

Cowichan Regional Airshed Roundtable

Synopsis

January 31, 2023 Session

Attending:

Cindy Lise Our Cowichan- Facilitator, Tarek Ayache, Ministry of Environment and Climate Change Strategy, Dr Shannon Waters Island Health Medical Health Officer, Keith Lawrence CVRD, Shaun Chadburn Municipality of North Cowichan, Ilse Sarady CVRD, Gary Bruce City of Duncan, David Slade Cowichan Watershed Board and Mill Bay Fire Improvement District, James Van Hemert Town of Lake Cowichan, Angela Wheeler Island Health, Kris Schumaker CVRD, Brian Houle Catalyst Paper, Aaron Stone CVRD Chair and Mayor Town of Ladysmith, Ian MacDonald CVRD, Cindy Hlus Cowichan Tribes Ts'ewulthun Health, Garth Mihalcheon community member, Kate Segall CVRD Area A, Ian Morrison CVRD Director, Rachelle Rondeau CVRD Transit, Cole Smith for Sonia Furstenau, Ben Maartman CVRD Director Area H, Ian Benoit Alberni Valley Air Quality Society, Mike McKinlay City of Duncan Councillor, David Moen Catalyst Paper, Jennifer Lawson FACT, Danica Rice Cowichan Tribes Community Land Use, Gary Holman Saltspring island CRD, Jake Belobaba Town of Ladysmith, Dave Preikshot North Cowichan, Hilary Abbott CVRD Area D Cowichan Bay Director, Kate Miller CVRD, Rob Haris CVRD Bylaw,

Welcome to the Traditional Territory of the Cowichan People

Itst sq'up'ip u tuna' kweyul tun'ni'utu Quw'utsun Tumuhw. "We are gathered here on the Cowichan Lands"

'Uy' skweyul 'Uy kwun-us 'i lumnamu "Good Day. How are you"?

Simple Rules

The Cowichan Regional Airshed Roundtable is comprised of multiple partners from multiple organizations and sectors and as diverse as their organizations and reasons for coming to the table. Together we have created simple rules that guide us in our efforts.

- *Reaffirm trust.*
- *Be transparent*
- *Fail forward*
- *Respect for all members*
- *Create vitality, have fun, become the place to be*

Airshed Roundtable and Strategy Refresher

Why the Airshed Strategy? Our greatest concern for health in our region is linked to the air contaminant of fine particulate matter, also called PM 2.5. In the Cowichan Valley, the main contributors of PM 2.5 are open burning and wood heating, which have been our area of focus to this point. Poor air quality is complicated by the fact that there are multiple authorities with different jurisdictions relating to air

quality. Through the roundtable we are working collectively to address the issues. We all have a role to play in doing our part to improve air quality, awareness and changing behaviours in our region. As the roundtable your contribution has led to improvements over the past number of years. We still have work to do as NO amount of air pollution is good for our health. As a member of the Airshed Roundtable we ask that you take what you learn back to your respected areas of work and community to help mobilize the actions required to continue to improve the health outcomes for you, your family and your community.

The Cowichan Regional Airshed Strategy, communications and Engagement Road Map highlights the journey to date and the planned approach for behaviour change as we move forward. All documents can be found on the CVRD website www.cvrld.ca/Airshed-Protection

Our Efforts for Protecting human health- raise public awareness on the health impacts of wood smoke

- Develop consistent airshed wide regulatory approach for open burning
- Contribute to provincial efforts to control wood smoke
- Explore options for curbside pickup
- Reduce the number wood burning appliances
- Airshed wide regulatory approach to wood burning appliances
- Develop incentive programs for appliance upgrades
- Promote alternative energy sources
- Reduce other contributors and pollutants in the Cowichan airshed

Round Table Updates (Those who provided updates beyond introductions are included below)

Jimmie Hodgson Sr Manager - Forestry Operations Mosaic. (Jimmie was not able to attend the session but forwarded this update). Mosaic continues to progress towards “near elimination” of residual fiber burning with a target goal of 2030 to align with CleanBC’s target. We continue to improve our fiber utilization and have expanded our salvage resources to ensure we are maximizing our potential to current markets and minimizing the amount that gets burned each fall.

James Van Hemert- The Town of Lake Cowichan has implemented an anti outdoor burning bylaw.

Angela Wheeler- Island Health supports the airshed strategy in a number of ways including supporting information campaigns via social media and alternate communications. They have supported information on wood smoke reduction during the winter burning season as well as now have included information during the summer and wildfire events.

Brian Houle- Catalyst Paper has undergone some significant changes and disruptions in the last while including the closing of its paper mills. Just recently a 50 million Dollar investment including 18.5 million Dollars from the government (with the rest from Catalyst) will allow the restructuring and opening of the paper mill. The new investment will allow Catalyst to do even better at lowering emissions and the use of fossil fuels and energy use. Catalyst is working with the province on an air permit for the mill.

Aaron Stone- the timing of this meeting is important as the CVRD is undergoing budgeting and its strategic direction. Information from today is very helpful.

