



Regional Airshed Roundtable

Year 1 Report

Comox Valley Regional District

May 2021

Submitted to: Comox Valley Regional District

Submitted by: Pinna Sustainability Inc.



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1. Introduction

1.1 Background

Over the last two decades, an increasing body of evidence indicates that wood smoke can be a significant source of air pollution that can have detrimental health effects to humans. This is highlighted for BC's context in a recent report published by the BC Lung Association which stated that wood smoke is a major contributor to air pollution in BC.¹ Wood smoke contains fine particulate matter called PM_{2.5}, a pollutant that can cause chronic and acute respiratory and cardiac diseases, especially among children and the elderly. Major sources of PM_{2.5} include using wood stoves to provide heat in homes, open burning to manage debris and reduce fire risk, vehicles and equipment that serve our daily needs, and more.

In an effort to reduce the levels of PM_{2.5}, local initiatives have been implemented such as the Comox Valley Regional District's (CVRD) Wood Smoke Reduction Program, bylaw updates by local governments, and education and outreach initiatives by both the CVRD and local advocacy groups. Despite these efforts, local air monitoring results showed no significant improvement.

Recognizing the severity of the issues, and lack of improvements in air quality, in 2019 the CVRD Board included air quality as a key project under the Regional Growth Strategy service. A multi-agency working group developed a framework for moving forward, which included recommending a collaborative approach to air quality improvement and forming a Regional Airshed Roundtable initiative (the Airshed initiative), as laid out in the report, *A Regional Approach to Improve Air Quality: Our Proposal*.

A collaborative approach was chosen because, as described the *Our Proposal* report:

“The interactions between the causes, impacts, and potential solutions of poor air quality in the Comox Valley are complex. While we know that there are distinct contributors to elevated PM_{2.5} (mainly attributed to wood smoke from residential heating, backyard burning and larger open burns), the pathways to improving air quality touch on personal choice and behaviours, social norms, socioeconomic inequalities, government regulation, the “tragedy of the commons” and cultural values...

Improving air quality in the region will require us to align our actions across many individuals and organizations, in order to achieve our goals [emphasis as in original].”

There is a wide variety of stakeholders with different opinions on how to improve air quality within the Comox Valley. The Airshed initiative works to navigate some of the complexities with air quality management through collaboration, communication and a strategic approach.

¹ BC Lung Association. State of the Air 2017 Report.
<https://bc.lung.ca/sites/default/files/State%20of%20the%20Air%202017%20-%20merged.pdf>

1.2 Airshed Roundtable Objectives and Process

The Airshed initiative is a three-year, collaborative initiative to form and begin implementation of an Airshed Protection Strategy (Strategy). The Strategy’s main aim is to improve air quality in the Comox Valley. As the purpose statement created by the working group that preceded this process states:

Working together to achieve the best air possible for a healthy Comox Valley.

“Working together” acknowledges that no one organization is ultimately responsible for clean air, but rather, that many must work together to achieve the desired outcome. Although the CVRD is leading this process, ultimately all participating organizations will play an important role in forming and implementing the Strategy.

“Best air possible” refers to measures in the short, medium and long term, with measurable improvements in daily and annual levels of PM_{2.5}, reaching consistently lower levels than the BC standards.

In order to achieve these improvements in air quality through a collaborative approach, the CVRD launched the Airshed initiative in Spring 2020 using the framework proposed by the working group. This involved establishing a Steering Committee, establishing an Airshed Roundtable, and retaining an Air Quality Coordinator. The following section describes these roles.

Objectives for the Airshed initiative and the process itself are broken down by year and are summarized in Figure 1 below.

