CARIP Use and Impact Assessment

May 2021

Initial Findings: Survey of Local

Governments





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EXECUTIVE SUMMARY

Community Energy Association (CEA) undertook a short survey of local governments between May 14 and May 19, 2021, to provide a timely, independent assessment of how local governments used the CARIP program and to assess the impact that the program has had.

CEA received 45 responses from communities across a spectrum of size and geography, as seen at the side.

The 45 responses to the survey indicate that the CARIP program was a valued, unique, high-leverage program for large and medium communities while delivering modest benefits to small communities.

Uptake of provincial, federal, and utility grants is at risk, as is the pace of implementing local government community energy and emissions plans and local implementation of CleanBC without a replacement program.

Large >20,000 42% Vancouver Island 18% Southern Interior 18% Lower Mainland 24% KootenayBoundary 31%

Survey Participants by Region

Survey Participants by Size

Program Performance Summary

Overall the program was highly successful with mid and large local governments at significantly accelerating CleanBC implementation and implementation of local community energy and emissions plans and strategic energy management plans. The program was less successful with small local governments due in part to the low grant amounts received. However, some local governments did manage to translate an annual grant of \$1,000 into Clean Community Fund match funding for a regional initiative.

	Successes		Challenges
1.	Exceptionally high leverage of other funds	1.	Low grant amounts to small local governments were not
2.	Supported significant internal capacity in local governments on		sufficient to fund capacity or leverage in many cases
	climate action	2.	Reporting for small local governments further eroded low grant
3.	Reporting created valuable data on local government operations		amounts
	and actions that do not exist elsewhere	3.	Grant amount linked to continued use of fossil fuels in
4.	Enabled multi-year planning/programs		operations

Program Cancellation Risks

The following risks arising from the cancellation of the program and no similar replacement program emerged from the survey:

- 1. Jobs in local government: Communities noted that internal capacity, including core climate positions, part-time/temporary positions, and summer students working on adaptation and mitigation, were partly or fully funded by the CARIP program. This includes, in some cases, the local government match for BC Hydro and FortisBC co-funded positions. If internal capacity is lost, it can be re-developed over time as staff develop internal relationships and re-establish momentum on programs. Experience with the Federation of Canadian Municipalities Staff Grant program, which funded 68 staff positions for two years in local governments across Canada, including BC, has shown that the hiring process can take the better part of a year. It can also take a year or more for staff to gain momentum in a local government.
- 2. **Grant Uptake:** CARIP funds have been matched with many federal, provincial, utility, and private foundation grants to advance climate action. A survey response from a regional district noted that this risk is significant for regional districts because their other funding is less flexible than municipalities. Federal and provincial governments have significant competitive application-based grants available to local governments for mitigation and adaptation. We have not precisely determined the likely reduction in local government abilities to access these grants or the possible degree of further concentration of these grants to the largest communities.
- 3. **Targets:** With 8 ½ years to the approximately 50% emissions reduction targets in 2030, two or more years of internal capacity acquisition and redevelopment will impact local government abilities to meet the targets.

Program Design Considerations

The CARIP program can inform future program design. Consideration for future programs to build on CARIP's strategic strengths and address its challenges include:

	Building on Strengths		Addressing Challenges
1.	Low barrier/not application-based	1.	A floor/minimum grant amount or a regional funding approach
2.	Durable so that planning can occur over multiple years		that provides value to small local governments
3.	Restricted to climate action with flexibility within the climate	2.	Rewarding local governments for climate action
	action context	3.	Capitalized appropriate to provincial/local ambition
4.	Stackable with all other grants	4.	Enhanced and streamlined reporting

The full report provides a rich exploration of local government use of CARIP funds, the unusually high degree of leverage the funds produced, and the program's challenges.

INTRODUCTION

Province of BC Context

On March 26, 2021, the Province of BC announced new 2030 sectoral targets for emissions reductions, including:

- transportation 27 to 32%;
- industry 38 to 43%;
- oil and gas 33 to 38%; and
- buildings and communities 59 to 64%.

On May 11, 2021, the BC Ministry of Municipal Affairs announced the cancellation of the Climate Action Revenue Incentive Program (CARIP), which began in 2008/2009.

