for its residents.

CAPD Stream 2 Actions:

- The Climate Action Team continues to identify and advocate for adaptation and resilience programs to support New Westminster residents to manage the impacts of climate change (for delivery through the Province and Utilities).
- The Climate Action Team, through the Energy Save New West program, continues to identify opportunities to provide additional marketing, resident support, and top-up incentives for existing energy, emissions and resilience programs that are delivered by the Province and Utilities.
- Within the current 4 year workplan, the Climate Action Team will develop a targeted and data-informed “vulnerable building retrofit” program for New Westminster residents in alignment with the Community Energy and Emissions Plan 2050 (CEEP) with an undefined program administration and delivery timeline (likely beyond 2026).

ACCELERATED WORKPLAN

This is work in progress that has been identified for an accelerated workplan through additional resources.

	Task	Assign to:
1	Assess identified buildings with vulnerable populations for suitability and implementation of a common cooling area.	Fire / EMO / FHA
2	Create a Heat Preparedness Plan template for buildings with no common cooling area to adopt.	Fire / EMO
3	Engage building representatives to retro fit a common cooling room.	Fire / EMO/ Building Dept.
4	Engage building representatives of buildings with no cooling areas to create a Heat Plan.	Fire / EMO
5	Perhaps it could read: "Provide air conditioners to vulnerable seniors who have mobility limitations or do not have a common cooling area	Fire / EMO / FHA / Seniors Society NGOs*
6	Collaborate with NGOs and FHA to establish best practices for heat response materials.	FHA / NGOs / FHA / COMMS
7	Public Outreach specific for heat education in vulnerable areas through the community “Pop Ups”.	Fire

	Task	Assign to:
8	Collaborate with Senior Services Society to create new and increase current outreach services.	EMO / Senior Services
9	Provide targeted outreach to FHA Home Health clients.	EMO / FHA
10	Collaborate to provide Heat Preparedness information through Energy Save New West program communication channels.	EMO / FHA / Comms / NGOs / Climate Action
11	Collaborate to provide Heat Preparedness information in home language community workshops through the Energy Save New West Empower Me program	EMO / Climate Action
12	Translate Heat Preparedness literature and posters to other relevant languages.	EMO / Comms
13	Collaborate with Communications to update sign board information for activations.	EMO / Comms
14	Collaborate with non-profit & faith based organizations to produce active outreach strategies.	EMO/ Social Planning
15	Collaborate with Parks to expand “ Stay Cool” Mapping for distribution with other heat publications.	EMO / Parks
16	Establish a centralized inbound information phone service for elderly who do not utilize internet services.	EMO / IT
17	Assess feasibility and implement an outbound “Cool Callers’ program during heat events.	Senior Services
18	Collaborate with NGOs to establish cooling venues for the unsheltered in a heat response.	Social Planning / EMO / NGOs
19	Expand outreach to the unsheltered during heat events.	EMO / Fire / Social Planning
20	Implement a cooling kit program including distribution with cooling supplies for unsheltered and low income.	Social Planning / EMO / Fire

* NGO = non-government organizations supporting appropriate vulnerable populations

Climate Action Team Stream 2 Accelerated Workplan:

The current Stream 2 work within the Climate Action Team 4-year workplan (2022-2026) is to identify gaps in existing provincial and utility programs as it relates to buildings and residents within the city of New Westminster. From there, the Team will develop a targeted and data-informed “vulnerable building retrofit” program for New Westminster residents in alignment with the Community Energy and Emissions Plan 2050 (CEEP) with an undefined program administration and delivery timeline (likely beyond 2026).

By accelerating stream 2, the work would include Identifying the root causes of building overheating, building archetypes and needs of building owners to advance comprehensive building envelope and mechanical system retrofits. This approach will result in emission reductions but also energy efficiency and conservation; which will further reduce energy utility bills for the residents and reduce electrical grid demand to support the resilience of the New Westminster Electrical Utility. The aim would be to develop a program design in 2024 and deliver a program to the community prior to 2026.

Impact of Stream 2 Acceleration on Climate Action Team Workplan:

Based on the current staffing levels of the Climate Action Team, to accelerate the stream 2 work the Climate Action Team would need to cease working on eMobility (i.e. public/private/fleet electric vehicle charging, transportation emissions, and EV policy development) and redirect staff time to accelerating extreme heat response programs (1 FTE).