Cindy Hlus- Cowichan Tribes is experiencing the health impacts that are affecting children from crowding of homes and in particular those where woodburning provides heat.

Garth Mihalcheon- Has offered to have a camera located on his home in the Properties to capture photos of smoky skies in our region. This was offered at the last roundtable and has not been followed through on. Cindy to connect Garth with Shaun Chadburn and Keith Lawerence.

Rob Haris- Recap of 2022 for Bylaw investigations for smoke nuisances. There were 36 smoke nuisances and 7 land clearing and debris calls. The total fines for 2022 resulted in \$2750 in fines. This was an increase in the number of reports from previous years. (This could be a result of more information regarding burning restrictions now being reported).

Ian Morrison- has a Purple Air Monitor 100 yards from his house that he monitors. Ian also sits as the Chair of the UBCM Environment Committee where the work of roundtables such as this get shared with the province.

Rachelle Rondeau- The CVRD Transit continues to improve its impact on air pollution. The new commuter bus to Nanaimo now operates Monday to Saturday. The commuter bus to Victoria also continues to operate as well as local services throughout the region. The CVRD is currently working on the future Transit Plan.

Hilary Abbott – The CVRD is currently undergoing the budget process. This is an important learning opportunity especially as there is a hope to upgrade some vehicles that will be more environmentally friendly.

Ian Benoit- Leading the Alberni Valley Air Quality Society. Ian noted that there have been some exceedances of pm2.5 in the region. One recently and 3 in November. They need to continue to improve their response. His team is meeting next week.

Danica Rice- Community Land Use Planner for Cowichan Tribes. Danica reports that Cowichan Tribes is currently engaging in land use planning and has been reaching out to their community members. Climate issues have risen to the surface including air quality where half of their respondents want to see changes. Cowichan Tribes is also undergoing a Solid Waste Management Plan.

Gary Holman – Saltspring Island and CRD. Saltspring Island also has the same issues as here with land clearing, wood burning and outdoor burning. They are not as impacted likely because of the location to the ocean breezes. They are interested in learning more about regulations and alternatives. They are also in the process of developing a large-scale composting program.

Shaun Chadburn – Municipality of North Cowichan. The MNC has undergone a number of actions over the past number of years including a bylaw that does not allow for open burning in the urban containment boundary. Initially when this was implemented in 2017 there was an increase in

complaints that have slowly declined over time. This is likely due to the increase in awareness and information regarding the bylaws, burning windows and venting index. The air quality page is one of the most visited pages on the North Cowichan website. The Municipality updated its climate Action and energy plan in 2022, and continues to focus on improving household energy efficiency by partnering in the Clean BC better homes program where we have facilitated the installation of approximately 200 heat pumps, many of which are switching from fossil fuel-based sources.

Jennifer Lawson- Fresh Air Cowichan Team (FACT). They have not been active lately but would like to continue to press for regulations allowing for woodburning appliances or fireplaces in all new builds. We can look to other jurisdictions to see what they have done in regards to these regulations. FACT was the first in the region to help provide the purple air monitors and they continue to be a great resource for determining current conditions in real time.

Ilse Sarady- Newly announced Solid Waste Manager of the CVRD. The CVRD solid waste management includes sending clean wood waste to Catalyst for hog fuel, planning for curbside collection of yard waste, bylaw administration as well as the rebate program for woodsmoke reduction. (Previously the woodstove exchange program).

[Air Quality Tarek Ayache](#)

A pdf is attached for your reference

Synopsis of latest reporting and numbers from air zone management

All provinces report on their progress through the Canadian air quality management system. Good news is most recent levels of main air contaminants in the Cowichan Valley (part of the Georgia Straight air zone) are now below the Canadian ambient air quality standards. We are now designated as an 'orange zone', which means we still require actions to further improve air quality in our communities.

- As has been articulated throughout the Airshed Roundtable process there is a clear link to PM_{2.5} and health effects including premature death
- We have been closely monitoring air quality in Duncan since July 2009 and in 2018 the Cairnsmore Station moved across the street due to the school district requiring the space where it was originally located.
- We have seen the influence in open burning bylaws that have resulted in decreasing trends in autumn/winter.
- Concentrations remain highest at night and on weekends particularly in the colder season, mainly as a result of wood burning and poor ventilation conditions.
- Wildfires are becoming more intense and increasing exposure to PM_{2.5} in certain years. In particular 2018 and 2020 had significant wildfire seasons.
- The Cowichan region still has high levels of PM_{2.5} in fall and winter but those are now getting less than before- trending downward which is great news. We need to continue to find ways to maintain the downward trend.