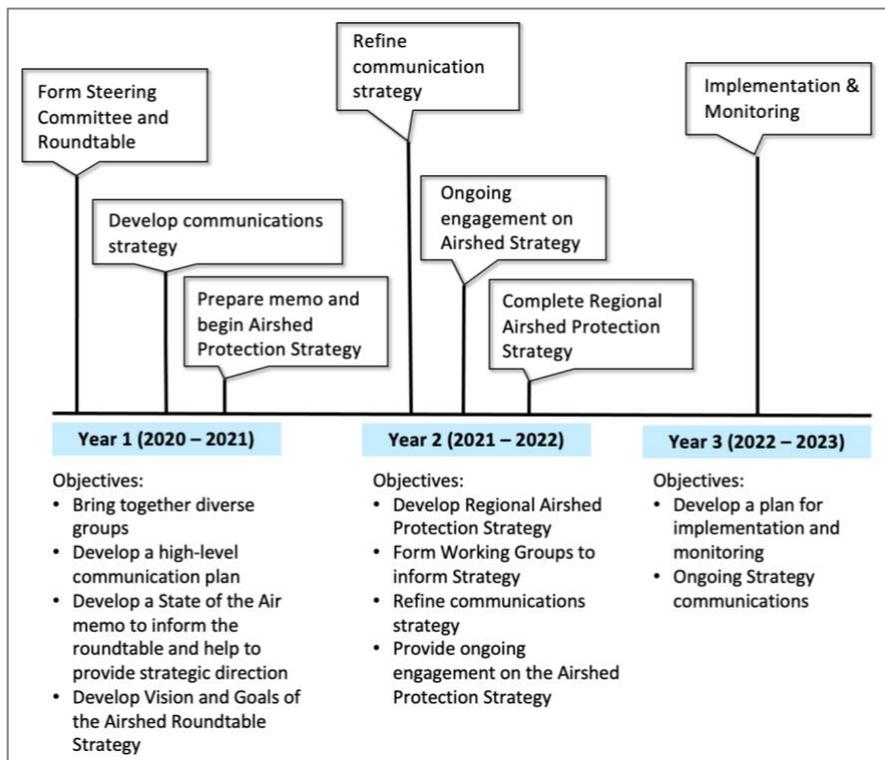


Figure 1: Objectives and process for the Regional Airshed Roundtable by year
May 7, 2021

1.3 Airshed Initiative Structure and Roles

The Airshed initiative is made up of four entities with different roles. The first group is the **CVRD** who convene the process, obtain and allocate resources, and make the final decisions. The second entity is the **Air Quality Coordinator**, Pinna Sustainability, hired by the CVRD as an external consultant. The Air Quality Coordinator's role is to facilitate process, support strategy development, guide implementation, and establish a process to monitor and report. The Air Quality Coordinator is also responsible for writing the Airshed Protection Strategy based on Steering Committee guidance, Roundtable discussion, and public input.

The third group is the **Steering Committee**, who are made up of government agencies involved in managing air quality. The Steering Committee role is to provide expertise, listen to input, inform recommendations, and champion and support strategies. The Steering Committee meets 8 - 12 times per year, which includes attending the Roundtable meetings.

Finally, the **Airshed Roundtable** is made up of government representatives, non-profit, industry, and members of the public. The Airshed Roundtable role is to identify issues, generate solution ideas, seek common ground, and share information and progress with their networks. The Airshed Roundtable meets 3 - 4 times per year.

Figure 2 displays the above information, along with the role of the **general public**.