Between May 14 and May 19, 2011, Community Energy Association (CEA) undertook a short survey of local governments to provide a timely, independent assessment of how local governments used the CARIP program and assess the program's impact.

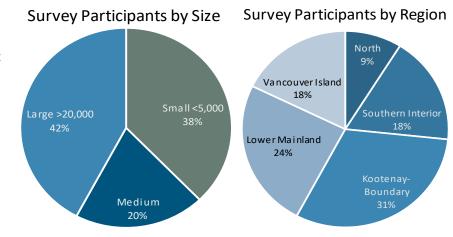
This report documents the findings of this research and outlines opportunities for the design of future programs. It is not meant to constitute a formal program evaluation of CARIP, although a future formal program evaluation would benefit from the findings and analysis in this report.

Survey Structure and Participants

CEA surveyed local governments through CEA's networks as well as those of BC Hydro and FortisBC. This survey was designed to provide a reasonable representation across BC communities quickly rather than taking a longer time to comprehensively survey each local government in BC. The survey was sent by email with a request to complete a table, which provided the raw data for this analysis. Participants were asked:

- Community name
- Are funds received under the CARIP restricted to climate/energy initiatives
- Activities funded by the CARIP funds
- Additional leverage achieved through the use of CARIP funds

We received 45 complete responses, one response which only provided commentary.



CEA categorized the participants by UBCM community size categories and regional association areas. The distributions are shown in the pie charts at the side. These distributions are consistent with CEA's previous surveys over more extended periods and more follow-up with communities to encourage responses.

While the responses are not an exact mirror of the distribution of local governments in BC, they represent all sizes and regions. CEA notes that small local governments may lack the capacity to turn around a response to a survey quickly. The survey was open for approximately three days for each network (CEA, BCH, FBC), and there was some overlap between networks. Multiple responses from the same community through different networks were counted only once.

Key Findings

Several key findings emerge. This section begins with reflections from local governments on the impact of the unique characteristics of CARIP, which enabled local governments to do multi-year planning based on CARIP funds. The following sections explore the specific uses of CARIP.

Durability and Flexibility

Survey participants indicated that both the amount of CARIP and the administration process (durable, non-application) were essential to their use of the funds.

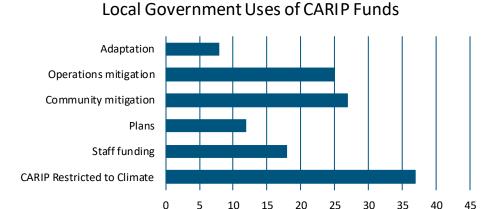
Quote from participants:

- **Lower Mainland, Large** "The 'steady' source of CARIP refund also allowed the City to plan and execute multi-year phases without the resorting to multiple applications for funding. It also allows for the funds to be used as and when needed.",
- Northern, Small "The strong feeling in the north is that an application-based process is not what small communities want to see implemented. Small communities lack the capacity",
- **Lower Mainland, Medium** "Removing CARIP as a non-competitive funding stream means that small municipalities like [us] are left cash stranded as staff capacity limits the ability to apply for other funding opportunities and the high competitive nature of existing grants is difficult for small municipalities to remain competitive"
- Kootenay-Boundary, Medium "CARIP has served as an invaluable tool and support system for the development of climate/conservation programs within the RD, serving to enable and support funding applications from other parties and through providing a flexible, quickly available pot of money which can be allocated and pivoted when required without the need for lengthy funding applications or additional levels of administration. Removing the CARIP funding will certainly impact the ability for RD to quickly access funding to support or begin important campaigns for climate action which are so important to reaching the ambitious climate goals we need to hit to continue living as we do. The financial structure of Regional Governments in particular make rapid reallocation of tax funds very challenging therefore putting much emphasis on the need for funding applications from external bodies, be it federal, provincial or private and not having this fund to add to matched contributions will reduce the opportunities we are able to apply for in numerous realms. "
- Northern, Large: "My main concern regarding the loss of CARIP funding is that small-medium municipalities, such as the [us], already struggle so much with our lack of capacity and ability to put grants together. I believe the loss of this program will very much prevent us from being able to implement many projects. The loss of the funding will also further contribute to the mindset that "climate action initiatives are too expensive" resulting in shelving climate action plans and further reduction in environmental staff."

