UBCM

Community Emergency Preparedness Fund

Disaster Risk Reduction – Climate Adaptation

2023/24 Application Worksheet

Please complete and return the worksheet with all required attachments by **March 28, 2024**. Applicants will be advised of the status of their application within 120 days of the application deadline.

All questions must be answered by typing directly in this form. **As all questions are reviewed and scored as part of the adjudication process, please do not leave any questions blank.**

If you have any questions, contact cepf@ubcm.ca or (604) 270-8226 ext. 220.

SECTION 1: Primary Applicant Information	
First Nation or Local Government full name: Whistler (Resort Municipality)	File number*: LGPS-10678

**Refer to the LGPS Online Application Form submission confirmation email*

SECTION 2: Detailed Project Information

1. Type of Project. Please identify each component you are applying for:

- ☒ Category 1: Foundational activities (risk mapping, risk assessments, planning)
- ☐ Category 2: Non-structural activities (non-physical such as land use planning, community education, purchase of eligible equipment)
- ☐ Category 3: Small scale structural activities

2. Project Cost and Grant Request.

a) Total proposed grant request (provide grant request breakdown below): $50,000.00

Category 1: $50,000.00

Category 2: $0.00

Category 3: $0.00

b) Does the proposed project include repairs and/or relocation of infrastructure that was damaged through an eligible DFA event? If yes, please provide more information.

No

3. Project Area.

a) Describe the proposed project area(s) (location, size, total number of people benefiting from this project, land use, etc.) for each proposed project included in this application.

Situated within the shared, unceded territory of the Ľil̓wat7úl (Lil'wat People) and Sḵwx̱wú7mesh (Squamish People), the Resort Municipality of Whistler (RMOW) is located in the southern Pacific Ranges of the Coast Mountains, approximately 140 km north of Vancouver and 36 km south of the town of Pemberton in the southern portion of the Squamish-Lillooet Regional District (SLRD) (50.1162° N, 122.9535° W). The RMOW resides within the Whistler Landscape Unit, which covers 94,131 hectares. 41% of the total LU area is comprised of Crown Forested Land Base (CFLB), with 19% of the CFLB spatially identified as Old-Growth Management Areas (OGMA), comprised of mature and old-growth productive forests (Whistler Landscape Unit Plan, 2015).

The RMOW spans an area of 24,500 hectares and is home to 14,000 permanent residents (2021 Census) and over three million annual visitors. On peak holiday weekends or during significant events, Whistler's population may swell to over 55,000. Strong, sustained growth is predicted for the region in the next 30 years. Under the SLRD's current Regional Growth Strategy's (RGS's) "medium growth" scenario, the region's population is projected to grow from 2003 to 2031 from 35,141 to 68,153 residents. Primary factors driving growth include lifestyle choices, increasing demand for recreational services, economic and employment opportunities, natural beauty and environmental qualities, and proximity to the Lower Mainland.

This project is to complete a Strategic Climate Risk & Resilience Assessment for the RMOW, which will be applicable to the region. Whistler has an outsized influence on the region, given its driver as a significant employer from surrounding communities (Pemberton, Squamish, and SLRD) and its daily fluctuations in residents.

Map(s) indicating the location of the proposed project must be included with this application along with GPS coordinates.

b) Does the proposed project(s) build on other recent projects in your region? If yes, please explain. If referencing reports, please include the relevant page number(s).

The RMOW Strategic Climate Risk & Resilience Assessment builds on the 2022 Big Moves Climate Action Implementation Plan (p. 9, 51, 54 & 58), which outlines the municipality's goals and key climate change mitigation and adaptation initiatives. The Big Moves Climate Action Implementation Plan (2022) is building on the RMOW's previous climate work as it consolidates the detailed complexity of the 2016 Community Energy and Climate Action Plan (CECAP) with the prioritized, strategic simplicity and community momentum of the 2020 Big Moves Strategy. The CECAP, developed with the engagement of a Community Advisory Group and core RMOW staff, established a list of 94 actions for climate mitigation and 40 actions for climate adaptation.

In 2022, the RMOW retained BGC Engineering Inc. to summarize climate change projections and associated potential vulnerability and risks for the resort community

of Whistler. The report provides historical data and compares it to climate change projections to predict regional outcomes (BCG, 2022, pp. 10 & 11). It does not outline opportunities to mitigate risks and recommends additional work. These projections from BGC confirm the detailed climate modelling for Whistler that was done in 2015 by the Pacific Climate Impacts Consortium (PCIC), which guided the adaptation components of the CECAP.

