

DATE: September 7, 2017

FILE: 5280-02

TO: Chair and Directors
Committee of the Whole

FROM: Russell Dyson
Chief Administrative Officer

RE: Air Quality / Wood Stove Exchange Update

Purpose

The purpose of this report is to provide an update on air quality activities including the wood stove exchange program, and to recommend application to the provincial wood stove exchange program for 2018 funding.

Policy Analysis

At the September 20, 2016 Comox Valley Regional District board meeting, the following motion was passed:

THAT the Comox Valley Regional District approve the application process for funding to continue the wood-stove exchange program in the Comox Valley Regional District;

AND FURTHER THAT staff submit an application for up to \$20,000.00 to the provincial wood stove exchange program;

AND FINALLY THAT the wood stove exchange program be continued in 2017, and include an additional \$750 incentive for wood stove to heat pump conversions, subject to funding being received from the provincial wood stove exchange program.

At the May 30, 2017 Comox Valley Regional District board meeting, the following motions were passed:

THAT a three year (2017-2019) air quality education program be implemented as described in the staff report dated May 10, 2017, funded with the Island Health Community Wellness grant received by the Comox Valley Regional District in 2016.

THAT a letter be sent to the provincial Ministry of Environment expressing the Comox Valley Regional District Board's support for the proposed changes to the Open Burning Smoke Control Regulation.

At the July 25, 2017 Comox Valley Regional District board meeting, the following motion was passed:

THAT staff be directed to implement the wood stove exchange top-up incentive program, as described in the staff report dated July 5, 2017.

Air quality management was discussed during the CVRD board's strategic planning session on June 20, 2017, and the following item is included on the 2015 to 2018 Strategic Priorities Chart:

- Air Quality Management (Wood Stove Smoke) – Implement outreach, education and incentive programs.

Executive Summary

In November 2016, the Comox Valley Regional District (CVRD) received a grant of \$17,100 from the BC Lung Association to continue the regional wood stove exchange rebate program and burn-it-smart education campaign in 2017. In 2017, the CVRD Board approved the use of an Island Health Community Wellness grant for air quality related initiatives, including an education and outreach campaign as well as top-up rebates for exchanges from wood stoves to cleaner heating sources.

In late July 2017, a call for proposals for the 2017/18 wood stove exchange program was issued by the Province, with an application deadline of September 25. A successful application for funding would allow the existing wood stove exchange program to carry on during 2018 largely unchanged, and continue to leverage the approved CVRD top up rebates, resulting in the best possible incentive levels to those participants switching from non-EPA certified wood stoves to cleaner heating sources.

In the Comox Valley, air quality advisories due to temperature inversions and fine particulate matter (PM_{2.5}) are common occurrences during the winter months. Data from the past five years of local air quality monitoring indicates PM_{2.5} levels in Courtenay often rank higher than national air quality objectives during the heating season. Continuing the wood stove exchange program is a positive step the CVRD can take towards reducing local sources of PM_{2.5} emissions and improving local air quality.

Recommendation from the Chief Administrative Officer:

THAT the Comox Valley Regional District approve the application process for funding to continue the wood-stove exchange program in the Comox Valley Regional District;

AND FURTHER THAT staff submit an application for up to \$20,000.00 to the Provincial wood stove exchange program;

AND FINALLY THAT the wood stove exchange program be continued in 2018, including additional incentives for cleaner heating sources, subject to funding being received from the Provincial wood stove exchange program.

Respectfully:

R. Dyson

Russell Dyson
Chief Administrative Officer

Background/Current Situation

In November of 2016, the CVRD received from the BC Ministry of Environment and BC Lung Association \$17,100 in funding to continue the local wood stove exchange program into 2017. This funding provided for 43 wood stove exchanges (at \$250 each) as well as funding for a contract program coordinator and costs associated with promoting the program.

