



*2021 PSO CLIMATE CHANGE ACCOUNTABILITY
REPORT (CCAR)*

SCHOOL DISTRICT NO. 71
COMOX VALLEY SCHOOLS



Comox Valley Schools

A Community of Learners

INNOVATIVE • INQUISITIVE • INCLUSIVE

VANCOUVER ISLAND

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OVERVIEW - COMOX VALLEY SCHOOLS

Comox Valley Schools (SD71) is a positive, progressive, and growing school district situated on the east coast of Vancouver Island on the traditional territory of the K'omoks First Nation. Located within the Valley are the municipalities we serve: City of Courtenay, Town of Comox, Village of Cumberland and the Regional District, including the surrounding communities of Black Creek, Merville, Royston, Union Bay, Hornby Island and Denman Island. Each location providing their own unique services and community cultures. School District No. 71 (SD71) is one of 60 school districts in British Columbia.

QUICK FACTS – SD71 serves:

- 1 Regional District
- 3 Municipalities
- 2 Islands
- 1 First Nation
- 9700 + students



Vancouver Island, BC

Fifteen Elementary Schools: Airport, Arden, Aspen Park, Brooklyn, Courtenay, Cumberland Community School (K-9), Denman Island, École Puntledge Park, École Robb Road, Hornby Island, Huband Park, Miracle Beach, Queneesh, Royston, Valley View

One Middle School: Lake Trail Community School (Gr. 6-9)

Three Secondary Schools: Georges P. Vanier, Highland, École Secondaire Mark R. Isfeld

Additional Schools/Programs: Glacier View Secondary Centre (Alternate Gr. 8-12), Nala'atsi Alternate Program, Navigate (NIDES), International Student Program (ISP)

SD71's Vision and Mission Statement:

"An inclusive learning community that embraces diversity, fosters relationships and empowers all learners to have a positive impact on the world. To inspire engaged, compassionate, resilient lifelong learners and cultivate a collaborative community together."

Board of Education 2019 – 2023

PART 1. Legislative Reporting Requirements

DECLARATION STATEMENT

This Climate Change Accountability Report (CCAR) for the period January 1st, 2021, to December 31st, 2021, summarizes our greenhouse gas (GHG) emissions profile, the total offsets to reach net-zero emissions, the actions we have taken in 2021 to reduce our GHG emissions, and our plans to continue reducing emissions in 2022 and beyond.

By June 30, 2022, School District No. 71 (SD71), also referenced as Comox Valley Schools, will post this Climate Change Accountability Report to our website at www.comoxvalleyschools.ca/.



EMISSION REDUCTIONS: ACTIONS & PLANS

A. Stationary Sources (e.g. buildings, power generation)

Throughout SD71 we are committed to preparing all learners for a changing world. We value educational excellence, community engagement, organizational stability, environmental

stewardship, physical health, and mental well-being. The district is committed to minimizing GHG emissions and has met the challenges of rising heating costs and increased demand on aging facilities. Energy efficiency is a key strategy in SD71's approach to minimizing GHG emissions from stationary sources. Senior management plays an active role in seeking out and securing funding opportunities that will result in GHG emission reductions. The following four principles are of key importance when assessing the need for replacing equipment:

- I. Creating healthy environments, including air, temperature and noise for students, teachers and support staff
- II. Reducing GHGs
- III. Reducing energy consumption and waste
- IV. Increasing equipment and system efficiency

When reviewing existing mechanical systems in service within SD71 and evaluating recommendations to upgrade or replace with new systems, the new systems are assessed to meet the following minimum requirements:

- significantly reduce the carbon emissions produced by the building systems;
- conserve energy (electricity and fossil fuels) and decrease operating costs;
- demonstrate a successful approach to addressing climate change.

When looking at building retrofits for SD71, energy conservation measures that are practical and cost-effective are reviewed and assessed for implementation with a goal to ensure estimated savings are optimized and maintained during the useful life of the initiative and beyond. It is SD71's intent to tie together climate adaption policies with planned capital upgrades to ensure that future work reduces GHG emissions and improves infrastructure resiliency.