The 2022 Community Wildfire Resiliency Plan (CWRP) was completed as an update to the Resort Municipality of Whistler's (RMOW) 2011 CWRP, which was predated by the municipality's first CWRP in 2005. The RMOW also developed a Wildfire Protection Strategy in 2017, which focused on resources and strategies to implement CWPP recommendations to date. Since developing these plans, the RMOW has implemented several wildfire risk reduction recommendations and continues to exemplify proactive wildfire risk mitigation. The area of interest for this CWRP encompasses a 1-kilometre buffer surrounding Whistler's Urban Development Containment Area, which provides a narrower geographic scope than the previous two CWRPs. This CWRP provided the RMOW with an updated action plan that can be used to guide their next steps forward to proactively protect the community, infrastructure, and natural landscape of the RMOW from a wildfire event.

The Flood Hazard Specific Guide (herein referred to as the Flood Plan) is a hazard-specific annex to the Resort Municipality of Whistler (RMOW) Comprehensive Emergency Management Plan. In British Columbia, as required by the BC Emergency Program Act, local governments are responsible for planning and responding to emergencies within their jurisdictional area, including flood emergencies. The purpose of the Flood Plan is to describe how the RMOW will prepare for and respond to a flood event in the RMOW. The plan outlines response and coordination arrangements for predicted and spontaneous flood events. The intended audience for the plan is municipal staff and Council.

The RMOW's 2012 Hazard, Risk & Vulnerability Assessment Report (HRVA) examined the hazards that may impact a community, the risk that each hazard event poses to the community as a whole, and the vulnerable elements of the community. An HRVA is a requirement mandated by the Local Authority Emergency Management Regulation of the B.C. Emergency Program Act and the Resort Municipality of Whistler Emergency Measures Bylaw NO. 1593, 2002. This document represents that assessment, as completed by a committee of Municipal staff (the HRVA advisory committee).

The 2019 Sea-to-Sky Multimodal Evacuation Plan outlines the process and resources for the complete evacuation of either the RMOW or District of Squamish (DOS) to the north or south using the existing highway system and other safe and practical modes of transportation, including rail, ferry, and air. The Plan considers all hazards, meaning it is not specific to one hazard but can be implemented for any

hazard requiring the complete evacuation of either the RMOW or DOS. The Plan can be implemented for a hazard threat or hazard incident.

Although the reports gathered so far have formed a sound basis for this project, it is still essential to examine the community's ability to withstand and recover from the effects of climate change. This examination is necessary to ensure that proper planning is undertaken and to meet government requirements. Given the recent increase and severity of climate-related events, this assessment must identify the social, economic, and environmental impacts these events will have on the community, a gap identified in previous reports. The RMOW aims to conduct a rigorous and thorough assessment of the risks and impacts for Whistler associated with climate change. Such an assessment will enable the RMOW to plan and prioritize its climate adaptation and community resilience initiatives more accurately and effectively.

c) Are there previous emergency response costs that the proposed project(s) is designed to mitigate?

Whistler's response to and recovery from major emergencies and disasters is domestically important for the British Columbian and Canadian economy. The total estimated end-consumer commercial spending in Whistler is $1.27 Billion annually. 2012 research revealed that the annual tax revenue (federal, provincial, and municipal) generated by Whistler spending is $428M annually or approximately $1.17M daily. (RMOW, 2013). Given this estimate, Whistler-based tourism export planning and mitigation efforts combined with trained staff and early mobilization of emergency resources will significantly reduce the potential overall impact of a significant emergency or disaster. Page 11 of the Comprehensive Emergency Management Plan (CEMP) states that revenues represent 22.5% of all tourism export revenues generated within British Columbia. A major emergency or disaster in Whistler could cause a significant decline in the number of tourists visiting the area and, as a result, a decrease in the amount of money spent. Therefore, the Whistler community's ability to recover as quickly as possible and resume regular operations has a wide-ranging impact on the local, provincial and federal economies. By better understanding climate-related hazard risks, the RMOW will be better positioned to mitigate impacts found in the assessment.