To date (including 2016 program participants), a total of 66 tracking numbers have been assigned, and of those tracking numbers, rebate cheques have been issued to 47 eligible participants. Of the 2016 participants, all but one were for exchange to a new wood burning appliance. The introduction

of the heat pump exchange pilot project in 2017 resulted in a shift to this cleaner heating source, with eight heat pump tracking numbers issued this far.

In July 2017, a call for proposals for the 2017/18 provincial wood stove exchange program was issued, with an application deadline of September 25. Should the CVRD wish to continue receiving provincial funds to support the woodstove rebate program, an application would be made to the BC Lung Association and the CVRD program would continue largely unchanged in 2018 once funding is confirmed. Eligible recipients would continue to be homeowners throughout the CVRD Electoral Areas and member Municipalities.

One change of note to the provincial program is an adjustment to incentive levels provided by the province – the provincial contribution to exchanges involving EPA certified wood burning appliances will continue to be \$250, while other cleaner heating sources will see a Provincial contribution of \$400. Of note, these incentive levels are intended to fit within a similar budget for the program, meaning that fewer overall rebates would be available.

This Provincial change in incentive levels acknowledges the air quality benefits of cleaner heating sources such as wood pellet, natural gas or electric heat pumps, and is quite compatible with the direction established by the top up rebates that the CVRD is now able to offer as part of the air quality education and incentive program approved earlier this year. The CVRD wood stove exchange program website and other supporting materials have been updated with information regarding the larger incentives for cleaner heating sources, as outlined below in Table 1.

New heating appliance	Total Rebate
EPA certified wood stove	\$250
Natural gas or pellet stove	\$600
Electric heat pump	\$1,000

A variety of activities are planned for the fall in support of air quality outreach and the wood stove exchange program. An updated pamphlet “Cleaner Air for Our Community” (Appendix ‘A’) has been produced and distributed for display at community facilities and to wood smoke impacted neighborhoods in the community. A Burn It Smart workshop, facilitated by a representative of the Wood Energy Technicians of BC, is being planned for the upcoming Comox Valley Fall HomeExpo at the Comox Recreation Centre, and an advertising campaign is in development for implementation in October.

In order to maintain the Provincial contribution to the local wood stove exchange program in 2018, an application for continued funding is suggested. For reference, in 2016, an amount of \$20,000 was requested, and \$17,100 was awarded. Continued provincial funding would leverage the approved CVRD top up funding, resulting in the best possible incentive level to those participants switching from non-EPA certified wood stoves to cleaner heating sources.

Options

1. Apply to the provincial wood stove exchange program, and continue the program in the Comox Valley in 2018
2. Not apply to the provincial wood stove exchange program.

Due to ongoing air quality concerns related to PM_{2.5} levels in the Comox Valley and the interest in the current wood stove exchange program in the Comox Valley, option 1 is recommended.

Financial Factors

The CVRD received in 2016 a community wellness grant from Island Health totalling \$98,933. This grant provided \$14,700 for the CVRD's share of costs for the recently completed emissions inventory. The education program and top-up incentive program approved by the board will be implemented with the funds remaining from this grant.

For 2017, the CVRD received \$17,100 to implement the provincial wood stove exchange program, which provides \$250 towards the exchange of old non-certified wood stoves for new, cleaner heating options, and \$4,100 for the contracted wood stove exchange program coordinator. A similar level of funding is recommended to continue the program for next year.

As the CVRD has no service dedicated to air quality, the existing wood stove exchange program, approved education program and wood stove top-up incentive program are funded with provincial grants. Should expanded air quality initiatives be desired in the future, the board would need to consider establishing a service and potentially using taxation for additional funding.

Legal Factors

Local Governments are granted the authority to protect local air quality through various sections of the *Local Government Act* and *Community Charter*. A full summary of the provincial legislative framework for air quality was included as Appendix 'A' to an air quality report delivered to the June 2016 meeting of the CVRD Committee of the Whole ([link](#)).