• **Southern Interior, Medium "**Most importantly, the reliability and predictability of non-competitive funding makes multi-year action planning possible, which leads to more meaningful action on addressing climate change in our community."

Use of CARIP Funds Summary

Local governments are using CARIP funds in a variety of ways, as depicted in the chart below.



The following sections explore each of the uses in more detail.

Restrictions on funds

Survey Results: **82%** (27 of 45 participants) restricted CARIP funds to climate action and emissions reduction initiatives either formally or informally. Of the local governments that did not restrict the funds, all except 1 were small communities. Several small communities (<5,000 population) noted that they received \$1,000 or less through CARIP annually.

Quote from participants:

- Vancouver Island, Large: "This funding has been key in helping us move our carbon neutral and climate initiatives forward, and helped us to establish our Carbon Neutral Reserve Funding where we allocate this funding and matching funds based on our tons of CO2e, which this program has been instrumental in helping us move forward."
- **Vancouver Island, Small**: "Only received ~\$1,000 annually, but the reporting requirements were very time-consuming and onerous. The grant went into general revenues."

CEA's Interpretation: The vast majority of local governments responding to the survey restrict CARIP to climate action and emissions reduction except where the amounts they receive are too small to be useful for climate action.

Program design considerations: Restricting funds to climate action in future programs appears viable if there is a meaningful floor set for the grant amount for small local governments so that it is useful. An alternative approach could be funding at a regional level rather than individual local governments. This alternative would necessitate careful design to avoid governance complications.

Funding staff

Survey Results: 40% of participants indicated that CARIP was used to fund staff positions within the local government. 73% of large communities funded one or more of their full-time core climate staff with CARIP funds and many also funded summer students, temporary staff, or part-time staff to work on climate action through the grants. Only 11% of small communities used CARIP funds to support staff positions due to the small amounts received.

Quote from participants:

- Lower Mainland, Medium "CARIP funding is the backbone of our Climate Action Plan that will slow significantly and funds several FTE that will likely not be employed much longer without some sort of continued funding like CARIP. Losing CARIP is putting dedicated sustainability FTE jobs directly at risk. cutting off CARIP mid-way through 2021 when most municipalities have budgeted for 2021 CARIP rebates to come through in 2022 puts municipal budgets at risk and leaves little to no time for planning, resulting in the immediate halting of many climate action priorities."
- **Lower Mainland, Large** [CARIP has allowed us to] "Hire **20+ students per year** to work on climate. Sustainability Staff (especially when we were establishing our dept, but also for project support staff)"
- Vancouver Island, Large "Co-funds staff positions, including Corporate Energy Manager (BC Hydro), Community Energy Manager (BC Hydro), and Community Energy Manager (FortisBC)."
- Vancouver Island, Medium "On-demand bus technology funded through Built in Canada Innovation Grant, driver salaries funded through CARIP."

CEA's Interpretation: The Province did not put restrictions on how CARIP funds could be used. Large and medium communities determined that internal capacity was the highest and best use of a portion of the funds. Small communities did not have the opportunity to fund staff positions given the small amounts of the grants. Internal capacity within local governments is known to be a critical limiting factor in their ability to implement climate actions. BC Hydro, FortisBC, and the Federation of Canadian Municipalities have co-funded climate-focussed staff positions in BC local governments. Some local governments used CARIP to be the 'match' for the co-funded positions. There are very few other grants with which local governments can fund internal capacity.

Program design considerations: The Province of BC and many municipalities have ambitious climate targets and plans. A key constraint on local government implementation of CleanBC and community energy and emissions plans is internal capacity. Equity between small, medium, and large communities would enhance future similar programs. Addressing the internal capacity constraint within local governments would accelerate CleanBC implementation by providing capacity to apply for and manage other grants to advance climate action initiatives.

Funding Community and Corporate Plans

Survey Results: 27% of participants noted using CARIP for community energy and emissions plans, adaptation plans, or corporate plans. None of the small communities reported using CARIP to fund plans.

Quote from participants:

- Southern Interior, Large "\$25k for Community Climate Action Plan (City contribution for FCM MCIP grant)"
- Lower Mainland, Large "Development of Climate Adaptation Plan, Development of Climate Action Strategy"

CEA's Interpretation: The absence of plan development through CARIP in small communities could be due to either the small amounts that small communities get through CARIP or alternative funding streams such as the BC Hydro Quickstart CEEP program. It could also indicate an absence of plans, in particular adaptation plans, in small communities.