B.C.'s vulnerability to climate risks can be substantially reduced through proactive adaptation. There is clear evidence that investing in climate resilience makes economic sense and can have very high rates of return through avoided damages. For example, a 2019 report from the Global Commission on Adaptation notes that every dollar spent on measures to improve climate resilience results in savings of 2 to 10 dollars in the future. Proactive investments can help avoid higher costs and limit hardships associated with climate-related disasters and slow-onset climate changes (Climate Preparedness & Adaptation Strategy, 2022-2025). This project aligns both climate action and disaster management.

4. Evidence and Rationale. What is the evidence and rationale for undertaking the proposed project(s)? This may include evidence of how the local natural hazard and/or climate risk is being assessed through threat levels (e.g., as identified in completed risk assessments) and projected climate risks and/or recent history (e.g., evacuation order, disaster financial assistance).

For Category 2 or 3 projects, this may also include completed risk maps, assessments or plans, environmental impact analysis, design drawings or details, record of engagement with First Nations, asset management plan (including natural assets where applicable), projected climate risks, and/or letters of support (from provincial ministries, etc.).

The RMOW's Strategic Climate Risk & Resilience Assessment is being undertaken as part of government's public reporting requirements under the B.C. Climate Change Accountability Act.

The BCG report summarizes climate change projections and the potential vulnerability and risks associated with the resort community of Whistler. These include:

- Increased temperatures year-round are also anticipated to increase severe storms' frequency and intensity. This includes intense, localized summer thunderstorms that may spark wildfires, induce landslides and debris flows, and produce damaging debris flooding. (p 11)
- Will also see increased precipitation, mainly from increased high-intensity precipitation events, but with a longer, warmer, and drier summer season. (p 10)
- Winter storm systems and atmospheric rivers are anticipated to become more frequent and intense, and while cold snaps are likely to become less frequent, those that occur can be as intense or even more intense than those at present. (p 11)
- Summer temperatures are expected to increase with a corresponding decrease in water availability, increasing the probability of extreme heatwaves, drought, and wildfires. In addition to high heat quickly drying 1-hr wildfire fuels (e.g., grasses and shrubs), heatwaves in the region pose a health danger to the community due to the normally high marine-layer humidity that inhibits overnight cooling coupled with a presumed low proportion of air-conditioned households. (p 11)

We have recently seen record highs of forest fires, floods, droughts, heat domes, less snowfall in the valley, hotter and drier summers, and glacier loss. These hazards, linked to climate change, emphasize the significance of conducting this evaluation to establish the risks, impacts and appropriate measures for planning and implementation.

Copies or extracts of the available evidence is required to be submitted with the application. Please indicate what documentation is being submitted *and provide a specific reference to the sections of documents that should be reviewed.*

- BCG Report

- Big Moves Climate Action Implementation Plan 2022

5. Alignment with Intent of DRR-CA funding.

a) Describe how the proposed project(s) considers climate change in the project methodology and adapts to the impacts of climate change through the final deliverables.

The Strategic Climate Risk & Resilience Assessment will identify the social, economic, and environmental risks and impacts of climate-related events on the community. Significant work has been done in the last decade to understand climate change and hazard risk. Data from various recent RMOW reports will be synthesized to complete this assessment and identify hazards and slow onset risks through the lens of climate change. These include but are not limited to existing fire and flood mapping, BGC Engineering Inc. (2022), Big Moves (2022), The BC Preliminary Strategic Climate Risk Assessment for British Columbia (2019), Sea to Sky Multimodal Evacuation Plan (2019 – updated), 21 Mile Creek Watershed Protection Plan (2015), Comprehensive Water Conservation and Supply Plan (2015 updated report), Community Wildfire Resiliency Plan (2022), Community Recovery Plan (n.d.), Flood Hazard Specific Guide (n.d.). In addition, research and expert interviews will be conducted to bolster data further or fill in gaps in RMOW's current data set.

The report will be completed as a desktop study, and the project will have no climate impacts (i.e., negligible emissions).

b) How will the proposed project(s) lead to increased understanding of the social, cultural, and/or environmental impacts of natural hazards and/or climate-related risks?

Detailed local climate modelling indicates that a changing global climate will likely bring three critical changes to the Whistler area. These fundamental changes are (1) an increase in the frequency and intensity of heavy rain events; (2) longer, hotter and drier summers; and (3) milder winters with increased precipitation falling as rain near the valley bottom. Effectively managing the community's response to these changes through informed vulnerability and risk analyses is core to ensuring the resort community's long-term success and resilience.