Ongoing plans to continue reducing emissions from stationary sources include making sure our building heating and cooling management systems are operating in the way they are intended. Optimization of building HVAC systems, lighting upgrades and domestic hot water upgrades (e.g. moving away from storage tank hot water systems to using boiler plant heat as a means to heat our hot water) are all under review. The district is looking to integrate strategic and tactical energy management planning and systems into our processes and will be reviewing, assessing, and analysing mechanical systems to ensure they are programed

effectively and efficiently for our educational institutional needs and goals, leading to reduced emissions.

The most significant GHG reduction upgrade projects completed in 2021 include:

- I. Boiler Plant Upgrades at Aspen, Brooklyn & Huband Park Elementary Schools
- II. Lake Trail Community School Boiler Plant Upgrade
- III. Direct Digital Control (DDC) Upgrades at Aspen, Brooklyn, Hornby and Queneesh Elementary Schools & Lake Trail Community School

I. Boiler Plant Upgrades at Aspen, Brooklyn and Huband Park Elementary Schools



Figure 1 – Huband Park Elementary, Aspen Elementary and Brooklyn Elementary School entrances

As the boilers at Aspen, Brooklyn and Huband Park Elementary Schools were at the end of their service lives, the old, inefficient, gas fired atmospheric copper fin hot water space heating, Lochinvar boilers were removed and replaced with new high efficiency Viessmann condensing boilers



Figure 3- New Pumps installed in Aspen Elementary

and pumps to minimize energy consumption, reduce greenhouse gas emissions and lower operating costs.

Alongside funds from the SD71 operating budget, these projects were subsidised by the provincial

Carbon Neutral Capital Program (CNCP) and provincial Annual Facilities Grant (AFG) funding.



Figure 2 – New boilers installed at Aspen Elementary

Based on mechanical reports prepared by Integral Group Consulting Engineers, the annual estimated gas consumption for the boiler plant upgrades at Aspen and Brooklyn Elementary is expected to be reduced by 33.3% per site. Annual expected emission reductions from these projects are approximately 27 - 35 tonnes of carbon dioxide per site, based on the same reports.

II. Lake Trail Community School Boiler Plant Upgrades

Lake Trail Community School is a new build that was completed in the fall of 2021. The replacement school was built onto the existing gymnasium of the old school to create a seismically safe school for students in the area. Overall, the new build has a smaller footprint than the old school and incorporates modern building systems (windows, insulation etc.) which make for a more efficient building. The project included new mechanical systems, featuring very high efficiency Viessman boilers and on-demand hot water via gas fired water heaters which will use less natural gas than the older style, traditional commercial hot water heaters. The boilers that were in the older school had been replaced in 2015 and were repurposed to boiler retrofits in Aspen and Huband, noted above, replacing systems that were at their end-of-life cycle.



Figure 4 – New Viessman boilers, Lake Trail Community School entrance & on-demand hot water heaters

III. Direct Digital Control (DDC) Upgrades at Aspen, Brooklyn, Hornby and Queneesh Elementary Schools & Lake Trail Community School

DDC systems can simplify processes and allow for system automation and energy efficiency in the workplace. They are a key component to optimizing HVAC efficiency. DDC upgrades to the Aspen, Brooklyn, Hornby, Lake Trail and Queneesh schools will aid in reducing energy waste, reducing energy consumption and increasing equipment and



Figure 5 - Main DDC Panel for Lake Trail Community School

system efficiency. The old systems had reached their end-of-life cycles and were obsolete. The DDC upgrades were funded through various streams including SD71 operating budget, capital funding, federal HVAC funding, and provincial seismic funding.

Heating, Ventilation, and Air Conditioning (HVAC) Notes in Context of COVID-19 Operations:

Of note, SD71 HVAC systems were reprogrammed to comply with the American Society of Heating and Refrigeration Engineers (ASHRAE) best practices and recommendations for the prevention of COVID-19 transmission. The changes include:

- Ventilation system programmed to run a building flush for two hours prior to occupancy to significantly increase the volume (doubled) of fresh air being brought into the buildings;
- Lowered the CO₂ setpoint to 800 ppm which significantly increases fresh air volumes in the school;
- Increase the duration of all systems with occupancy sensors to run systems for a minimum of 2 hours. Thus, when you leave the classroom at a break time the system keeps exchanging the air in the classroom; and
- All large air-handling systems such as the gymnasiums, and other large single zones, run the systems at 100% rather than a reduced fan speed which is the normal mode.

