

DATE: January 30, 2020**FILE:** 5280-15**TO:** Chair and Directors
Committee of the WholeSupported by Russell Dyson
Chief Administrative Officer**FROM:** Russell Dyson
Chief Administrative Officer**R. Dyson****RE: 2020 Wood Smoke Reduction Program**

Purpose

To provide an update to the Comox Valley Regional District (CVRD) Board about the proposed 2020 Wood Smoke Reduction Program including funding received by the Ministry of Environment (MOE)/BC Lung and the identification of wood smoke “hot spot” areas to allocate “top up” rebates with funding provided by Island Health.

Recommendation from the Chief Administrative Officer:

THAT the rebate amounts for exchanging a wood-burning appliance for a qualifying gas stove (natural gas or propane), pellet stove and heat pump are reduced from \$1000 to \$400 per rebate;

AND THAT \$35,000 of grant funding provided by Island Health in 2019 for electric heat pump top up rebates in wood smoke hot spot areas be allocated to West Courtenay (lands west of the Courtenay River) and the Village of Cumberland as these areas have higher concentrations of wood smoke coupled with higher housing densities;

AND FINALLY that any further changes to the Wood Smoke Reduction Program be deferred to the future Regional Airshed Roundtable that is in development.

Executive Summary

- The CVRD has received \$29,000 in grant funding from MOE/BC Lung to continue the Provincial Wood Stove Exchange Program in 2020. The funder has allocated the funding as \$15,500 for rebates; \$10,000 for public outreach and events (e.g. smart burning workshops) and \$3,500 for a coordinator to deliver the program. MOE/BC lung contributes up to \$400 per rebate offered.
- From 2017-2019, the CVRD “topped up” the \$400 MOE/BC Lung rebate using grant funding from the Island Health Community Wellness Grant to enable rebates of up to \$1,000. That top up funding is fully spent. Staff will pursue additional funding opportunities to support a continued top up. In the interim, however, the rebate amount is recommended to be \$400.
- In 2019, the CVRD received \$35,000 in funding from Island Health to provide top up rebates (14 rebates of \$2,500 per household) for cleaner energy sources (i.e. electric heat pumps) specifically in hot spot areas.
- Definitive hot spot areas are not easy to define due to the characteristics of particulate matter and weather patterns, but the data does indicate that West Courtenay (lands west of the Courtenay River) and Cumberland are good starting points as they have areas with high concentrations of particulate matter coupled with medium to high residential density. Best

practice indicates that density is an important consideration in assessing the degree of public health impact of particulate matter.

- Staff recommends that any further updates to the Wood Smoke Reduction Program be deferred to the soon-to-be established Regional Airshed Roundtable, which could establish criteria to determine where to focus future rebate and education efforts (proximity to sensitive uses, density, high particulate matter, etc.). Staff is in the process of establishing the Leadership Group to support the Roundtable and requesting resources to hire a coordinator to lead the work through the proposed Regional Growth Strategy (RGS) service financial plan.

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Background/Current Situation

Since 2016 staff have been implementing the MOE's Provincial Wood Stove Exchange Program, which changes out wood stoves (5 years or older) for cleaner heating options including heat pumps, gas or pellet stoves and cleaner burning wood stoves. In 2019, a total of 59 rebates were issued for the following exchanges: 13 electric heat pumps, 8 higher efficiency wood stoves, 35 gas stoves (propane or natural gas) and 3 pellet stoves. In May 2019, the board eliminated the rebates for cleaner burning wood stoves and increased all other rebates to \$1,000.

Rebates in the Regional District (including Courtenay, Comox and Cumberland)

The CVRD was successful in our grant application to the MOE/BC Lung Association for funding to continue the Provincial Wood Stove Exchange Program in 2020. Funding available includes \$15,500 for rebates; \$10,000 for public outreach and events (e.g. smart burning workshops) and \$3,500 for a coordinator to deliver the program. Through the 2020 budget for Function 512 (RGS) an additional \$4,000 is requested for the coordinator role in 2020. The rebate amount provided by MOE/BC Lung is \$400 per rebate making 38 rebates available. From 2017-2019 the CVRD used funds from the Island Health Community Wellness Grant to top up the rebate amount to \$1,000. For 2020, the rebate amounts will be \$400 unless additional grant funds can be secured for top ups. Alternatively, should the board choose, the requisition amount for Function 512 could be increased to provide top up funds for rebates.

Property owners can also apply for additional rebates through cleanBC (administered by the Province). Rebates available for electric heat pumps are up to \$4,300. CleanBC also provides \$450 rebates for EnerGuide Home Evaluations. The EnerGuide home evaluation provides information to help homeowners make decisions about doing retrofits or upgrades to make a home more energy efficient. Energy efficiency within a home is an important component of the effectiveness of the heating appliance and may reduce overall energy usage. Staff will be recommending that the Airshed Roundtable consider linking any future rebates for exchanging woodstove with rebates for improving home energy efficiency.