A further detailed understanding of the RMOW's risk and resiliency will ensure that our community and economy are ready for expected climate changes and related impacts in the coming years and decades. Climate risks can be reduced by preventing the cause of the hazard if possible, reducing the potential consequences, or developing a plan to address the impacts if they happen (Climate Preparedness & Adaptation Strategy, 2022-2025). To mitigate disaster risk, we must manage risks from natural, biological, and climate change comprehensively and collaboratively across all sectors and levels. Success in this process requires the community to understand the risks, including the drivers and interdependencies across society, and know their role in collaboratively managing these risks (Resilience Pathways Report, 2022).

c) Will the proposed project(s) identify or achieve co-benefits (e.g., assessing multiple hazards, protecting valuable cultural assets, reducing greenhouse gas emissions, improving community health and wellbeing, enhancing biodiversity)?

Whistler's natural environment is one of the resort community's greatest assets, and residents and visitors continue to understand the need to protect its inherent values. A healthy natural environment in the Whistler Valley significantly benefits tourism, recreation, and quality of life. It also supports local wildlife, biodiversity and

ecosystems, with its contiguous natural areas connecting all ecosystems within the broader landscape. The Strategic Climate Risk & Resilience Assessment will identify multiple hazards that can and have impacted the community.

The resiliency aspect of the assessment aims to understand the RMOW's adaptive capacity and identify ways to improve community health and well-being in the face of climate change and associated impacts. The Intergovernmental Panel on Climate Change (IPCC) defines resilience as "the capacity of social, economic and environmental systems to cope with a hazardous event or trend or disturbance..." (IPCC 2022: 9, note 12), and the World Health Organization makes the important point that resilience "is much more than just the absence of vulnerability; it is about whole system capacity" (WHO 2015: 7). Resilience is relative to specific people and places (Office of the CMOH 2020). The ability of people and places to bounce back from climate-related stresses depends on a range of factors that affect individual and community health and well-being (BCMOECC n.d.). The RMOW Strategic Climate Risk & Resilience Assessment will consider a whole-of-society approach in the context of the resort's unique location and tourism economy.

6. Engagement with First Nations and/or Indigenous Organizations. As noted in the Program Guide, engagement with First Nations and/or Indigenous organizations in advance of submission of the application is required. Please identify the specific bands, Treaty First Nations, and/or Indigenous organizations that were engaged in advance of submitting the application as well as the specific traditional territory, reserve or other First Nation's land that may be impacted by the proposed project(s).

a) Which First Nations and/or Indigenous organizations were engaged as part of the development of this application?

Líl̓wat Nation and Squamish Nation

b) Which First Nations and/or Indigenous organizations will participate in the proposed activities and what specific role will they play?

In 2020, the Resort Municipality of Whistler entered into a Framework Agreement with Líl̓wat Nation and Squamish Nation to further build our government-to-government relationship and provide for greater participation in economic and cultural opportunities in Whistler.

Whistler's Official Community Plan and shared community vision articulate our commitment to an enduring relationship defined by reconciliation and collaboration.

In completing the Strategic Climate Risk & Resilience Assessment, these groups will be engaged throughout the project to integrate Traditional Knowledge and to provide input on how the types of climate-related risks will impact their communities. In addition, we will consult the Action Plan for Disaster Risk Reduction by First Nations in BC (2023).

c) Describe the specific traditional territory, reserve or other First Nation's land that may be impacted by the proposed project(s)

Whistler is located on the unceded territories of the Líl̓wat Nation and Squamish Nation, who have lived on these lands since time immemorial. Living and working in this place, colonially known as Whistler, is a gift that we share with both the Líl̓wat7úl and Sḵwx̱wú7mesh.

Líl̓wat Nation: The L̓il̓wat7úl are Ucwalmícw, which translates to “the people of the land,” they are 1 of 11 communities that form the Státimc Nation. The territory extends to Rubble Creek, north to Gates Lake, East to Upper Stein Valley and west to the coastal inlets of the Pacific Ocean, an area covering 7911.31 square kilometres. There are about 2,500 members of the Lil’wat Nation. They speak Ucwalmícwts, meaning “the language of the land.” They are a mountain community; their territory is similar to what you see in Whistler. Their clothing, food, housing and transportation have adapted to the temperature change found in the mountain ranges.