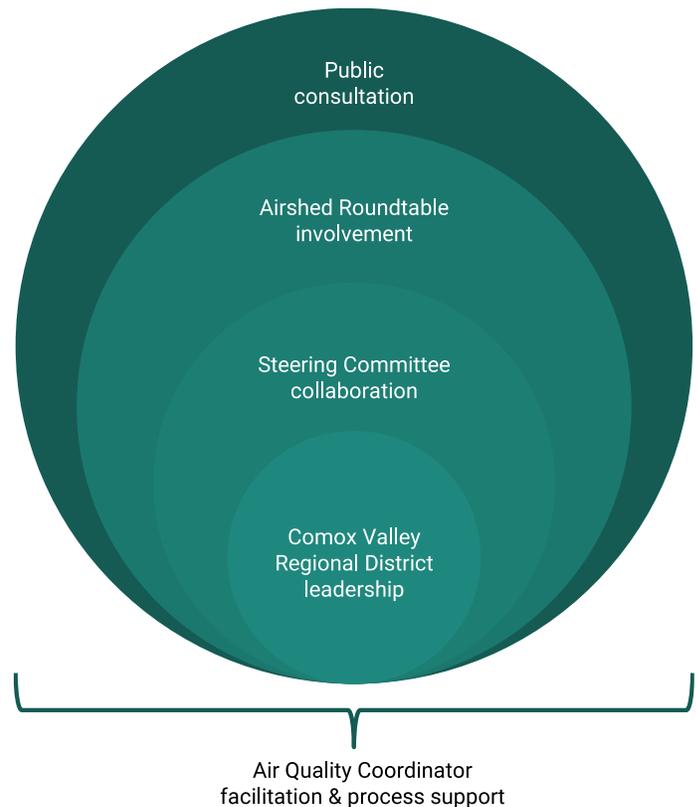


Figure 2: Airshed Protection Strategy group structure

2. Group Formation

One of the first steps in the Airshed initiative was to form the groups responsible for its creation: Air Quality Coordinator, Steering Committee, and Airshed Roundtable. The following section outlines this process.

2.1 Air Quality Coordinator

In April 2020, the CVRD put out a Request for Proposals to hire an Air Quality Coordinator to support the Airshed Roundtable Strategy development. Pinna Sustainability Inc. was awarded the contract in May 2020.

2.2 Steering Committee

The Steering Committee is made up of staff from government agencies and academia who are involved in managing or researching air quality. The following groups were invited to participate in the spring of 2020. Active members of the Steering Committee are in **bold**, while passive members (receive meeting notes and materials) are in *italics*. There are eight active members of the Steering Committee currently.

- **CVRD**
- *Town of Comox*
- **City of Courtenay**
- *Village of Cumberland*
- **BC Wildfire, BC Ministry of Forests, Lands, Natural Resource Operations and Rural Development (FLNRORD)**
- **Air Quality Section, BC Ministry of Environment and Climate Change Strategy (ENV)**
- **Vancouver Island Health Authority (VIHA)**
- **Vancouver Island University**
- *K'òmoks First Nation*

2.3 Airshed Roundtable

Working in partnership with the CVRD, and building upon the suggested stakeholders and representatives outlined in the *Regional Approach to Improve Air Quality: Our Proposal*, the Air Quality Coordinator developed invitations for participation in the Airshed Roundtable.

The following groups were invited to participate in the summer of 2020. Active members of the Airshed Roundtable are in **bold**, while passive members (receive meeting notes and materials) are in *italics*. There are 29 number of active participants in the Airshed Roundtable.

- *BC Community Forest Association*
- **BC ENV**
- *Benett Sheet Metal and Heating*
- **City of Courtenay**
- *Comox Seniors' Association*
- **Comox Fireplace & Patio**
- **Comox Valley Breathe Clean Air**
- **Comox Valley Chamber of Commerce**
- *Comox Valley Community Foundation*
- **Comox Valley Community Health Network**
- **Comox Valley Nurses for Health & the Environment**
- **Comox Valley Farmers' Institute**
- **Comox Valley Fireplace and Patio**
- *Comox Valley Firewood*
- **Cumberland Community Forest Society**
- *CVRD's Integrated Regional Transportation Select Committee*
- **Elemental Energy Advisors**
- *Fire Departments (Fire Chiefs Association)*

- First Nations Health Authority
- **FLNRORD**
- **Focused Energy Assessments**
- **Hanock Natural Resource Group**
- **Hearth, Patio, & Barbeque Association of Canada**
- K'ómoks First Nation
- **Manager of Fire Services CVRD**
- **Mid Island Farmers' Institute**
- *Mosaic Forest Management*
- **Norse Heating**
- *Peakflow Energy Solutions*
- School District 71
- **Town of Comox**
- **Vancouver Island University**
- **VIHA (Environmental Health)**
- **VIHA (Public Health)**
- **Village of Cumberland**
- **Six members of the public**

Members of the public were invited to submit a proposal to join the Airshed Roundtable. Six members of the public were chosen by the CVRD based on submissions to join the Airshed Roundtable.