Regional Growth Strategy Implications

Continuing the wood stove exchange program would work towards the following objectives of the Regional Growth Strategy:

- Ecosystems, natural areas and parks: poor air quality could adversely impact the ability of residents to recreate in natural areas and parks;
- Local economic development: poor air quality could adversely impact the desirability of the Comox Valley as a tourism and retirement destination;
- Public health and safety: exposure to the pollutants in wood smoke has been linked to negative health outcomes including impaired lung function in children, increased severity and frequency of symptoms of asthma and chronic obstructive pulmonary disease (COPD) and increased risk of heart attack or stroke for those with risk factors for heart disease; and

Intergovernmental Factors

Many communities in British Columbia address local air quality challenges through air quality working groups, which typically include Local Governments, First Nations, health authorities, Ministry of Environment and local citizens amongst their membership. Due to air quality concerns resulting from PM_{2.5} levels in exceedance of provincial objectives, the Ministry of Environment and Island Health have a strong interest in assisting with the development of a Comox Valley air quality working group. Staff from Comox Valley Local Governments have been invited to review the elements of the air quality education and outreach program as they are developed.

Interdepartmental Involvement

The following CVRD departments have been involved in the CVRD's response to citizen concerns regarding local air quality:

- Transit and sustainability;
- Fire services;
- Building services;
- Bylaw enforcement;

- Public affairs; and
- Legislative services.

The majority of the air quality work thus far has been led by staff in the community services branch.

Citizen/Public Relations

In the Comox Valley, air quality has been a recent citizen concern due to temperature inversions and wood smoke in the winters, smoke from open burning activity in the area, and wildfire smoke during the summer. A citizens group known as Breathe Clean Air Comox Valley has been formed, and appeared as a delegation at the May 2016 meeting of the CVRD Committee of the Whole. Air quality was also one of the strongest themes cited by respondents in the Comox Valley Community Foundation's Vital Signs 2016 survey.

Prepared by:

Concurrence:

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Attachments: Appendix A – “Cleaner Air for Our Community” brochure

Wood Stove Rebates

Wood Stove Exchange Program

The purpose of the Wood Stove Exchange Program is to minimize the impact of residential wood burning on air quality in communities throughout the Comox Valley.

Who Can Apply

The Comox Valley Regional District (CVRD) has rebates available on a first-come first-served basis to homeowners who are exchanging non-EPA certified wood stoves for a new wood, pellet or gas heating appliance, or an efficient electric mini-split air-source heat pump. Rebates range in value from \$250 for a new wood stove to \$1,000 for a heat pump.

Where to Apply

Applying for a wood stove rebate is simple. The CVRD has partnered with a number of local retailers to deliver the rebates. Alternatively, you can coordinate with a different retailer or installer. For full details on how to apply for a rebate, visit this CVRD web page: www.comoxvalleyrd.ca/woodstove