Squamish Nation: The Sḵwx̱wú7mesh Úxumixw, the Squamish People, are the descendants of the Coast Salish First Nations People that lived in present-day Greater Vancouver, Gibson’s Landing and Squamish, BC. Their territory is 6,732 square kilometres. There are about 4,000 members of the Squamish Nation. They speak Sḵwx̱wú7mesh Snichem. The number of fluent speakers is deficient, but they aggressively bring back their youth. The majority of their territory is found along the ocean. Their clothing, food, housing and transportation have adapted to the temperate rainforest.

d) Indicate the extent to which staff and/or elected officials have undertaken Indigenous Cultural Safety and Cultural Humility Training

By October 1, 2021, most full-time municipal staff had participated in cultural awareness and sensitivity training. The RMOW continues to provide training and resources to staff to enable ongoing opportunities for listening, learning, and action on truth and reconciliation. An online resource library for staff has been established to support further learning. In 2023, all RMOW staff were gifted with admission to the Squamish Lil’wat Cultural Centre to inspire and foster such learning.

If applicable, please submit evidence of support for the proposed activities from First Nations and/or Indigenous organizations identified above. This could be in the form of a letter, email, or other correspondence.

7. Comprehensive and Cooperative Approach.

a) Identify any partners (e.g., local governments, equity organizations, agricultural sector, critical infrastructure owners) that will participate in the proposed project and the specific role they will play.

This project will use data collected within various departments of the RMOW to inform the Strategic Climate Risk & Resilience Assessment. Additionally, we will consult with the BC Ministry of Emergency Management and Climate Readiness to ensure our methods and outcomes align with guidance emerging from the updated BC Emergency and Disaster Management Act (2023). The RMOW will also engage with the Squamish Nation and the Líl̓wat Nation on this assessment.

b) Describe how the proposed project will contribute to a comprehensive, cooperative, and regional approach to disaster risk reduction-climate adaptation.

The increasing risks of disasters and climate change due to population growth, aging infrastructure, and climate change require changing traditional risk management practices. Continuing with the same old approach can severely affect society, the environment, and the economy. Thus, it is crucial to have innovative, informed, and

collaborative planning at all levels that supports disaster and climate risk management. This approach should be integrated into various policies and actions, including development planning, across multiple sectors (Resilient Pathways Report, 2022). This assessment will enable integration of the results into the Emergency Management department and impact community planning.

According to the Intergovernmental Panel on Climate Change, in the context of climate change impacts, risks result from dynamic interactions between climate-related hazards and the exposure and vulnerability of the affected human or ecological system (IPCC 2022: 7). This risk assessment aims to create a comprehensive approach to disaster risk reduction and climate adaptation for the RMOW through considering the aspects of a climate risk assessment as identified by the International Standards Organization (ISO) including the consideration of vulnerabilities, exposure and climate change hazards, or the consideration of likelihoods and consequences (ISO, 2019).

A thorough understanding of the risks associated with climate change for Whistler—and of the community's adaptive capacity or resilience—can also be a resource to support neighbouring communities in the Sea to Sky region, as they also face similar challenges.

c) Describe how diverse populations, including equity-denied populations, will be involved or benefit from this project (e.g., engagement considers non-English speaking populations, DRR-CA measures benefit equity-denied populations).

Systemically marginalized communities have typically contributed the least to climate change but are disproportionately negatively impacted by climate-related events, such as wildfires, extreme heat, flooding and extreme weather. For climate change adaptation policies, plans and programs to promote equity, it is necessary to address interacting forms of discrimination, such as racism and poverty (Climate Change, Intersectionality, and GBA+ in British Columbia, 2021). Socioeconomic inequities exist in health, housing, and child welfare, creating additional vulnerabilities and exacerbating impacts when disasters occur for Indigenous Peoples (First Nations Action Plan for Disaster Risk Reduction by First Nations in BC, 2023). Enhancing climate resilience for everyone in B.C., regardless of where and how they live, requires integrating equity considerations into climate adaptation responses (Climate Preparedness & Adaptation Strategy, 2022-2025). This project will allow the RMOW to identify these gaps and work with other organizations, such as Whistler Community Services Society, in this climate-change adaptation work's future planning and implementation phases. In particular, the resilience assessment can help the RMOW identify population inequities related to the challenges of climate change and, from there, address those inequities in support of whole community resilience.