It should be noted that to meet the City’s CEEP and eMobility emission reduction targets, it is expected that the City needs to install ~18 publically accessible EV charging stations (including 3 DC Fast Charging) and ~8,500 retrofitted parking stalls in multi-unit residential buildings over the next 4 years. If work is redirected to building retrofit program development, these targets will not be met.

BUDGET REQUEST

The Climate Action Reserve Fund (Attachment 1) was established to ensure funds are available to overcome the incremental increased cost of reducing corporate and community energy consumption and greenhouse gas emissions, in an attempt to ensure global temperature rise does not exceed 1.5C. Although the steam 1 budget request of \$268K does not address energy conservation, it is in support of emergency life and safety near term adaptation against the real and devastating impacts of climate change that we are all feeling today. The financial implications of the stream 2 actions, will be considered and calculated in the upcoming budget processes. However, at this stage, it is estimated that an additional full-time equivalent (FTE) position will be

required to focus on designing a building retrofit program. The anticipated salary for this FTE is \$95,000 per year, along with associated benefits.

A Climate Action Decision Making Framework is being developed in 2023, but in absence of this structured approach to managing the climate funds, it is necessary to present the principles which were considered in developing this one-time budget request:

- *Climate change related life and safety:* while working on root cause solutions, near term impacts of extreme heat put at risk the lives of the most vulnerable residents.
- *Incremental funds:* stream 1 attempts to minimize overall cost by using existing programs and partners to deliver increased support, rather than creating a one-time emergency program from the ground up.
- *No year-over-year funding requested:* The stream 1 work is a one-time enhancement with no ongoing operating costs associated.

Emergency Management Office (EMO)

- To accomplish the accelerated workplan EMO will require approximately 14 weeks of three full time equivalent staff at an expense of \$95,000:
 - Backfill the Emergency Management Coordinator
 - Secondment of a firefighter into the EMO
 - Fire prevention staff (to assist on overtime)
- Senior Services Society will require an equivalent of 1 full-time equivalent staff for 14 weeks to assist with project management and to collaborate with the EMO to identify vulnerable seniors at an expense of \$27,000.
- EMO will require \$108,000 for 126 additional portable air conditioners plus \$12,600 for installation.

Climate Action

- Stream 1: Expanding Energy Save New West marketing and communication budget and Empower Me workshop materials, estimated expense of \$25,000.
- Stream 2 (not part of the one-time budget increase): 1 FTE dedicated to building retrofit program design, estimated to be \$95,000/yr.

Budget Description	Amount
EMO - 14 weeks of 3 FTE equivalent staff	\$95,000
Senior Services Society – 14 weeks of 1 FTE equivalent staff	\$27,000
126 portable air conditioners and installation	\$120,600
Energy Save New West – marketing and workshop materials	\$25,000
TOTAL	\$267,600

NEXT STEPS

1. Council endorse the accelerated Heat Plan response workplan and the \$268,000 one-time budget increase to be funded from the Climate levy, collected from electric utility bills portion of the Climate Action Reserve Fund.

2. Direct staff to seek endorsement of the \$268,000 one-time budget request from the Utility Commission prior to July 10, 2023.

3. Direct staff to bring this report back at the July 10, 2023 Regular Council meeting for Council approval or rejection.

OPTIONS

There are five options for Council’s consideration; they are:

- Option 1 - Council endorse the recommendation from the Utility Commission

- Option 2 – Council endorse the accelerated workplan and the \$268,000 one-time budget increase to be funded from the Climate levy, collected from the electric utility bills, portion of the Climate Action Reserve Fund

- Option 3 - Council direct staff to pursue the following Next Steps as outlined in this report:
 - a) Direct staff to seek endorsement of the budget amount from the Utility Commission;

 - b) Direct staff to bring this report back at the July 10, 2023 Regular Council meeting for Council approval or rejection.

Option 4 – Council not endorse the recommendation from the Utility Commission and approve the Council motion Implementation of a temporary Low-Income Energy Assistance Program in 2023.

Option 5 - Council not endorse the recommendation from the Utility Commission and provide further direction to staff.