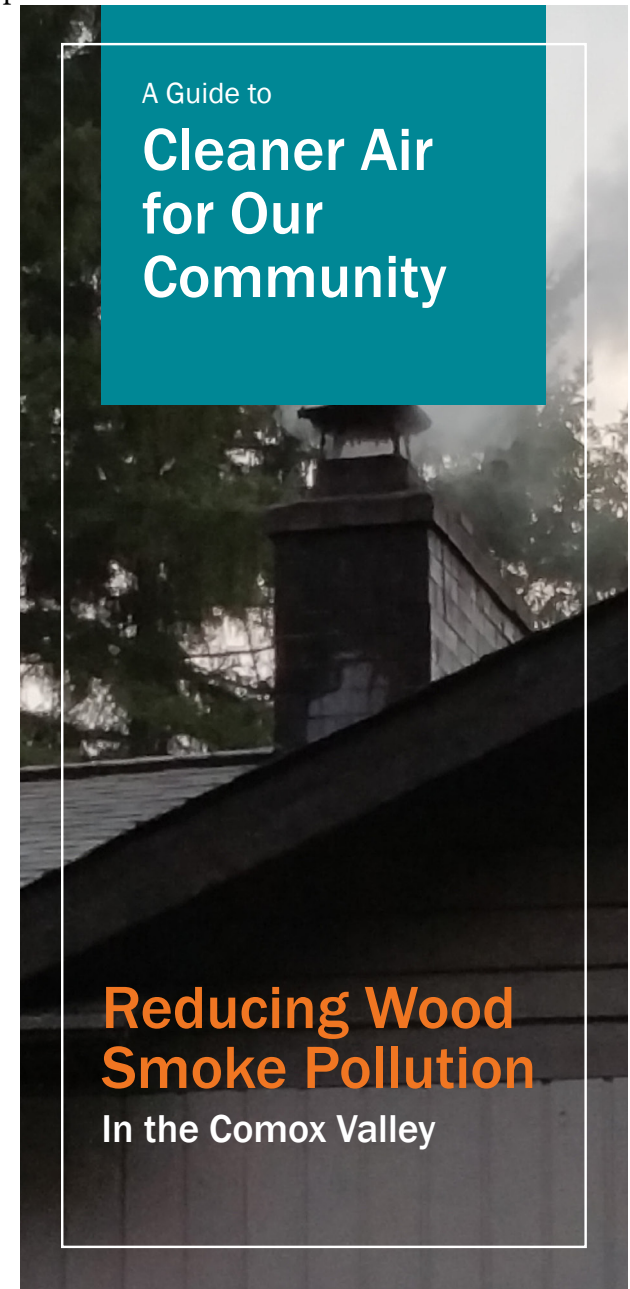


Funding support for the Comox Valley Wood Stove Exchange Program has been provided by the BC Ministry of Environment and the BC Lung Association.

For more information about the program, visit the CVRD website.

Questions regarding the program can be directed to the CVRD Wood Stove Exchange Program coordinator at 250-650-2302 or wsrebate@gmail.com.

Our Partners



Your Health

- Wood smoke contains small particles (PM_{2.5}) and chemicals that can have a direct impact on respiratory and cardiovascular health.
- Small particles and pollutants in wood smoke can trigger asthma attacks.
- Exposure to wood smoke can cause watery eyes, stuffy noses and chest tightness. Everyone may experience symptoms but children and seniors are especially vulnerable.
- Research has shown that there is no threshold below which smoke has no health effects. This means it is important to minimize the amount of smoke produced and humans' exposure to it.
- Burning wet or green wood produces more smoke, making it more dangerous to your health, and the health of your neighbours.



Your Home

- 1** A well-sealed, well-insulated and properly ventilated home will reduce your energy needs.
- 2** If you are planning to install a new heating device, choose cleaner and more efficient heating (non-wood burning) devices. Natural gas and electricity are much cleaner ways to heat a home.
- 3** If you have to use wood, improve efficiency and reduce pollution by installing a high-efficiency EPA-certified wood burning appliance.
- 4** High-efficiency units allow you to burn 30 per cent less wood and get the same amount of heat. Advanced technology stoves mean less smoke, less work and big cost savings. Natural gas stoves or electric heat pumps provide even greater air quality and financial benefits.
- 5** Most insurance companies require confirmation of proper installation of your wood burning appliance by WETT professionals in order to offer you competitive home insurance rates.

Your Choice

If you burn wood, save money and reduce pollution at the same time! Burn only clean, dry firewood.

Four easy steps to dry wood:

Split

Split into pieces 10-15 cm in diameter. Pieces should be about 6 cm shorter than the firebox size.



Stack

Stack wood in a single row with the split side down.



Cover

Cover the top of the stack to protect it from rain or snow. Make sure there is space between the cover and the stacked wood; don't let the cover rest directly on the wood.



Store

Allow enough time for wood to dry. Soft woods take a minimum of six months, hardwoods take a minimum of 12 months.



Is your wood dry?

Properly dried wood is lighter, has cracks in the grain on the ends, and sounds hollow when knocked against another piece of wood. It is illegal to burn firewood with a moisture content greater than 20%. Moisture meters allow you to test the moisture level in wood, are available in stores and can cost as little as \$20.