Líl̓wat Nation and Squamish Nation will be engaged during the risk and resilience assessment process.

If applicable, please submit evidence of support for the proposed activities from partners identified above. This could be in the form of a letter, email or other correspondence.

8. Qualified Professionals. Disaster risk reduction-climate adaptation activities can require specialized technical knowledge and experience to provide meaningful results to your community. If applicable, please outline your procurement process to engage the necessary subject matter expertise (Qualified Professionals) required for the proposed project(s) and the criteria you will use to make the selection.

The RMOW Procurement Policy integrates sustainable purchasing goals and provides guidelines for purchasing goods and services required by the RMOW, including equipment, maintenance, professional services, and construction contracts. The policy is intended to achieve maximum economy, efficiency, and effectiveness in the procurement function's performance.

The RMOW is committed to open, transparent, fair and accountable access to municipal business using leading practices and ensuring compliance with legislation and applicable trade agreements. The RMOW procurement practices will ensure respect for environmental and social values. The RMOW Procurement Policy PDF is available for download on the website.

The assessment will follow standards conducted by qualified professionals stated in the Risk Management Guideline (2022), including ISO 31000:2018, the international standard for risk management adopted by the B.C. government. This suite of resources includes:

o CSA ISO 31000:18 Risk management – Guidelines (CSA ISO 31000) guide the provincial risk management framework and process.

o CSA ISO/TR 31004:14 (R2019) Risk management – Guidance for the implementation of ISO 31000 provides detailed guidance for the implementation of the provincial risk management framework.

o CSA IEC 31010:20 Risk management – Risk assessment techniques provides guidance on selection and application of systematic techniques for risk assessment.

o ISO Guide 73:2009 Risk management – Vocabulary provides risk management terminology to be consistently applied throughout risk management activities.

SECTION 3: CATEGORY 1 – Detailed Project Information

Only complete this section if you are applying for a project under Category 1: Foundational Activities. If this project includes flood risk mapping, confirm that you have contacted EMCR in advance of submitting the application and provide the date and contact person:

☐ We have contacted EMCR: N/A

9. Proposed Category 1 Activities. What specific activities will be undertaken as part of the proposed project? Please refer to Section 6 of the *Program and Application Guide* for eligibility and note that activities must align with the required workplan and budget.

The Strategic Climate Risk & Resilience Assessment will identify climate-related impacts and events and social, economic, and environmental impacts on the community. This work will build off many initiatives and technical assessments completed to address both disaster risk reduction (DRR) and climate change adaptation (CCA). It is essential to

consider both CCA and DRR in developing community resilience when extreme events occur with increased frequency and severity throughout the province, with unprecedented effects on communities. Further, this work will align with provincial and federal initiatives in disaster management and climate action. The project will also include an assessment of Whistler's adaptive capacity or resilience to projected climate changes and associated impacts.

10. Proposed Deliverables and Outcomes.

a) What specific deliverables will result from this project?

The Strategic Climate Risk & Resilience Assessment will involve the following deliverables:

A. Identify Risk Events based on Background Review

Significant work has been done in the last decade to understand climate action and hazard risk. Data from recent RMOW reports will be synthesized to complete this assessment and identify hazards and slow onset risks. These include but are not limited to existing fire and flood mapping, BGC Engineering Inc. (2022), Big Moves (2022), The BC Preliminary Strategic Climate Risk Assessment for British Columbia (2019), Sea to Sky Multimodal Evacuation Plan (2019 – updated), 21 Mile Creek Watershed Protection Plan (2015), Comprehensive Water Conservation and Supply Plan (2015 updated report), Community Wildfire Resiliency Plan (2022), Community Recovery Plan (n.d.), Flood Hazard Specific Guide (n.d.). In addition, research and expert interviews will be conducted to bolster data further or fill in gaps in RMOW's current data set. This will be summarized in a succinct and usable background review that can guide all future work in this sector.

B. Analyze Risk Events

Building off the BCG report, this task will ensure gaps are addressed from that assessment. Using the framework provided in the 2019 Preliminary Strategic Climate Risk Assessment for British Columbia, the process of analyzing the risk events and slow-onset climate impacts is stated below.

- Likelihood

o Using a combination of desk research, expert consultations, and existing data, the likelihood of each scenario occurring is estimated (both in the present day, between 2000 and 2019 for most scenarios, and in the 2050s, between 2040 and 2059) to determine how climate change influences the likelihood of fixed-magnitude events.