- Good news is that we have seen overall improvement with annual mean numbers falling below the air quality objectives and have moved to the orange zone (from red). We do however require continued progress.
- The number of exceedances is also decreasing
- Ozone readings are still meeting Canadian ambient air quality standards and we continue to trend downwards. There are short-lived ozone increases in some years, mainly the result of wildfire smoke.
- Wildfire smoke in recent years has played a significant role in our air pollution.
- There are now around 20 PurpleAir monitors active within our region. Data can be accessed by logging into CVRD or the Purple air website. Some sites stand out more than others in PM2.5 levels, and work is still ongoing to analyze data and report findings from the PurpleAir monitors.

[Dr Shannon Waters Health as linked to Quality Air Index](#)

Pdf attached

- We have higher numbers of COPD and respiratory illness here in the Cowichan region in relation to the rest of the province.
- PM2.5 is so fine it enters the bloodstream and in addition to Asthma and COPD where the lungs are affected it travels to the heart.
- Hospitalizations are higher here as is the dispensation of medication.
- **There is a direct correlation** between hospitalizations, visits to the doctor and prescriptions being filled when air quality is poor. People get sick especially those who are predisposed, vulnerable or cannot seek refuge in clean air environments.

[Keith Lawrence – The Cowichan Airshed Strategy Historical Context and Updated Strategy](#)

[Airshed Protection Strategy Update](#) (link here)

Keith took the participants through the historical context of the Airshed Strategy and accomplishments to date. Now it is time to look at the strategy moving forward and what is still to be accomplished. The work of the Airshed Strategy now fits within the climate adaption planning currently underway.

Moving forward the following actions are recommended:

Protecting Human Health

- Raise public awareness for impacts and best practices
- Establish clean air shelters
- Develop consistent regulatory approaches for open burning
- Explore options for a curbside pickup of yard materials
- Develop consistent regulatory approach for woodstoves
- Enhance incentive programs for the replacement of woodstoves to other primary modes of heating

Build strong and collaborative partnerships

- Continue to build strong and collaborative partnerships through the Airshed Roundtable
- Develop work plans
- Periodic reporting and monitoring
- Develop linkages to climate change, transportation, wildfire and solid waste planning

Rebates Woodsmoke Reduction Program Ilse Sarady

Pdf attached.

- Been offering Wood to wood exchanges since 2009. Interest in rebates have dropped since the pandemic- possibly due to not wanting others in their home or hesitancy to spend money during uncertain times.
- In recent years, more heating alternatives have been added to the rebate program
- As of 2023, when upgrading to a heat pump, woodstoves can be kept as emergency backup heating. Residents that opt for this have to sign a waiver to confirm that they will only use stoves in an emergency. They also need to track wood cord usage.
- As of 2023, there is now a bounty program where people can get \$300 for turning in an old stove
- Typically, the interest for rebates was high in the fall. This may change with climate change as transitioning to a heat pump also provides air conditioning in the summer and can mitigate the impacts of extreme heat
- Rebate barriers have been reduced but up-front costs for transitioning to heat pumps can be prohibitive for many. This rebate program can be coupled with the provincial and federal rebate programs for heat pumps.

Questions

- In relation to the pyramid slide on Dr Waters presentation, has there been any changes since the pandemic? Dr waters reported that during the pandemic provincial mandates that prevented open burning were put into place to reduce the strain on access to medications and to lower the increase in respiratory impacts. The results of this action have not been determined as of yet.
- Should we be encouraging residents to use N95 masks during smoke alerts? A campaign to promote the masks has not been undertake as there are many factors that go into this. The PM2.5 molecules are microscopic and can cross the mask barrier. Proper fit and quality cannot be monitored. This question will go back to Dr Waters for further clarification. We will investigate the literature from other countries where masking during poor air quality is common.
- Does PM2.5 cross the blood brain barrier? We know that it gets into the blood stream and impacts all organs.
- What proportions of PM2.5 are a result of traffic? Mobile sources are approximately 6% while 77% are related to open burning and wood burning appliances.
- We need to continue to push for more legislation and education
- Can anyone who turns in an old woodstove get \$300? Yes.

NEXT MEETING- to be determined

Appendix A (additional information)

- CVRD Airshed Protection site <https://www.cvr.ca/2180/Airshed-Protection>
- New Airshed Protection Strategy 2023 [Airshed Protection Strategy Update](#)
- Our Cowichan Communities Health Profile www.ourcchn.ca
- For your interest, more studies on air pollution's impact on cognitive abilities and mental health:
 - Air pollution impact on cognitive abilities and mental health
 - https://www.theguardian.com/environment/2023/feb/02/air-pollution-causes-chess-players-to-make-bigger-mistakes-study-finds?CMP=Share_AndroidApp_Other
 - https://www.theguardian.com/environment/2023/feb/01/study-reveals-links-between-uk-air-pollution-and-mental-ill-health?CMP=Share_AndroidApp_Other
- Videos are posted on a BC Government YouTube channel at the links below:
 - https://youtu.be/ta-4_RDhvJw Wood Smoke and Your Health
 - <https://youtu.be/MF-egVYixwE> Burning Clean: It Starts with the Wood
 - https://youtu.be/pwt4fVKiC_U Wood Smoke: Tips for a Cleaner Burn