These standards are at odds with energy conservation and have resulted in increased energy consumption and green house gas emissions throughout our district. Additionally, school staff have changed their behaviour with respect to ventilation in their classrooms – it has become common practice to leave windows and doors open through out the year. This has resulted in a substantial increase in heating costs and further erosion of energy conservation principles.

Various Building and Equipment Upgrades

IT Hardware Upgrades - The IT Department continues to replace older computers that draw more power and create more heat with newer units as a part of the district's ongoing technology replacement plan. At the same time, replacing older liquid-crystal display (LCD) monitors with newer light-emitting diode (LED) monitors results in less heat generation and power loss. Additionally, centrally located printers have replaced multiple personal use printers.



Ongoing light-emitting diode (**LED**) **Light upgrades** were completed in various school classrooms and office spaces. The new LED lighting consumes **40% less electricity**, has lower maintenance and a much longer life span than the former fluorescent tube lighting, which contains mercury and uses heat to create light.



Energy Efficient LED Lighting Solutions

B. Mobile Sources (e.g. fleet vehicles, off-road/portable equipment)

Mandating greater vehicle fuel economy is a straightforward way to reduce GHG's from motor vehicle use. Optimal fuel performance is a driving factor embedded within SD71's vehicle policy and mileage & fuel consumption tracking. Finding ways to reduce fuel consumption promotes fuel efficiency and reduces emissions; the SD71 vehicle policy incorporates tips from Natural Resources Canada including idling reduction tips and strategies. Management reviews the vehicle policy with maintenance staff annually. The policy includes notes on GPS tracking, highlighting that we track vehicle location, speed, acceleration, harsh braking and cornering.

The district continues to remove older fleet vehicles and purchase newer vehicles that are fuel-efficient and produce less emissions. Of note, SD71's heavy equipment fleet all meet Tier 4 diesel emission standards (e.g. computer control and sensing for exhaust system particulate). The Tier 4 standard is a modern standard that runs cleaner than older heavy equipment.

Additionally, SD71 is in the early stages of researching and investigating suitable equipment for trades vehicles that are lower or zero emission and establishing a Clean Fleet Plan. Stable funding options will be necessary for a cleaner fleet and will direct resource and organizational capacity in moving forward with development and implementation of a Clean Fleet Plan.



C. Paper Consumption

Comox Valley Schools is gaining efficiencies and reducing paper consumption by updating processes to online formats and using technology to reduce paper consumption. Starting in January 2021, SD71 moved to an online bus registration form. Prior to this transition, all bus registrations came in by paper. Additionally, the district moved its work order system and school registrations to online formats in 2021. These processes were previously heavily paper based. Overall, transitioning to electronic formats is helpful for reducing paper consumption in the long term, throughout the district. In 2021, SD71 did see an increase in paper consumption even with the implementation of electronic formats to replace paper-based systems. Comox Valley Schools has been one of the fastest growing districts in the province; increased student enrolments, along with increased signage and messaging for COVID-19 are factors that contributed to increased paper consumption in 2021. Ongoing efforts to reduce paper consumption will include continued efforts to use technology to integrate more of our business processes to electronic formats.

2021 GHG Emissions and Offsets Summary Table:

School District No. 71 2021 GHG Emissions and Offsets Summary	
GHG Emissions created in Calendar Year 2021	
Total Emissions (tCO ₂ e)	2250
Total BioCO ₂	6.36
Total Offsets (tCO ₂ e)	2243
Adjustments to Offset Required GHG Emissions Reported in Prior Years	
Total Offsets Adjustment (tCO ₂ e)	0
Grand Total Offsets for the 2021 Reporting Year	
Grand Total Offsets (tCO ₂ e) to be Retired for 2021 Reporting Year	2243
Offset Investment (\$25 per tCO ₂ e) <i>[Grand Total Offsets to be Retired x \$25/tCO₂e]</i>	2243 X \$25 = \$56,075