- Consequences

o Consequences for each risk event or impact across nine dimensions include loss of life; morbidity, injury, disease, or hospitalization; psychological impacts; loss of social cohesion; loss of cultural resources; loss of natural resources; loss of economic productivity; loss of infrastructure services; and cost to government.

- Evidence Base and Confidence

o Some risk events or impacts have a more robust evidence base than others. A confidence score is based on the quality of the evidence base for each risk event.

- Compounding Risk

o Many climate-related risks have compounding effect potentials, such as landslides after a wildfire or debris torrent during a high precipitation event. This part of the assessment will outline the potential scenarios based on the climate risks, what impacts these could have, and what mitigation strategies could be implemented.

C. Evaluate Risk

This will analyze the data, assign a rating to each climate risk, and evaluate the adequacy of existing risk mitigation measures. The project team will multiply the likelihood rating by the average consequence rating to determine the final risk score. Based on the total score, the risk event scenario is categorized as extreme, high, medium, or low risk.

D. Resilience

The Big Moves Climate Action Implementation Plan (2022) addresses resilience through its three Adaptation Goals aimed collectively at increasing Whistler's resilience to the impacts of climate change:

1. Minimize wildfire threats to human health and safety, private property, infrastructure, wildlife and natural areas.

2. Increase the resilience of built assets, infrastructure and services to endure extreme weather and environmental events.

3. Protect, support and increase the resilience of local ecosystems, natural assets and biodiversity.

A more holistic definition of resilience is provided by the Sendai Framework for Disaster Risk Reduction (2015), which defines resilience as "the ability of a system, community, or society exposed to hazards to resist, absorb, accommodate, adapt to, transform, and recover from the effects of a hazard in a timely and efficient manner, including through the preservation and restoration of its essential basic structures and functions through risk management."

In order to achieve resilience outcomes, a four-step process will be conducted:

1. A climate disaster primer to better understand the expected changes of climate disasters as defined in the outcomes in sections 3.2 and 3.3. This primer identifies the climate disaster type, expected change due to climate change, adaptation measures, and considerations.

2. Conduct a Climate Disaster Resilience Self-Assessment and apply further specialized tools to analyze each risk using the Future Cities resources.

3. Understand the community's willingness to address climate change for increased resilience. This tool is an evaluative checklist designed as a baseline to examine a community's current allocation of climate-resilient infrastructure, data and technology integrations, and programs on community health and wellbeing to assess

its ability to withstand and adapt to challenges posed by climate change. The background review (3.1) and assessment (3.2-3.3) will inform this.

4. Identify actions or strategies to achieve resilience goals, as defined by the UN Sendai Framework. This will form the final deliverable, including an overall community risk profile, a determination of the severity of consequences, and actions that can be implemented to support disaster risk reduction and climate change adaptation. Gaps in current adaptation strategies and actions will be identified, and recommendations may be made for new approaches and/or reprioritization of existing initiatives.

b) If applicable, how does this project address and/or inform existing or future amendments to local plans, policies, building codes, floodplain zoning bylaws, and/or public awareness/education?

The RMOW's Strategic Climate Risk & Resilience Assessment is being undertaken as part of the government's public reporting requirements under the B.C. Climate Change Accountability Act. This project will also inform the planning process, which involves the RMOW Emergency Measures Bylaw No. 1593, 2002, which authorizes the Resort Municipality of Whistler to plan for dealing with emergencies and disasters, including declaring a local state of emergency.

SECTION 4: <u>CATEGORY 2</u> – Detailed Project Information

Only complete this section if you are applying for a project under Category 2: Non-Structural Projects

11. Proposed Category 2 Activities. What <u>specific</u> activities will be undertaken as part of the proposed project? Please refer to Section 6 of the *Program & Application Guide* for eligibility and note that activities must align with the required workplan and budget.

N/A

12. Proposed Deliverables & Outcomes.

a) What specific deliverables will result from this project?

N/A

b) If applicable, how does this project address and/or inform existing or future amendments to local plans, policies, building codes, floodplain zoning bylaws, and/or public awareness/education?

N/A

13. Monitoring & Performance Measures. Describe how the project will be monitored and what performance measurements will be used (e.g., work progress reports, timeline review, resource planning, procurement plan and roll out).

