



Corporate Services

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September 12, 2022

File No: 7130-01

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Jim Bauer, Chief Financial Officer
Westbank First Nation
301- 515 Hwy 97 South
Kelowna, BC V1Z 3J2
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Dear Sirs:

Re: **2022 Community Emergency Preparedness Fund Application – RDCO Extreme Heat Risk Mapping, Assessment and Planning Project**

To support the Emergency Operations Centre (EOC), the Regional Board approved the following resolution at its July 14, 2022, Board meeting:

***THAT** the Regional Board supports the Regional District of Central Okanagan application to the UBCM Community Emergency Preparedness Fund for a \$153,545 grant to complete the Extreme Heat Risk Mapping, Assessment and Planning project.*

A copy of the Board Report is enclosed for your easy reference.

The UBCM Evaluation Committee has reviewed the RDCO's submission and has requested resolutions be submitted from the City of Kelowna, City of West Kelowna, District of Lake Country,

District of Peachland and Westbank First Nation that clearly states that local government's approval for the primary application to apply for, receive, and manage the grant funding on their behalf.

Accordingly, the RDCO is hereby requesting that your respective Councils consider the following resolution as soon as possible and provide the RDCO's Corporate Services Department with a certified copy of the resolution by no later than September 22, 2022:

THAT *[insert name of Council]* approves the Regional District of Central Okanagan applying for, receiving, and managing the UBCM Community Emergency Preparedness Fund grant funding to complete the Extreme Heat Risk Mapping, Assessment and Planning project on behalf of *[insert name of local government]*.

If you are unable to meet this tight timeline, please advise me as soon as possible.

Yours truly,

A handwritten signature in black ink, appearing to read "S. Horning".

Sandi Horning
Deputy Corporate Officer

encls.

cc: S. Follack, Emergency Program Coordinator
Email: sfollack@kelowna.ca



Regional Board Report

Request for Decision

To: Regional Board
From: Brian Reardon, CAO
Date: July 14, 2022
Subject: 2022 Community Emergency Preparedness Fund Application – RDCO Extreme Heat Risk Mapping, Assessment and Planning Project.

Voting Entitlement: *All Directors – Unweighted Corporate Vote – Simply Majority (LGA S.208)*

Purpose: To consider a grant application to the UBCM Community Emergency Preparedness Fund for completion of an Extreme Heat Risk Mapping Analysis and Response Plan.

Executive Summary:

The Emergency Management Program is a regional service comprised of all municipal and electoral area jurisdictions along with Westbank First Nation who work together to provide a coordinated emergency response for events such as forest fires, floods, landslides, and extreme heat events.

As climate change is creating more frequent extreme heat events, identifying options to support our residents during times of extreme heat is becoming more vital. The Emergency Operations Centre is seeking to complete an extreme heat risk mapping analysis, risk assessments and a regional response plan and implementation strategy to help protect vulnerable populations in our communities.

Extreme Heat Risk Mapping will identify high risk areas in urban and interurban areas, determine the needs of neighborhoods with limited resources and/or transportation options and identify available resources and best locations for response preparedness. A Response Plan will identify the needs of the most vulnerable populations and provide resources to support them during heat events, develop short- and long-term extreme heat risk reductions goals, objectives, and strategies to meet the goals.

Recommendation:

THAT the Regional Board supports the Regional District of Central Okanagan application to the UBCM Community Emergency Preparedness Fund for a \$153,545 grant to complete the Extreme Heat Risk Mapping, Assessment and Planning project.

Respectfully Submitted:

A handwritten signature in black ink that reads "Brian Reardon".

Prepared by: Sandra Ballan-Brown, Corporate Services Executive Assistant

Attachment(s): 2022 Community Emergency Preparedness Fund Application

Strategic Plan Alignment:

Priorities: Sustainable Communities, Environment

Values: Collaboration, Regional Perspective, Resiliency, Relationships

Background:

To support the Emergency Operations Centre, the RDCO is applying for funding to complete an extreme heat risk mapping analysis, risk assessments and a regional response plan and implementation strategy to help protect vulnerable populations in our communities. Risk assessments will identify the social, economic, and environmental impacts of extreme heat events including identifying urban heat islands, community and infrastructure vulnerabilities, and risk tolerance or “risk threshold” including populated areas proportionately at risk.