- i. *[Note, BioCO₂ is included in Total Emissions but not Total Offsets. For K-12 and Post-Secondary organizations, and BC Transit, Total Offsets will not equal Total Emissions minus Total BioCO₂ because offset exempt emissions for buses are included within Total Emissions.]*
- ii. *Emissions and offset investment amounts will be validated by CAS prior to distributing invoices.*
- iii. *You must round "Grand Total Offsets to be Retired" to a whole number (no decimal places) before multiplying by \$25 (e.g., 43.2 = 43, 43.5 = 44).]*

Retirement of Offsets:

In accordance with the requirements of the *Climate Change Accountability Act* and Carbon Neutral Government Regulation, School District No. 71 (**the Organization**) is responsible for arranging for the retirement of the offsets obligation reported above for the 2021 calendar year, together with any adjustments reported for past calendar years (if applicable). The Organization hereby agrees that, in exchange for the Ministry of Environment and Climate Change Strategy (**the Ministry**) ensuring that these offsets are retired on the Organization's behalf, the Organization will pay within 30 days, the associated invoice to be issued by the Ministry in an amount equal to \$25 per tonne of offsets retired on its behalf plus GST.

Clean Government Reporting Tool (CGRT) GHG Offset Summary

School District 71 - Comox Valley	
2021	
Direct Fuel Combustion	
t CO ₂ e, GHG, All	1922
Purchased Energy	
t CO ₂ e, GHG, All	66.8
Mobile Energy Use	
t CO ₂ e, GHG, All	200
Office Paper	
t CO ₂ e, GHG, All	55.0
Fugitive Emissions	
t CO ₂ e, GHG, All	