Top Up Rebates in Wood Smoke Hot Spot Areas

In 2019, Island Health provided a \$35,000 grant to the CVRD to provide top up rebates in wood smoke hot spots to exchange a wood stove to a cleaner energy option that does not result in PM_{2.5}

emissions (i.e. electric heat pump). With the top up, the rebate for an electric heat pump would be \$2,900 (\$400 from MOE/BC Lung, \$2,500 top up from Island Health) making a total of 14 top up rebates available.

As the grant is specifically for hot spot areas, CVRD staff worked with Matthew Wagstaff (a former student at UBC), MOE and Island Health to map data from Mr. Wagstaff's 2017 mobile monitoring wood smoke study and look for patterns. The data provided some insight into areas with high concentrations of particulate matter, but was limited by the pre-determined driving route which mostly included the municipalities of Courtenay, Comox and Cumberland (Appendix A). Due to lack of data available for the electoral areas, they will not be eligible for this particular top up opportunity. Generally, the available data demonstrates that the Village of Cumberland and Courtenay West (lands with the City of Courtenay boundary, west of the Courtenay River) had a combination of medium to high residential density coupled with high concentrations of particulate matter. As a starting point and for the purpose of providing the limited top ups rebates, it is suggested the tops ups are allocated to the homes within the Village of Cumberland and Courtenay for the following reasons:

- In discussions with Island Health and MOE, it was determined these are priority areas due to higher wood smoke concentrations and higher housing densities;
- Allows for targeted promotion of the top up rebates and ease of administration;
- Limited uptake of the woodstove exchange program in Cumberland to date (only 5 rebates issued in 2019): targeted incentives may increase take up;
- Supports existing policy actions in Cumberland - no woodstoves in new residential construction, ban on land clearing and yard waste fires;
- Lower income areas throughout West Courtenay.

If additional grant funding is secured, the Airshed Roundtable/Leadership Group could explore additional hot spot areas to focus rebate/education efforts.

At the May 28, 2019 board meeting, staff was directed to increase incentives to assist low income households. CVRD staff reviewed Statistics Canada income data and no definitive pattern between high particulate matter and low income emerged. Generally speaking, lower income pockets exist throughout West Courtenay one of the proposed hot spot areas. How the Wood Smoke Reduction Program should support low income residents could be explored by the Airshed Roundtable/Leadership Group.

Summary

Table 1 below shows a summary of the proposed rebate scheme moving forward.

Table 1:

Appliance Type	Provincial Incentive (up to 38 rebates available)	Top up (up to 14 rebates available)
Gas stove (natural gas or propane) or pellet stove	\$400	\$0
Electric Source Heat Pump	\$400	\$2,500 (hot spots only – West Courtenay and Cumberland)

* Rebates are first come, first served until funding is finished.
Top ups may be increased if additional grant funding is secured.

Moving Forward

Recognizing the board's strategic priority to address the climate crisis, any future funding opportunities should consider aligning the air quality objectives of the Wood Smoke Reduction Program with climate action objectives. For example, incentivizing electric heat pumps over other fossil fuel sources (e.g. natural gas) would improve air quality and reduce greenhouse gas emissions.

Policy Analysis

Part 13 of the *Local Government Act* (RSBC, 2015, c. 1) outlines the purpose of an RGS. The RGS is a regional vision that commits regional districts and municipalities to a course of action to meet social, environmental and economic objectives. The legislation is broad enough to address regional matters such as air quality.

Options

1. Proceed with staff recommendation to allocate hot spot top ups rebates to the Village of Cumberland and West Courtenay (lands west of the Courtenay River). Allocate MOE/BC Lung rebates as shown in Table 1.
2. Provide direction to staff to revise the Wood Smoke Reduction Program.

Financial Factors

The Wood Smoke Reduction Program is funded through grants provided by MOE, BC Lung and Island Health. Staff time to oversee the program is proposed to be funded through the RGS Service (Function 512).

Legal Factors

No legal factors to consider.

Regional Growth Strategy Implications

Clean air relates to supporting a high quality of life through the protection and enhancement of community health, safety and well-being (Goal 7: Public Health and Safety) and protecting, stewarding and enhancing the natural environment and ecological connections and systems (Goal 2: Ecosystems, Natural Areas, and Parks).

It is widely held that any reduction in PM_{2.5} levels has a positive impact on human health. Providing top up rebates in an area with higher density and high concentration of particulate matter aims to further reduce harmful PM_{2.5} levels.

Intergovernmental Factors

The following stakeholders are in some way involved in local air quality: CVRD, Town of Comox, City of Courtenay, Village of Cumberland, Ministry of Environment, BC Lung Association, Island Health, Citizens, Retailers, WETT Inspectors, Home Insurance providers and Firewood providers.

Interdepartmental Involvement

The following departments are in some way involved in local air quality: sustainability, planning services, fire services, building services, bylaw enforcement, communications and legislative services.

Citizen/Public Relations

A communications plan will be prepared for the 2020 Wood Smoke Reduction Program, which will include promotion of rebate programs and education on proper wood burning techniques.

Attachments: Appendix A – “Driving Route for Mobile Wood Smoke Monitoring Project”

Appendix A