Program design considerations: Program flexibility allows for funds to be leveraged to attract other funding streams sometimes, as in the case of MCIP providing only 20% of the total plan cost. Future program design would benefit from careful consideration of how to maintain flexibility in using funds to attract other grants.

Community-wide Mitigation

Survey Results: 60% of participants used CARIP for community-wide mitigation initiatives beyond funding internal capacity. 41% of small communities used CARIP for one or more community-wide mitigation initiatives.

Electric vehicle charging infrastructure and related EV initiatives were the most common use of CARIP community-wide, with 22 of 45 participants reporting this.

One medium community used CARIP to cover driver salaries for on-demand transit to bridge the operational funding gap after a capital grant was secured.

11% of participants used CARIP funds for active transportation, primarily bicycle or e-bicycle programs.

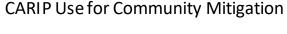
35% of communities used CARIP, often leveraged with much larger grants for retrofit programs, while ¼ of the participating communities leveraged CARIP funds for Step Code implementation. However, no communities reported leveraging CARIP funds for land use initiatives.

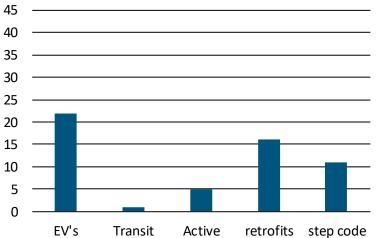
Quote from participants:

- Northern, Small "CARIP funds have been used to support the installation of EV charging stations (level 3)."
- Southern Interior, Large "\$500K used towards retrofit of Canada (City contribution for Clean BC Communities grant), \$200k used to fund Energy Step Code (leveraged BC Hydro Implementation Fund), \$25k/year to fund City's contribution to the Wood Stove Exchange Program (City contribution for Provincial funding), \$66K to purchase EV chargers, \$20k for Community EV & E-Bike (match funding from BC Hydro), \$15k for municipal contribution to 'top up' Home Energy Assessment rebate (Clean BC). \$15K for Home Energy Retrofit Program, \$16k for purchase/installation of community bike racks."

Lower Mainland, Large

- "2021 Projects: financing backbone of City Climate Action Plan implementation (zero emissions buildings plan for new and existing buildings, sustainability report card for development update, deep energy retrofits of corporate facilities, develop extreme weather response plan)
- Ongoing community engagement on climate action





- o BCSEA Cool it! Climate Leadership programming for youth in City schools
- BC Energy Step Code early adoption strategy
- Solar panel feasibility study
- Electric vehicle charging station installation
- Scoping tri-cities electric vehicle strategy study (UBC Sustainability Scholar project)
- o Envisio project management of the Climate Action Plan."
- **Kootenay-Boundary, Medium** "Seed funding leveraged with other RD and public/private funding for the \$2M Accelerate Kootenays program. Builder capacity building leveraged into \$400K of training and support leading to highest literacy of Step Code in the Province. **CEM position has leveraged millions** to support EVs, organic waste diversion, step code, etc."
- **Lower Mainland, Large** "The City has received \$2.5M in CARIP funding since 2009. It has been used extensively since for a number of initiatives, including:
 - o Incentive Funding: Leveraging incentive funding for energy efficiency programs from BC Hydro and FortisBC, including the Building Benchmarking Challenge and Energy Efficient Spray Valve for Small Restaurants, [local] Carbon Market.
 - Capacity Building: Building Air Tightness Training and Blow Door Tests (to support capacity-building for Part 9 builders) RE: implementation of the BC Energy Step Code.
 - Policy Development: Policy and technical analysis for initiatives such as the EV parking requirements for residential developments."
- **North, Small** "The Village was able to use the fund for the Charge North project. Without the CARIP funds, it is unlikely the Village would have had the funds to allocate to the project (\$5,000)."

CEA's Interpretation: CARIP funds have enabled local governments of all sizes to accelerate CleanBC implementation by using CARIP as a high-leverage match to deliver community mitigation programs. A key enabling factor is the fund's flexibility and durability, which allows local governments to respond rapidly to other grant opportunities.