3. Strategy Development Process

Once the Air Quality Coordinator, Steering Committee and Airshed Roundtable were formed, the groups began to meet, build relationships, and begin to develop the Strategy's vision and goals. The date, agenda, and outcome of each meeting during the first year are outlined in the proceeding sections.

3.1 Steering Committee Meetings

Five Steering Committee meetings were held during the first year of the process. The following table provides the date, agenda and outcomes from each meeting.

Date	Agenda	Outcomes
Meeting 1: June 18, 2020 9 members present	<ul style="list-style-type: none"> • Introductions • Review work completed to date re: air quality • Establish roles and expectations • Review State of the Air Report table of contents • Discuss communications approach • Discuss Roundtable invitations • Next steps 	<ul style="list-style-type: none"> • Updates for Terms of Reference and Guiding Principles document • Updates to State of Air memo table of contents • Confirm Roundtable membership

<p>Meeting 2: August 13, 2020</p>	<ul style="list-style-type: none"> • Review Draft State of the Air Memo • Discuss Roundtable membership procedures • Identify objectives and approach for first Roundtable meeting 	<ul style="list-style-type: none"> • Updates to State of the Air Memo report content • Updates for the Roundtable meeting approach • Members volunteered to present background information at the first Roundtable meeting
<p>Meeting 3: October 14, 2020</p>	<ul style="list-style-type: none"> • Discuss outcomes from Roundtable meeting #1 • Identify objectives and approach for Roundtable meeting #2 • Discuss media approach 	<ul style="list-style-type: none"> • Group happy with first Roundtable meeting • Members volunteered to lead presentations in their topic area of expertise in the next Roundtable meeting (open burning, space heating, and transportation) • Recommendations for media approach
<p>Meeting 4: February 3, 2021</p>	<ul style="list-style-type: none"> • Overview of Roundtable survey input • Review and discuss draft vision and goal ideas developed from the survey input • Discuss feedback obtained from Roundtable members on the Roundtable membership and process, and proposed approach for Roundtable meeting #3 • Proposed updates to the process for Year 2 engagement 	<ul style="list-style-type: none"> • Updates to draft vision and goals document to bring to the Roundtable • In response to feedback from Roundtable participants, discussed and confirmed continuation of the current collaborative format, and endorsed additional communication with Roundtable members as needed to encourage collaboration
<p>Meeting 5: April 13, 2021</p>	<ul style="list-style-type: none"> • Review vision and goal updates based on Roundtable meeting #3 • Working Group proposal as an approach to enable increased discussion among small groups between Roundtable meetings • Roundtable update, including participant process requests • Strategies for Goal 2: Effective coordination of efforts and monitoring 	<ul style="list-style-type: none"> • Endorsed current vision and goals document with minor changes requested • Endorsed proposed Working Group format • Suggested potential public event to highlight links between health and air quality • Strategies section deferred to next meeting due to time limitations

3.2 Roundtable Meetings

Three Roundtable meetings were held during the first year of the Airshed Roundtable process. The following table provides the date, agenda and outcomes from each meeting.