Extreme heat response planning will include community engagement, data relevant to areas from Interior Health mapping; considerations for heat-sensitive populations and targeted response actions to mitigate impacts with low to moderate income neighbourhoods. Adaptive responses allow a community to determine its vulnerabilities to extreme heat more accurately in high-risk areas, areas lacking infrastructure for cooling, and areas of vulnerable populations.

Specific activities undertaken as part of the proposed project include:

- Review of lessons learned during the 2021 heat dome and best practices learned from other jurisdictions
- Completion of an Extreme Heat Risk Assessment
- Completion of Extreme Heat Risk Map(s)
- Completion of an Extreme Heat Risk Response Plan including collaborating with Interior Health using their “HARS” report specific to:
 - Completion of health impacts of extreme heat in the elderly population assessment
 - Heat response in interior rural communities and who it affects assessment
- Create effective heat alert protocols and messaging for all residents
- Communications Plans – messaging prior and during an active heat event
- Working with the most vulnerable populations specifically related to (but not limited to) to identify their needs and provide planning and resources to support during heat events, develop short- and long-term extreme heat risk reduction goals, objective and strategies to meet the goals
- Presentation of extreme heat risk assessments, maps and plans to local governments, indigenous communities, community organizations and community groups. This includes seeking advice from Knowledge Holders and other experts (e.g., health authorities, biologists), and engaging community (e.g., service organizations, equity-denied populations, Indigenous organizations), Indigenous Nations, local governments, agriculture sector, critical infrastructure owners, etc

Outcomes could include a summary of discussions or letters of support from different parties identifying preferred options going forward

Considerations:

Organizational/External:

The identified project and grant submission supports the following strategic priorities: provides proactive and responsive governance; anticipates, prepares and adapts to challenges, and provides a regional perspective.

Financial:

Successful receipt of the Community Emergency Preparedness Funding will ensure the project completion.

Legal/Statutory Authority:

Local Governments are eligible to apply for UBCM Community Emergency Preparedness Funding.

Alternate Recommendation:

THAT the Regional Board defer consideration of the Regional District of Central Okanagan application to the UBCM Community Emergency Preparedness Fund for a \$153,545 grant to complete the Extreme Heat Risk Mapping, Assessment and Planning project, for further information.

Community Emergency Preparedness Fund

Extreme Heat Risk Mapping, Assessment, and Planning 2022 Application Form

Please complete and return the application form by **June 24, 2022**. All questions must be answered by typing directly in this form. If you have any questions, contact cepf@ubcm.ca or (250) 387-4470.

SECTION 1: Applicant Information	AP <i>(for administrative use only)</i>
Name of Local Government or First Nation: Regional District of Central Okanagan	Date of Application: June 20, 2022
Contact Person*: Sandra Follack	Position: Kelowna Fire Department, Deputy Chief, EPC for the RDCO
Phone: 250-469-8629	E-mail: sfollack@kelowna.ca

* Contact person must be an authorized representative of the applicant.

SECTION 2: For <u>Regional Projects Only</u>
<p>1. Identification of Partnering Applicants. For all regional projects, please list all of the partnering eligible applicants included in this application. Refer to Section 2 in the <i>Program & Application Guide</i> for eligibility.</p> <p>Regional District of Central Okanagan, City of Kelowna, City of West Kelowna, District of Lake Country, District of Peachland and Westbank First Nation.</p>
<p>2. Rationale for Regional Projects. Please provide a rationale for submitting a regional application and describe how this approach will support cost-efficiencies in the total grant request and support a comprehensive, cooperative approach.</p> <p>The Emergency Operations Center is a regional program and identify where in the region requires support including the best locations for cooling centres to most effectively support residents in response efforts with minimal cost impacts. As climate change is creating more frequent extreme heat events, identification is becoming more vital to efficiency and response.</p>

SECTION 3: Project Information

1. Name of the Project:

- a. Name of project: Extreme Heat Mapping Analysis, Assessment and Planning for
- b. Regional support
- c. Proposed start and end dates. Start: October 1, 2022 End: October 1, 2023

2. Project Cost & Grant Request:

- a. Total Project Cost: \$153,545.00
- b. Total Grant Request: \$153,545.00
- c. Have you applied for, or received, funding for this project from other sources. If yes, please indicate the source and the amount of funding received or applied for.
N/A

3. Project Summary. Please provide a summary of your project in 150 words or less.

The RDCO is applying for funding for all stakeholders as a joint project to; identify extreme heat risk mapping, plan and assessment, and disaster risk reduction.