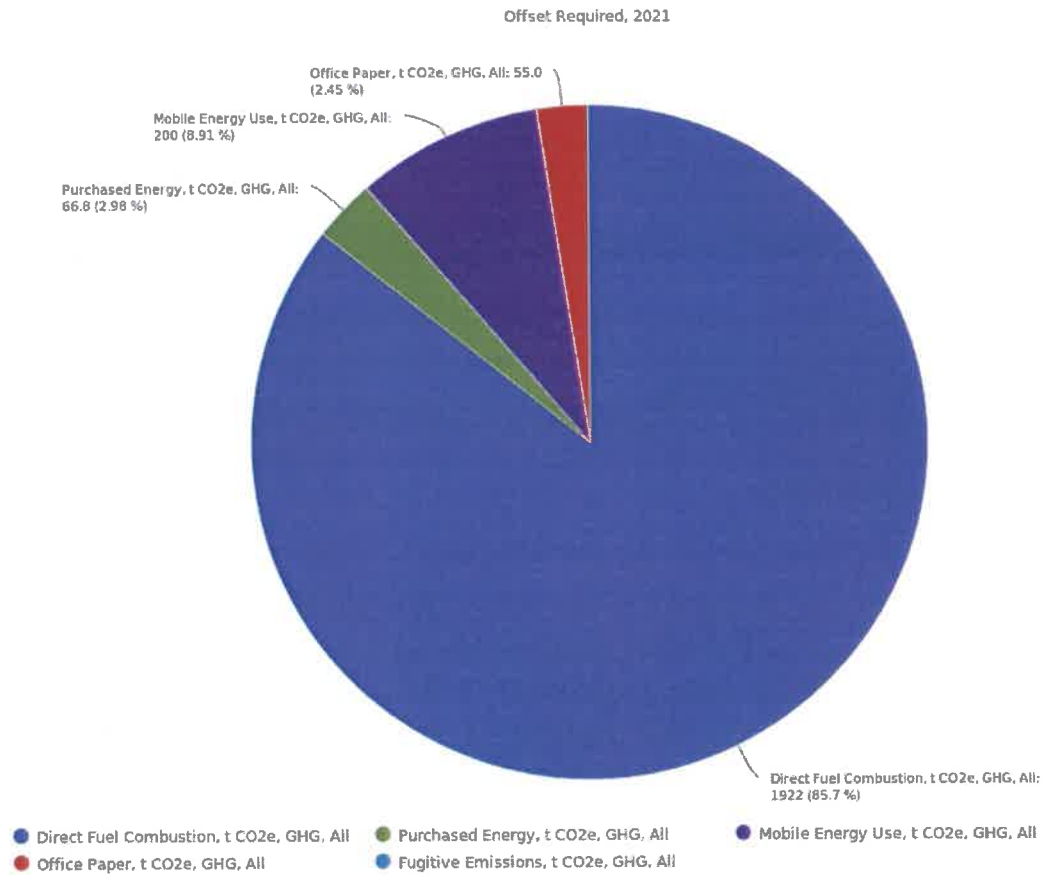


Figure 6 – CGRT graph showing proportional GHG emissions in tCO₂e by SD71 in 2021

PART 2. Public Sector Leadership

2A. Climate Risk Management

Along with accounting for green house gas emissions, SD71 is preparing for a changing climate and managing climate related risks. The strategy involves developing climate-related targets that will enable Board level oversight. This work will start in 2022 and carry forward into coming years. Additionally, SD71 is starting work on a climate risk management plan for operational and capital planning around climate-related risks and opportunities. Energy management and building resilience are at the forefront of capital infrastructure planning. Operational initiatives driven by climate change, particularly, high heat trends during 2021 included updating procedures for working in the heat and the addition of air conditions to all modular classrooms.



Figure 7 – Isfeld student involvement planting shade trees



Figure 8 – SD71 maintenance staff working on Isfeld shade trees

Additionally, when reviewing landscaping at sites within the district, consideration is given to planting trees strategically to provide shade. As well as assisting in cooling classrooms, natural plantings of trees and shrubs can diminish air and noise pollution. Shade trees were added at École Secondaire Mark R. Isfeld Secondary and Valley View Elementary in 2021.

2B. Other Sustainability Initiatives

As part of its *Value Statement*, The Board of Education of SD71, Comox Valley Schools, embraces and encourages **Global Awareness and Environmental Stewardship**. Furthermore, **Organizational Stability & Environmental Stewardship** is one of four strategic priorities of the district's *Strategic Plan* with the goal of cultivating environmental stewardship by fostering the following actions:

- Align outdoor and environment learning opportunities for long-term sustainability
- Reduce carbon emissions and environmental footprint
- Support the establishment and augmentation of school garden projects
- Reduce the use of single-use plastics throughout the district
- Implement strategies for zero waste by increasing recycling and composting efforts in all facilities
- Augment the Active Travel Program and public transit commute initiatives

A sustainability project of note that took place during 2021 was the Arden Creek Restoration Project. Restoration along Arden and Morrison Creeks and their confluence included trail improvement and planting. The project promoted student and community engagement around environmental and habitat protection. The public info sheet included as Appendix A, provides a good summary.



Figure 9- Community members and students working together on the Arden Creek restoration project

Additionally, SD71 senior management continues to assist teachers, support workers, parents, and students in their educational green initiatives and activities throughout the school district and community. Of note, Lake Trail Community School is working on reducing its impact on the environment by minimizing waste generation and cultivating awareness around zero waste principles such as conserving resources and minimizing pollution through the implementation of a 'green station' in a central location in the new school. The project was reported in an article in the September 17, 2021, Comox Valley Record: ['Courtenay's Lake Trail School introduces waste free initiative'](#) (click on the link or see Appendix B).

2C. Success Stories

Roughly, 80% of SD71 buildings have fuel heating. Natural gas and propane have much higher tCO₂e emissions than electricity. In recent years, as funding and budgets have allowed the district has been upgrading older boiler plants in its portfolio. Since 2010, 95% of SD71's boiler inventor has been upgraded to higher efficiency boiler systems.