Date	Agenda	Outcomes
Meeting 1: September 15, 2020 30 members present	<ul style="list-style-type: none"> Welcome and introductions Overview of project and process Expert presentation on Air Quality in the Comox Valley Facilitated discussion on strengths, barriers, and opportunities Next steps 	<ul style="list-style-type: none"> Acquaintance among participating members List of strengths, barriers and opportunities to bring forward to set the context and to inform development of Strategy vision and goals
Meeting 2: November 19, 2020 30 members present	<ul style="list-style-type: none"> Welcome and introductions Check-in on process and terms of reference Introduction to collaborative strategy development Steering committee presentations on 3 topics: Space heating, open burning, and transportation Break-out groups: informing goal development Next steps 	<ul style="list-style-type: none"> Suggested updates to Terms of Reference Increased awareness of the major sources of air pollution in the region Input to support development of Strategy vision, goals and values
Meeting 3: March 4, 2020 30 members present	<ul style="list-style-type: none"> Welcome and introductions Steering Committee update Related initiatives update: Community resiliency investment and FireSmart Roundtable survey findings Developing the strategy: draft vision and goals overview Break-out: Vision discussion Break-out: Goals discussion Reconvene and wrap-up 	<ul style="list-style-type: none"> Detailed input on the vision statement and goals Informed the identification of guiding principles for the Strategy

3.3 Roundtable Survey and Feedback

Following the second Roundtable meeting, an online survey was implemented to seek feedback from both the Steering Committee and Roundtable members. Primarily the survey sought to collect vision and goal ideas from the two groups, feedback on the Airshed initiative process to date, as well as gauge support for potential Working Groups. The results of the survey helped inform the vision and goals document, as outlined in the next section.

4. Key Outcomes

4.1 Formation of Roundtable and Terms of Reference

One of the first tasks of the Airshed Roundtable was to form a Terms of Reference. Based on the original proposal for this process, as well as consultation with the Steering Committee and CVRD, the Air Quality Coordinator formed a draft Terms of Reference. The Terms of Reference was reviewed and updated based on Steering Committee and Roundtable feedback.

4.2 Communication Plan and Ongoing Communications

A communications plan was drafted and approved by the board in July of 2020. The plan highlights the objectives and proposed formats for communication with select audiences. This includes social media content, CVRD website updates, and board updates. The Airshed Roundtable meeting materials, including presentations, are available to the general public through the [CVRD project website](#). Further, a shared drive has been created for Roundtable members to access meeting materials and related resources.

Throughout the first year, members of the Roundtable provided feedback related to process of the Airshed initiative. The Air Quality Coordinator maintained regular communication with all members, received input, and brought feedback to the Steering Committee during meetings for guidance on how to address feedback and/or adjust the process, as necessary. For example, the Steering Committee proposed that the Air Quality Coordinator have one-on-one meetings with select members of the Roundtable to hear feedback directly and maintain a collaborative environment.

4.3 State of the Air Memo

A State of the Air memo was completed in September 2020 and was written to provide the background to prepare the Airshed Roundtable for participation to develop and implement a Regional Airshed Protection Strategy. This memo summarizes the current state of the air in the Comox Valley (air quality data, pollutant sources, studies and work completed to date), highlights how air pollutant sources are regulated and managed, and provides examples of what an airshed protection strategy may include. It provides members of the Roundtable a common understanding of this information in preparation for collaboratively developing an airshed protection strategy for Comox Valley. Key messages from this memo and the Roundtable discussions will be communicated with the public during the process, and the memo itself has been made available for download on the project website.

4.4 Strategy Vision and Goals

During the first year of the Airshed initiative one of the main tasks was to develop a set of vision and goals for the Airshed Protection Strategy. The process that was used to develop the vision and goals is outlined in Figure 3 below. The vision and goals document is provided as Appendix A.



Figure 3: Comox Valley Airshed Strategy: method for drafting vision and goals

5. Next Steps

The next year of the Airshed initiative will build on the success of the first year to develop the Airshed Protection Strategy. This includes identifying how to achieve the goals laid out in the first year through development of concrete actions.

The CVRD has provided resources to conduct additional engagement in 2021 to support this process. This process will be advanced through smaller Working Groups with select Roundtable and Steering Committee members to take a “deeper dive” into developing strategies in specific topic areas. Working Groups will be tasked with moving from goal to action, including identifying both longer-term and shorter-term actions. The Working Groups will also consider who would be responsible for implementation, and how the goal can be tracked.

