

Strathcona

RESIDENTS' ASSOCIATION

c/o Strathcona Community Centre
601 Keefer Street Vancouver, BC V6A 3V8

Proposal

Strathcona Community-based AQ Monitoring Project (Engagement and Planning Phase)

To: Centerm Community Fund
From: Board of Strathcona Residents Association

November 29, 2019

Strathcona Community-based Air Quality Monitoring Project - Engagement and Planning Phase

Introduction

This proposal is being submitted in response to an invitation to East Vancouver community groups to apply for project funding. The Strathcona Residents' Association ("SRA") is a non-profit community group, a registered society under the BC Societies Act, that represents the voice of more than 6,000 residents of the Strathcona neighbourhood located in the northeast of Vancouver. The purpose of the SRA is to promote the health, safety and well-being of residents living in the Strathcona neighbourhood of Vancouver. The SRA is represented on the newly formed South Shore Community Liaison Committee that has a mandate to serve as a "a collaborative forum where community, Indigenous, municipal, marine industry and Vancouver Fraser Port Authority representatives meet to share information, provide input, identify concerns and collaborate to develop potential solutions to ongoing and emerging issues.". As such, the SRA is submitting this proposal as a recognized organization that represents our community's interest, as a near-port community, in finding solutions that protect the environment, safety and well-being of our community alongside the expanding port activities of the Burrard Inner Harbour.

Project Overview

The Proposal is directly related to helping local community members of Strathcona better understand key issues related to air quality and develop approaches through citizen science for directly being involved in measuring air quality in the Strathcona community area. The proposal for funding in the 2020 fiscal year is envisioned as phase one of a three-phase project that would occur over the three years of funding from the Centerm Community Fund.

Key proposal components of the Engagement and Planning phase of the Community-based Air Quality Monitoring Project:

- Identify Strathcona community participants & establish level of involvement;
- Identify external partners, & establish level of involvement;

- Through community engagement, identify priority concerns and sensitive receptor sites within the Strathcona Community area;
- Conduct a survey of other community based AQ monitoring projects (e.g., Citizen Science monitoring);
- Identify Community-based AQ monitoring options (through a researched report) that enhance community engagement/ownership of project, facilitate information sharing, and produce reliable of data;
- Hold 2 community air quality meetings in 2020 with community members; and
- With input from AQ experts, prepare a Strathcona community citizen science air quality monitoring work plan for 2021-22.

The Project will be led by the SRA AQ Steering Committee (Steering Committee). The Steering Committee will hire a Researcher/Coordinator on contract to lead focus groups, coordinate meetings, prepare written deliverables (an AQ monitoring options report and Strathcona community citizen science air quality monitoring work plan). The Researcher/Coordinator will work closely with the Steering Committee.

The expert advisor for the Project will be Dr. Naomi Zimmerman, Director of the [Integrated Research in Energy, Air, Climate & Health \(iREACH\) laboratory](#), who has expertise in community-based air quality monitoring projects, including building air quality networks with low-cost sensors.

See Annex 1 for Proposed Tasks and Estimated Schedule.

See Annex 2 for Proposed Budget.

How the Proposal meets the criteria of the Centerm Community Fund

The Proposal aligns with the three pillars of the Centerm Community Fund, as follows:

1. Environmental Leadership

The Proposal aligns with the CCF's pillar of Environmental Leadership, in particular the principle of protecting and improving air, land and water quality to promote human health and biodiversity through the advancement of knowledge and programs within the immediate vicinity of the Port's south shore operations.

Specifically, the Proposal focuses on the CCF's first environmental category, Air, with an emphasis on air quality and greenhouse gases (GHGs). The Proposal's primary interest is with air quality as it pertains to human health, with a secondary interest in GHGs.

2. Community enrichment

The Proposal is open to all members of the community, with a particular focus on public facilities such as schools, community centres, daycare centres and senior care facilities. The Proposal would bring local residents together to learn about air quality and health in a series of community meetings and promote the direct participation of residents in a citizen science project that directly empowers local residents in the process of monitoring the current air quality in their neighbourhood. These activities will help to strengthen the local community and provide opportunities for people to connect with one another in taking action for protecting the environment and enhancing the community's quality of life.

3. Education and Training

The Proposal aligns with the CCF's pillar of Education and Training. A major component of the Proposal is to work with community members, including local schools to encourage science education and awareness related to air quality and knowledge around citizen science AQ monitoring approaches around the world. This will provide community members with a unique opportunity within their immediate communities to learn more about the connection between air quality and human health, and to get hands-on experience in the use of hand-held AQ monitors, data collection, and tracking of data over time.