New boilers have better **annual fuel utilization efficiency (AFUE) ratings** – generally speaking, a higher AFUE rating means higher efficiency. New boilers have an AFUE of 90 to 95% vs older boilers with and AFUE of 55 to 65%. Replacing all the old standard efficiency boilers with high efficiency boilers increases student and staff comfort and reduces natural gas consumption. All boiler replacements were upgrades from non-condensing boilers to condensing boilers. The image below notes some of the key differences:

Differences between Condensing & Non-Condensing Boilers

Condensing Boilers	Non-Condensing Boilers
One or more larger heat exchangers	Single combustion chamber and single heat exchanger
Lower temperature of combustion products (around 55°C)	Higher temperature of combustion products (around 180°C)
Exhaust gas is recycled through the condensing heat exchanger	Combustion gases go into the flue and 30% of the heat is wasted
Help combat climate change by reducing CO ₂ emissions	Higher carbon footprint
Higher initial cost , but cost efficient in the long-run	Lower initial cost, but very costly venting

Boiler plant upgrades alongside the seismic upgrade at Lake Trail Community School provide an interesting case study to highlight because it not only demonstrates the impact of using higher efficiency boilers, but also the impact of modern building standards. During 2015, the boiler plant in the school was upgraded and subsequently upgraded again in 2021 in conjunction with new seismic school build. Modern mechanical systems combined with current building standards and contemporary designs featuring more efficient building envelopes, encompassing better insulation and windows create notable energy efficiencies.

The chart below highlights natural gas consumption, weather normalized, to a typical weather year, in tonnes of carbon dioxide equivalents (tCO₂e) for Lake Trail Community School for the years 2015-2020. The downward trend illustrates lower emissions following the 2015 boiler replacement and again in 2020 following the new build and boiler upgrades. The higher emissions in 2019 and 2020 can be attributed to the school being under construction and large sections of the school were open while the old school was being taken down and rebuilt.

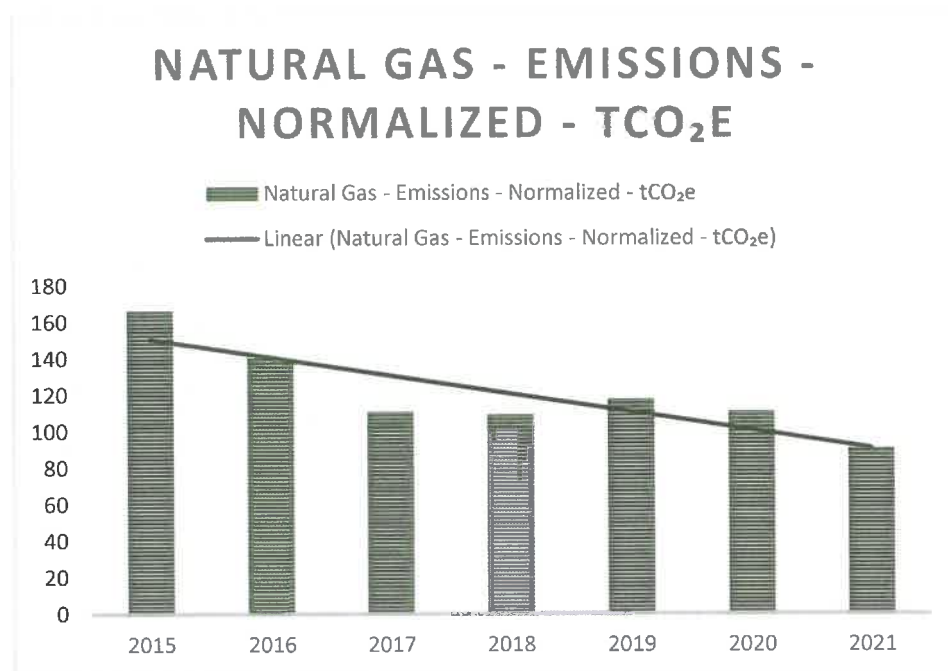
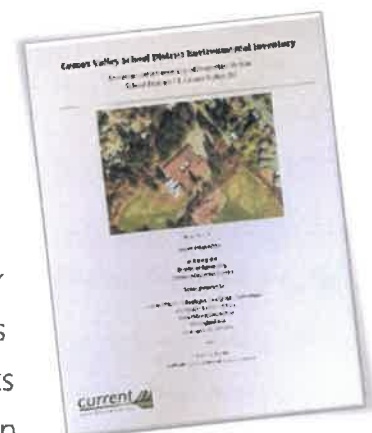