N/A

SECTION 5: CATEGORY 3 – Detailed Project Information

Only complete this section if you are applying for a project under Category 3: Small-Scale Structural Projects

14. Proposed Category 3 Activities.

a) What specific activities will be undertaken as part of the proposed project? Include key activities and steps that will be taken to complete the project.

N/A

Refer to Section 6 of the Program & Application Guide for eligibility and note that activities must align with the required work plan and budget.

N/A

b) Have discussions taken place with applicable agencies to prepare for all required permits and regulatory approvals? Have the required approvals, authorizations and permits to complete the proposed project been applied for or received?

N/A

c) How do you intend to ensure the project is completed to provincial and federal standards?

N/A

d) List any potential implementation risks that may impact your ability to deliver on the project and explain what mitigation measures are in place to address them (e.g., staff capacity, procurement, severe weather, permitting (DMA, WSA, DFO), in-stream works fishery window, Land Right of Way requirements).

N/A

e) How will the project be developed and constructed to ensure that project risk is not increased, or transferred, to any parties or to the environment (e.g., transfer of flood risk downstream, destruction of fish habitat, introduction of pollutants to the environment).

N/A

15. Evidence of Completed Foundational Activities.

Describe the risk assessment process, options assessment (e.g., structural and non-structural, benefit cost analysis) and engagement process that was utilized to determine the proposed project.

N/A

Copies or extracts of the available evidence is required to be submitted with the application. Please indicate what documentation is being submitted and provide a specific reference to the sections of documents that should be reviewed.

N/A

16. Asset Management. Project sustainability and lifecycle costing are important considerations for structural mitigation projects. Many organizations have implemented asset management practices consistent with Asset Management for Sustainable Service Delivery: A BC Framework.

Outline any ongoing asset management / lifecycle maintenance considerations for the project, and how these will be addressed as part of your organization's asset management framework (at a minimum please include details on ownership, lifetime, operation and maintenance, and budgets).

N/A

17. Proposed Outcomes. For each of the following, please describe the extent to which the proposed project will:

a) Prevent, eliminate, or reduce the impacts of hazards through construction of disaster risk reduction-climate adaptation works.

N/A

b) Reduce disaster-related financial liabilities (e.g., history or likelihood of future Disaster Financial Assistance (DFA) claims).

N/A

18. Monitoring & Performance Measures. Describe how the project will be monitored and what performance measurements will be used (e.g., work progress reports, timeline review, resource planning, procurement plan and roll out, etc.).

N/A

SECTION 6: Required Attachments

Only complete applications will be considered for funding.

The following separate attachments are required to be submitted as part of the application:

☒ Band Council resolution, Treaty First Nation resolution, or local government Council or Board resolution indicating support for the current proposed activities and willingness to provide overall grant management.

☒ Detailed work plan that includes a breakdown of work activities, tasks, deliverables or products, resources, timelines (start and end dates), and other considerations or comments.

☒ Detailed budget that indicates the proposed expenditures from CEPF and aligns with the proposed activities outlined in the Application Worksheet. Although additional funding or support is not required, any other grant funding or in-kind contributions must be identified. Applicants are encouraged to use the new LGPS Budget and Financial Summary Tool.

☒ Map(s) indicating the location of the proposed project(s).

☒ If applicable, copies of any relevant documents that support the rationale for this project must be included with this application.

☐ For regional projects only: Band Council resolution, Treaty First Nation resolution, or local government Council or Board resolution from each sub-applicant that clearly states their approval for the primary applicant to apply for, receive, and manage the grant funding on their behalf. Resolutions from partnering applicants must include this language.

SECTION 7: Signature This worksheet is required to be signed by an authorized representative of the applicant *(i.e., staff member or elected official)*. Please note all application materials will be shared with the Province of BC.

I certify that to the best of my knowledge: (1) all information is accurate, (2) the area covered by the proposed project is within the applicant's jurisdiction (or appropriate approvals are in place) and (3) it is understood that this project may be subject to a compliance audit under the program.

Name:	Title:
Signature*: **An original or certified digital signature is required.*	Date:

Documents should be submitted as Word, Excel, or PDF files. Total file size for email attachments cannot exceed 20 MB.

All documents should be submitted to Local Government Program Services, Union of BC Municipalities by e-mail: cepf@ubcm.ca.
Please note "2024 DRR-CA" in the subject line.