Background Rationale

Since 2017, the residents of Strathcona have expressed concerns about current and future air quality in their neighbourhood and have expressed interest in being directly involved in air quality monitoring for the purpose of generating reliable localized AQ data to support engagement with government regulators and authorities in advocating for improved air pollution for local residents. Since 2017, the SRA has engaged on the topic of air quality through communications to the VFPA, the BC Environmental Assessment Office (BC EAO), the Minister of Environment, Metro Vancouver, and the City of Vancouver. Further, the SRA has been actively engaging with community members in discussions about air quality and health for the past few years.

The 2018 air quality assessment report conducted for the Centerm Expansion Project concluded that in a substantial net increase in criteria contaminant emissions such as NO₂, CO and diesel particulate matter would result from the expansion. Metro Vancouver's Air Quality division (Metro Vancouver) also concluded that the Centerm Expansion would result in exceedances of federal air quality objectives for NO₂ (or NO_x) within adjacent communities, including Strathcona. In addition, Metro Vancouver indicated that the AQ assessment report's reliance on ambient AQ stations located outside of the immediately adjacent neighbourhoods may have resulted in an underestimation of actual air quality conditions at the local level. To better

understand local conditions, Metro Vancouver recommended that AQ data be collected at additional receptor sites throughout the near-port communities (including Strathcona).

The SRA has been mandated by its members to work with the Port of Vancouver, Metro Vancouver, the Province and other levels of government for the purposes of enhancing local air quality. This community-based AQ monitoring initiative – conducted in partnership with the VFPA and other governmental bodies - would help to address gaps in knowledge related to air quality in Strathcona while helping to build partnerships supporting a healthy environment in Strathcona.

Coordination with Regional AQ Monitoring

This Project will complement, not duplicate existing AQ monitoring efforts being undertaken by Metro Vancouver at the regional level. The SRA will continue to communicate with Metro Vancouver and Vancouver Coastal Health to share information and coordinate activities.

Annex 1. Proposed Tasks and Estimated Schedule

Resource Task	SRA AQ Steering Committee	Expert Advisor	Coordinator /Researcher	Schedule (2020 – Estimated)
Task 1. Work planning	X			January
Task 2. Hiring of Coordinator-Researcher	X			January
Task 3. Outreach to public community (e.g., community centres, seniors' centres, schools, etc.)	X		X	February
Task 4. Community engagement: Survey and focus groups with community stakeholders	X		X	March
Task 5. Preparation of Draft AQ monitoring options (includes research and community engagement)	X	X	X	March - April
Task 6. Community AQ Meeting #1 (late March 2020)	X	X	X	March (promotion to start 2 months in advance)
Task 7. Preparation of draft Strathcona community citizen science monitoring project work plan for 2021-22	X	X	X	April-August
Task 8. Community AQ Meeting #2 (September 2020)	X	X	X	September (promotion to start 2 months in advance)

Annex 2. Proposed Budget

Resource Task	SRA AQ Steering Committee	Expert Advisors	Coordinator /Researcher	Expenses	Subtotal
Task 1. Work planning	\$2,000 (in kind)	0	0	0	\$2,000
Task 2. Hiring of Coordinator-Researcher	\$1,500 (in kind)	0	0	0	\$1,500
Task 3. Outreach to public community (e.g., community centres, seniors' centres, schools, etc.)	\$2,000 (in kind)	0	\$2,000	0	\$4,000
Task 4. Community engagement: Survey and focus groups with community stakeholders	\$500 (in kind)	0	\$3000	0	\$3,500
Task 5. Preparation of Draft AQ monitoring options (includes research and community engagement)	\$500 (in kind)	0	\$3000	0	\$3,500
Task 6. Community AQ Meeting #1 (late March 2020)	\$500 (in kind)	\$500 (in kind)	\$800	\$300	\$1,600
Task 7. Preparation of draft Strathcona community citizen science monitoring project work plan	\$1000 (in kind)	X	\$5000 (in kind)	0	\$6,000
Task 8. Community AQ Meeting #2 (September 2020)	\$500 (in kind)	\$500 (in kind)	\$800	\$300	\$1,600
SUBTOTALS	\$8,500	\$1,000	\$14,600	\$600	\$24,700
10% Admin*					\$2,470
TOTAL					\$27,170

*The SRA will also provide administrative services valued at 10% of total project.