Figure 10 - tCO₂e normalized Natural Gas emissions for Lake Trail Community School illustrating lower emissions following the 2015 boiler replacement and again in 2021 following the new build and boiler replacement

Another interesting project to highlight from 2021 is the completion of a district-wide Environmental Site Inventory. The inventory encompasses all 24 properties within School District 71. The environmental inventory aides in developing an understanding of the existing physical opportunities and constraints at the sites related to environmental resources. As noted in the Introduction on page four of the *Comox Valley School District Environmental Inventory Report*: "This report is intended to support land use decisions and maintenance works by SD71 Operations staff and to empower administration, teaching staff, students, community groups and parents of each school to learn about and, importantly, to steward ecological value and function on the properties."



Looking Ahead

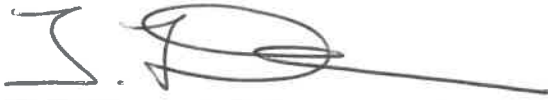
Comox Valley Schools aims to contribute to the 2050 emission reductions targets as set out by the BC government (see Appendix C for an overview of on GHG reporting).

The largest portion of SD71's GHG emissions originate from the energy used to heat and power the schools, maintenance and administration buildings. Consequently, the largest GHG reduction initiatives and applications for funding are directed towards reducing the energy consumption from buildings. Some key strategies include assessing the energy performance of each school site and identifying future energy efficiency projects that will reduce consumption in the district facilities. These assessments will factor in the *Annual Facility Grant (AFG)* project planning process, the *Annual Capital Plan*, the *Long Range Facilities Plan (LRFP)*, and the *Carbon Neutral Capital Program (CNCP)* funding requests.

Planned Energy Efficiency Projects for 2022:

- I. Installation of a **high efficiency boiler plant** at North Island Distance Education Facility with provincial CNCP and AFG funding.
- II. **Direct Digital Controls (DDC)** upgrades at Courtenay Elementary School with AFG funding.
- III. **Domestic hot water tank upgrades** at Courtenay, Aspen and Queneesh Elementary with SD71 funds.
- IV. Phase 1 – **Building controls and LED lighting**, upgrades at Glacier View Secondary with funding from provincial capital. The second phase of project plan for 2023 is to install a photovoltaic array.

Executive Sign-off:



Signature

MAY 30, 2022.

Date

TOM DEMEO

Name (please print)

SD 71 SUPERINTENDENT

Title

APPENDICES

Appendix A – Arden Creek Restoration Project – Public Info Sheet

Arden Creek Restoration Project



Arden Creek at the Morrison Creek confluence

Project Team:

- Morrison Creek Streamkeepers
- Fisheries and Oceans Canada
- Pacific Salmon Foundation
- School District 71
- Current Environmental Ltd.

Purpose:

To restore and enhance the riparian (streamside) and in-stream habitat of Arden Creek where it runs across School District 71 property at École Puntledge Park Elementary and Lake Trail Middle School.

Timing:

- Mid-July to mid-August, 2021
- Planting to occur in fall 2021

Project Rationale:

The habitat in and around Arden Creek is being remediated to support the needs of many local aquatic species, in particular, Morrison Creek lamprey and several salmon species. Morrison Creek lamprey are an endangered species – it is a population of Western Brook lamprey which produces both the typical freshwater non-parasitic form and uniquely, a freshwater parasitic form as well. The typical Western Brook lamprey is found from Oregon to BC, but this unique form is found only in Morrison and Arden Creeks – nowhere else in the world. They are a small fish, less than 15cm long, that is rarely seen.

Morrison Creek lamprey and its habitat are protected under the Species at Risk Act and Fisheries Act. In order to support the long term survival of the population we are undertaking remediation of Arden Creek and the surrounding riparian area to make sure the lamprey have what they need to breed, grow and feed. This work will benefit not just the lamprey but many other aquatic species, in particular salmon. Salmon need many of the same features as lamprey including free flowing water, complex substrates and places to take shelter.



Morrison Creek lamprey



Coho salmon fry



Morrison Creek lamprey

Get Involved!