Staff recommend Options 1, 2 and 3

INTERDEPARTMENTAL LIAISON

Advancing an extreme heat response is a high priority involving several City departments including Fire, Climate Action, Planning and Development, Parks and Recreation, Electrical, Finance and the CAO.

ATTACHMENTS

Attachment 1 – Climate Action Reserve Fund Summary Presentation (Utility Commission Slides, September 2022)

APPROVALS

This report was prepared by:
Cory Hansen, Emergency Management Coordinator
Leya Behra, Manager of Climate Action
Brad Davie, Deputy Fire Chief

This report was reviewed by:
Erin Williams, Fire Chief
Jackie Teed, Acting Director CAPD
Rod Carle, General Manager, Electrical

This report was approved by:
Lisa Spitale, Chief Administrative Officer

Attachment #1

Climate Action Reserve Fund Summary Presentation

- Utility Commission Slides September 2022

The background is a light blue gradient with several realistic water droplets of various sizes scattered across it. The droplets have highlights and shadows, giving them a three-dimensional appearance. The text is centered in the middle of the frame.

CLIMATE RESERVE

UTILITY COMMISSION UPDATE & ROUNDTABLE

BYLAW NO. 8321, 2022

COUNCIL APPROVED IN JUNE

CORPORATION OF THE CITY OF NEW WESTMINSTER

Climate Action Reserve Fund Bylaw No. 8321, 2022

A Bylaw to establish a Reserve Fund in support of the City of New Westminister's commitment to greenhouse gas reduction targets for the City's corporate operations and the community.

WHEREAS Section 188 (1) of the *Community Charter* states that a council may, by bylaw, establish a reserve fund for a specified purpose and direct that monies be placed to the credit of the reserve fund;

AND WHEREAS the City of New Westminister is a signatory to the B.C. Climate Action Charter to reduce corporate and community energy and greenhouse gas emissions;

Establishment of Fund

4. The Climate Action Reserve Fund is established to receive funding to provide investments in one-time funding for both Capital and Operating investments to accelerate climate mitigation and adaptation projects, actions and initiatives that target energy and greenhouse gas reductions associated with City lands, facilities, or infrastructure, or Community services or infrastructure, including but not limited to the following:

- a) The planning for and completion of regional or local energy reduction or conservation projects and initiatives;
- b) The creation and implementation of climate mitigation and adaptation strategies, policies, and other related initiatives;
- c) The creation and implementation of infrastructure projects that will result in measurable emissions reductions in support of the City's obligations under the Low Carbon Fuel Standard;
- d) The sale and transfer of low carbon fuel credits; and
- e) The provision of a mechanism to manage and track these funds and measure their impact on the corporate and community levels.

Municipalities role vs funds available:

- Bold Climate Action, yet limited funds
- Existing City Reserves limited to existing asset replacements
- Incremental Funds required for new investments/enhancements
- Ongoing operating impacts need to be accommodated in the long-term tax and utility rates – service the reserves and plan for asset replacement in the future (climate resilient assets)
- This funding can support the delivery of the City's 5 year plan as a one time investment or grant/incentive
- Business Case should be approved – max GHG reduction and carbon credits potential with 5-8 year pay back.

5 YEAR CAPITAL PLAN

Bold Climate Action – over \$100M in unfunded proposed Capital Investments

- District Energy
- Electric Vehicle Infrastructure – Public and Civic
- Electric Fleet
- Natural Assets
- Infrastructure/Facilities
- Public Incentives
- Climate Planning

Funded from the Electrical Reserve – Automated Meters

Funded from Debt – QB Substation

Unplanned – New Substation(s) – Growth Strategy

Unplanned – Flood Resiliency & Climate Mitigation (EOC Funding)

DECISION MAKING FRAMEWORK

NEW ASK FOR 2023 CAPITAL PLAN AND BUDGET:

- **CLIMATE ACTION DECISION MAKING FRAMEWORK \$50K**
- VALUE FOR MONEY: SUPPORT FOR BUSINESS CASE APPROVAL:
 - GREENEST BANG FOR OUR BUCK – MAX GHG REDUCTION
 - GATES: ORGANIZATION READINESS, PUBLIC READINESS, MARKET READINESS, ETC.
 - RETURN ON INVESTMENT/PAY BACK MODEL/ONGOING OPERATING IMPACTS
 - STRUCTURED APPROACH TO MANAGING THE CLIMATE FUNDS