Risk assessments that will identify the social, economic, and environmental impacts of extreme heat events including identifying urban heat islands, community and infrastructure vulnerabilities, and risk tolerance or "risk threshold." including populated areas proportionately at risk.

Extreme heat response planning using community engagement, data relevant to areas from IHA mapping; considerations for heat-sensitive populations and targeted response actions to mitigate impacts with low to moderate income neighbourhoods. Adaptive responses allows a community to determine its vulnerabilities to extreme heat more accurately in high risk areas, areas lacking infrastructure for cooling, and areas of vulnerable populations.

SECTION 4: Detailed Project Information

4. Proposed Activities.

- a. What specific activities will be undertaken as part of the proposed project? Refer to Section 6 of the *Program & Application Guide* for eligibility.
Review of lessons learned from 2021 heat dome and best practices from other jurisdictions; Completion of an Extreme Heat Risk Assessment (as described above); • Completion of Extreme Heat Risk Map(s) (as described above); • Completion of an Extreme Heat Response Plan which will include;
Collaborating with IHA using their "HARS" report specific to:
Completion of health Impacts of Extreme Heat in the Elderly population assessment
Heat response in interior rural communities and who it affects assessment
Create effective heat alert protocols and messaging for all residents toolkit

Communications Plans - messaging prior and during an active heat event

Working with the most vulnerable populations specifically related to but not limited to; (elderly, poor health status, social isolation) to identify their needs and provide planning and resources to support them during heat events and develop short and long term extreme heat risk reduction goals, objectives, and strategies to meet the goals.

Presentation of extreme heat risk assessments, maps and/or plans to Council, Regional Board, Westbank First Nation, community organizations and community groups. Identification of community values through engagement. This includes seeking advice from Knowledge Holders and other experts (e.g., health authorities, biologists, etc.) and engaging the community (e.g., service organizations, equity-denied populations, Indigenous organizations), Indigenous Nations, local governments, agricultural sector, critical infrastructure owners, etc. Outcomes could include a summary of discussions or letters of support from different parties identifying preferred options going forward;

- b. How will the project address the risks posed to heat-sensitive populations (including special consideration or response actions to support heat-vulnerable populations)?

Identify where the most vulnerable populations are using community engagement, local demographic temperature data, related heat reports and heat island reduction strategies such as increased vegetation and trees to lower urban temperatures.

Working with IHA to identify vulnerable older residents who live alone.

- c. How will the proposed activities consider and adapt to the impacts of climate change in the project methodology and deliverables?

Creating a map identifying specific heat related pockets in residential areas lacking in support infrastructure. Working with parks and biologists for eco-system viable options to create cooling areas using vegetation and trees.

5. Proposed Outcomes & Deliverables.

- a. What are the specific proposed outcomes and/or deliverables for this project?

Mapping identifying high risk areas urban and interurban. Determining needs of neighbourhoods with limited resources and/or transportation. Identifying available resources and best locations for response preparedness.

- b. How will the proposed activities increase understanding of the social, cultural, economic, and/or environmental impacts of extreme heat events to the community?

Identifying where areas are most vulnerable, most and least impacted by heat and providing toolkits to support neighbourhoods. Providing each identified area with the knowledge required to inform, educate and prepare residents affected.

- c. How will the proposed activities identify or achieve co-benefits (e.g. reducing greenhouse gas emissions, improving community health and wellbeing, enhancing biodiversity, etc.)?

Utilizing and sharing of reports from city and community initiatives to enhance knowledge on how modifying buildings, city infrastructure and updated bylaw

policies and regulations will support cooling neighbourhoods. Also, recognizing the Pacific Climate Impacts Consortium report identifying climate variability and how it affects our region.

- 6. Transferability.** Describe the extent to which the proposed project may be transferable to other local governments and/or First Nations.

The RDCO Emergency Program is a collaborative effort for all stakeholders to be involved in and benefit from a joint model of managing emergencies. During active incidents, each jurisdiction is supported in the EOC allowing for support to the Incident Commander when capacity is beyond the scope of the business plan. When the RDCO is not faced with emergencies, the support from the program ensures lessons learned is shared with annual reports, after action reviews, internal audits and a yearly report to the Regional Board, Council and Westbank First Nation.