Program design considerations: The CARIP program has supported diverse, award-winning, and game-changing community mitigation initiatives. CARIP was not initially explicitly designed to help large-scale community mitigation. A well-designed, durable and flexible program capitalized at a scale appropriate to the ambition of local government community energy plans and the CleanBC sectoral targets could have an even more significant impact.

Corporate Operations

Survey Results: 56% of participants noted using CARIP for energy and emissions initiatives in their operations. This is slightly lower than the number that used CARIP for community mitigation initiatives. 29% of small communities initiated corporate operations initiatives with CARIP.

Quote from participants:

- Southern Interior, Small "We had not used any of the funds until 2021. We have a \$10k firehall energy efficiency project that we have budgeted to fund from the reserve. It will include new baseboard heaters, programmable thermostats, windows, LED lighting. If we didn't have this reserve, this project could very likely have been bumped to a future year as we are a small community and funds are scarce. But we were able to suggest the reserve and not taxation."
- **Kootenay Boundary, Small** "A number of municipal facility efficiency measures have been taken, including the construction of a step 3 district office building."
- Lower Mainland, Large "
 - o 2016
 - City Hall external lighting replaced with LEDs
 - Arena ice surface lighting upgrades
 - Community Centre lighting controls installed
 - Interior and exterior lighting upgrades for Park washrooms
 - Library boiler efficiency design work and decoupling installation
 - Maintenance Yard LED lighting retrofit
 - [building] boiler replaced with efficient model
 - Arena lighting fixture retrofit
 - Police headquarters LED lighting fixture retrofit
 - Energy Audit of Greenhouses
 - 0 2017
 - Youth Gym Centre lighting replaced with LEDs
 - LED Lighting replacements for [community] Centre
 - Streetlight LED retrofits along [an] Avenue
 - Ageing pump station infrastructure replaced with efficient models
 - 2018
 - Air curtains installed at Engineering Operations garage
 - Commercial LED lighting retrofits
 - RTU and Air Handling unit study and replacement

- LED lighting upgrades at Fire Hall
- Unit heaters at Engineering Operations upgraded to condensing heaters to conserve energy
- 13 vehicles converted from standard diesel to dual diesel/propane systems to reduce fleet GHGs
- 0 2019
 - Purchase of **E-bikes** to offset employee use of fleet vehicles
 - Fleet Roadmap financial study to understand the financial costs associated with an electric fleet conversion
 - Energy conservation study conducted for 13 buildings to identify future efficiency and conservation projects
 - Various LED lighting and fixture retrofits
- o 2020
 - Energy efficiency upgrades at various facilities
 - Heat pump installation at Police headquarters
 - Replacement of gas-heated building space with electrical equipment at the new Sportsplex
 - Purchase of an EV for the fleet to replace an ICE vehicle
- **Central Interior, Medium** "Corporate GHG reduction projects, such as electrical equipment for the Parks department, idling reduction equipment for all new pickup trucks, variable speed drives for pumps, HVAC upgrades and heat pump installs, Realice project, and electric zamboni."

CEA's Interpretation: CARIP has supported a diverse set of programs to decarbonize local government operations. It has likely been a key strategic enabler for local governments who have lower climate action ambitions by providing a source of funding to initiate emissions reduction projects that also save ongoing operating costs through less energy consumption.

Program design considerations: CARIP decreases with a decrease in fossil fuel use in local government operations. If local governments can make significant decarbonization progress through the use of electric pickup trucks (early availability in 2021 and 20 models projected available by 2024) and other technologies, their durable and flexible funding may decrease just as the need for it is increasing for community mitigation. Consideration in future funding programs could be given to rewarding local governments for climate action.

Adaptation

Survey Results: 25% of participants noted using CARIP for energy and emissions initiatives in their operations. This is slightly lower than the number that used CARIP for community mitigation initiatives

Quote from participants:

- Kootenay Boundary, Medium "State of Climate Adaptation and Resilience in the Basin by Rural Development Institute Selkirk College and Kootenay & Boundary Adaptation Strategies Plan BC Agriculture & Food Climate Action Initiative"
- **Lower Mainland, Large** "2022 Projects: funding for the implementation of several planned high impact actions (coastal flooding strategy, zero-emissions mobility plan, community-wide climate adaptation education campaign)."