Further, the additional resources will be used for a broader education campaign, which will include an online public engagement through the CVRD Connect website.

A schedule for Year 2 tasks is provided in Figure 4 below.

		2021								2022			
		May	Jun	Jul	Aug	Sept	Oct	Nov	Dec	Jan	Feb	Mar	Apr
Deliverable 1: Airshed Roundtable, Leadership Group and Working Group													
1.1	Steering Committee meetings												
1.2	Roundtable meetings		24th			23rd		25th				24th	
Deliverable 2: Communications													
2.1	Develop communications strategy (1 per year)												
2.2	Communications - general												
Deliverable 3: Prepare and Implement Regional Airshed Protection Strategy													
3.1	Prepare the Regional Airshed Protection Strategy												
Deliverable 4: Funding													
4.1	Apply for relevant grant opportunities to support the work of the Roundtable						As needed						
Deliverable 5: Reporting & Project Management													
5.1	Project management												
5.2	Prepare year end report												
Deliverable 6: Engagement													
6.1	Develop Connect CVRD content												
6.2	Identify collaborative initiatives												
6.3	Host a public online event						Date TBD						
6.4	Working Groups to develop strategies	25-28	7-11	5-9									

Figure 4: Task schedule for Year 2

Appendix A – Vision and Goals

Comox Valley Airshed Roundtable

Draft Vision, Principles and Goals for the Airshed Protection Strategy

May 6, 2021

This document summarizes the current draft Vision, Principles and Goals for the Comox Valley Airshed Protection Strategy. It represents the input and review from Airshed Roundtable members and Steering Committee members. As a next step, members of the Airshed Roundtable and Steering Committee will form working groups to begin identifying strategies to achieve the goals.

Draft Vision Statement

The Comox Valley has clean air that supports the health of all residents.

*Currently, the Comox Valley experiences recurring periods of poor air quality that negatively affect the health of our communities. Achieving this vision is complex and will require **coordinated efforts** from several governments, organizations, industry, and community members. Our actions need to be effective in order to **continually improve air quality**, with an initial focus on reducing **fine particulate matter** – the air pollutant of greatest concern to the health of our Comox Valley communities.*

Draft Strategy Principles

The following principles will guide the development and implementation of the Airshed Protection Strategy:

- **Health protection:** Air pollution disproportionately affects some members of our community. We will work together to ensure the best air possible for all residents in all areas of the valley, focusing on protecting the health of our most vulnerable.
- **Accessible and affordable:** Reducing emissions may involve actions or investments that are not accessible or affordable to everyone. We will work to identify ways to improve access to and affordability of options that help clean our air.
- **Innovative and evidence-based approaches:** Our efforts will be based on the best available science, evidence and practices, and we will build on this information to test innovative approaches to achieve our vision.
- **Minimizing contributions to climate change:** We recognize the urgency of climate change and its potential effects on the health and well-being of our residents. We also recognize that air pollution and climate change are closely linked. Therefore, we will ensure our efforts to minimize air pollution simultaneously minimizing greenhouse gas emissions where applicable.

Draft Goals

1: Achieve measurable reductions in fine particulate matter levels

- 1A. Reduce emissions from existing residential wood-burning appliances
- 1B. Transition away from biomass heating systems in residential neighbourhoods
- 1C. Eliminate burning of yard waste in residential neighbourhoods
- 1D. Promote and advocate for alternatives to open burning outside of residential neighbourhoods
- 1E. Reduce emissions from transportation, focusing on sources of PM_{2.5}

2: Effective coordination of our efforts

- 2A. Build partnerships and align efforts across participating organizations
- 2B. Continually expand our knowledge of local pollution sources and impacts to inform our efforts

3: Educate and involve the community in understanding and reducing the impacts of air pollution

Preliminary sub-goals still in development:

- 3A. Facilitate a better understanding of the connection between air quality and health*
- 3B. Support knowledge transfer through public events*
- 3C. Support community engagement and links to educational opportunities*