- 7. Partnerships.** In addition to Question 1, if applicable, identify any partners (e.g., equity organizations, agricultural sector, critical infrastructure owners) you will collaborate with on the proposed project and specifically outline how you intend to work together.

Interior Health Authority, Community Resource Associations related to elderly population and social impacts. First Nation Health Association, Language Impaired Associations, Seniors Outreach Services Society, BC Community Living, Pathways Abilities Society, BC Housing, Kelowna Gospel Mission, Salvation Army, CMHA, United Way, Red Cross and several other non profit organizations with in the regional area.

- 8. Innovation.** Describe how this project will be innovative.

This project will identify why there are specific areas in the Central Okanagan that are subject to "heat extremes", why it is occurring in specific urban areas and not in others. It will also provide a better view and understanding of what creates the heat and how to alleviate the problem.

- 9. Additional Information.** Please share any other information you think may help support your submission.

See attached Interior Health "HARS" report.

Extreme Heat | Natural Disasters & Emergencies | IH (interiorhealth.ca)

See attached Pacific Climate Impacts Consortium Climate Explorer report
<https://www.pacificclimate.org/analysis-tools/pcic-climate-explorer>

SECTION 5: Required Application Materials

Only complete applications will be considered for funding. The following separate attachments are required to be submitted as part of the application:

- Local government Council or Board resolution, Band Council resolution, or Treaty First Nation resolution, indicating support for the current proposed activities and willingness to provide overall grant management.
- Detailed budget for each component identified in the application. This must clearly identify the CEPF funding request, applicant contribution, and/or other grant funding.
- For regional projects only: Local government Council or Board resolution, Band Council resolution, or Treaty First Nation resolution from each partnering applicant that clearly states their approval for the primary applicant to apply for, receive, and manage the grant funding on their behalf.

Approved applicants are required to grant the Province of British Columbia free and clear access and distribution rights, specifically a perpetual, royalty-free, non-exclusive, worldwide license to use, reproduce, modify, and distribute, any and all of the spatial data products acquired/produced using CEPF funding.

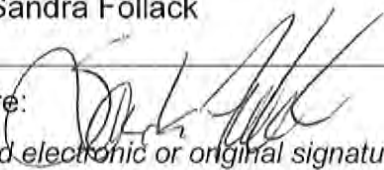
SECTION 6: Signature. Applications are required to be signed by an authorized representative of the applicant. Please note all application materials will be shared with the Province of BC.

I certify that: (1) to the best of my knowledge, all information is accurate and (2) the area covered by the proposed project is within our local authority's jurisdiction (or appropriate approvals are in place).

Name: Sandra Follack

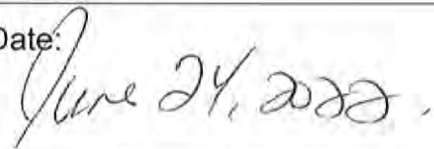
Title: EPC RDCO

Signature:



A certified electronic or original signature is required.

Date:



Submit applications to Local Government Program Services, Union of BC Municipalities

E-mail: cepf@ubcm.ca

	Cost	Tax (PST)	Project Total Cost	Details
Mapping	\$ 62,000.00	\$ 4,340.00	\$ 66,340.00	Use of GIS team to develop, adapt and predict areas of extreme heat using predictive modelling and Interior Health HARS report
Consultants	\$ 71,000.00	\$ 4,970.00	\$ 75,970.00	use of consultant for community engagement, meetings and report
Administrative expense	\$ 10,500.00	\$ 735.00	\$ 11,235.00	overhead to allow for processing and coordination of board reports and meeting schedules
Total Project Cost	\$ 143,500.00	\$ 10,045.00	\$ 153,545.00	

June 21, 2022

Regional District of Central Okanagan CEPF Community Extreme Heat Planning Grant 2022

	Budget
Revenue	
Community Extreme Heat Planning	153,545.00
Net Revenue	\$ 153,545.00
Expenses:	
Operating	
Mapping	66,340.00
Consultants	75,970.00
Administrative expense	11,235.00
Total Expenses	\$ 153,545.00