We will be working in this area in July and August to make Arden Creek and the plants surrounding it a more supportive environment for all aquatic species. When school has resumed in the fall and temperatures are a bit cooler there will be opportunities for teachers and students to get involved with the riparian planting. We will contact each school in the fall to coordinate these activities.

Thank you for your patience during construction this summer!

Appendix B - September 17, 2021, *Comox Valley Record Article: 'Courtenay's Lake Trail School introduces waste free initiative'*



Lake Trail School has created special sorting bins to manage waste. It is the first project of its kind in the Comox Valley. Photo supplied

Courtenay's Lake Trail School introduces waste-free initiative

BLACK PRESS SUBMITTED / Sep. 17, 2021 11:30 a.m. / COMMUNITY

As Lake Trail Community School opened the doors to its new building on Willemar Avenue this fall, staff and students noticed something new.

The school has opted to be as waste-free as possible, making a big commitment to shift how they manage trash.

The first project of its kind in the Comox Valley and aligning with the district's Strategic Plan, the school community began collaborating with Environmental and Outdoor Education teacher Serina Allison in the complex planning required to make this initiative a reality well before the new school was finished being built. They hope that other schools will be able to follow their lead, learning from their work.

“The Nanaimo school district is already reaching out to us for advice on how to do this,” said Allison.

“This project means that most waste from the school will be diverted from the regional landfill, which is a very big focus of the Regional District,” says CVRD educator Tina Willard-Stepan. “We work with students all over the district and they have been asking for this sort of infrastructure. Youth, in general, are very aware of environmental issues.”

The school has created special sorting bins to facilitate the diversion. Compost will be picked up by Earth Warriors Composting, a local company, and will be supported by Leadership and Lifeskills students in taking recyclables to the local Recycle BC depot. The school will also be supported by the CVRD’s educator, making sure that everyone is involved.

“It has been a lot of work to put together, but we are very committed to creating a culture of zero waste in our learning community,” said school principal, Gerald Fussell. “We have been in school for only two weeks and students are already on board. It’s very exciting.”

RECYCLING SCHOOL DISTRICT 71 SCHOOLS

Appendix C - Overview - GHG Reporting

In 2007, the BC Government took a major step in the fight against climate change by setting aggressive greenhouse gas (GHG) reduction targets and making it legally binding. The Climate Change Accountability Act (CCAA), formerly titled “Greenhouse Gas Reduction Targets Act (GGRTA)” updates legislated targets for reducing greenhouse gases. Under the Act, BC's GHG emissions are to be reduced by the following listed targets set for the Public Sector Organizations (PSOs) and regulated by the Carbon Neutral Government:

- ❑ By 2030, BC will reduce GHG emissions by 40 per cent, compared to 2007 levels
- ❑ By 2040, BC will reduce GHG emissions by 60 per cent, compared to 2007 levels
- ❑ By 2050, GHG emissions will be reduced by at least 80 per cent below 2007 levels

To meet legislated targets, all PSOs including school districts, are required to be carbon neutral. The phrase “carbon neutral” is a way to explain and take responsibility for the GHGs emitted. As a PSO “adding” GHGs to heat buildings, the emissions can be “subtracted” by purchasing carbon offsets. These purchased offsets support innovative BC-based projects that create economic opportunities and fosters the use and development of clean technologies across the province. All public sector organizations follow a five-step process to become carbon neutral and have been doing so since 2010.

SD71 has implemented these five steps to become carbon neutral. Firstly, **measuring** operational GHG emissions from district buildings, district vehicles and district wide paper consumption. Secondly, **reducing** emissions where possible through an integrated approach. Thirdly, **offsetting** SD71 GHG emissions by purchasing an equivalent amount of high quality, made-in-BC carbon offsets. Fourthly, **reporting** annually on progress through the Climate Change Accountability Report (CCAR) and finally, **verifying** data and emissions through the BC government online application Clean Government Reporting Tool (CGRT) to convert GHG emissions into a unit of measure. All PSOs enter their data into CGRT which then converts this data into **tonnes of carbon dioxide equivalents (tCO₂e)**.