CEA's Interpretation: Adaptation is included in CleanBC. Many local governments do not have the resources to complete adaptation plans, and few, if any, have the resources to deploy the required infrastructure to mitigate adaptation risks. CARIP helped with seed funding.

Program design considerations: Significant additional funding for adaptation will be required by local governments to assess and mitigate climate risks. How this interacts with a 'CARIP 2.0' is a good question. In particular, could a new and ambitious flexible and durable fund provide the match required for local governments to attract and stack much larger grants?

Leverage

Survey Results: 2/3 of participants reported that the CARIP funds were leveraged to secure other grants of varying sizes.

Quote from participants:

- Kootenay Boundary, Medium "
 - Enabled \$387.5k FCM grant for retrofits and Step Code Education, additional \$20k of FortisBC funding for SaveNow energyefficient product campaign
 - Kootenay Clean Energy Transition CARIP contribution from RDxx and contributions from RDyy & RDzz allowed CEA to apply for larger-scale funding applications to CBT for ~\$1m
 - REEP CARIP funding allowed application of RDCK FCM funding application of \$387,500 and of additional \$20k of Fortis funding to support the SaveNow energy-efficient product campaign."
- Vancouver Island, Medium "[CARIP co-funded] Energy Manager secured has helped secure over \$460,000 in additional grant funding."
- **Lower Mainland, Large** "Most importantly, it helps the City to supplement staffing costs. This is the main gap we see with provincial and federal programs currently available. There is an assumption that local governments have the staff resource to apply for and implement projects, and there is no program that funds staffing."

- **Kootenay Boundary, Medium** "Seed funding leveraged with other RD and public/private funding for the **\$2M** Accelerate Kootenays program. Builder capacity building leveraged into **\$400K** of training and support leading to highest literacy of Step Code in Province. CEM position has leveraged millions to support EVs, organic waste diversion, step code, etc."
- Lower Mainland, Large "Funding for community climate staff allows for other external funding to be leveraged from Federal and utility programs to cover 1-3 projects each year ... Funding for corporate climate staff allows for other external funding to be leveraged from Federal and utility programs annually for 5-10 energy studies, 10-15 lighting improvements, 2-5 equipment replacements, and 1-2 unique building or vehicle focused projects ... Funding for corporate climate staff also allows for significant funding to be sought and secured for new construction projects ... Funding for both corporate and community climate staff allows the City to remain connected to multiple regional, provincial, national, and international networks that regularly provide significant value through project examples, project partnerships, lessons from successes and failures, coordination on similar needs, and much more".

Lower Mainland, Large "

- Seed funding for Zero Emission Building Centre of Excellence (ZEBx); support for biennial Globe Forum and other green businesssector development work via Vancouver Economic Commission
- Of The \$15 Billion In Projects VEC Identified In Their 2019 COVID-19 Infrastructure Alignment Report, Almost All Of The Local Government Projects Therein (About 150) Used CARIP Funding As A Catalyst.
- Leverage Additional \$50,000 from UBC for Greenest City Scholars
- o Programs, networks, partnerships catalyzed by CARIP:
 - 1.Coastal Flood Risk Assessment (targeted coastal risk assessments): NRCAN: Enhancing Competitiveness in a Changing Climate program, UBCM: Infrastructure Planning Grant Program
 - 2. Electric Vehicle Charging Infrastructure Program: FCM: Green Municipal Fund, BC Hydro
 - 3. Development of green building policies: BC Hydro."

• Vancouver Island, Large "

- Matching funding for staff wages (Community and Corporate Energy Managers) through BC Hydro Sustainable Communities program
- Multiple projects with 50% matching funds required from the municipality that were supported by CARIP (e.g. BCH Ideation projects supporting EV Ready MURBs, Commercial Building Analysis and Program design, etc.)
- Multiple grant applications, many in collaboration with other municipalities and the Regional District, that were supported by CARIP through funding staff time and/or direct financial contributions, some recent examples include:
- o FCM, MCIP updating the Climate Plan
- o FCM Transition 2050
- o KR Foundation and Vancity funding for One Planet
- o FCM & Real Estate Foundation Municipal Home Energy Financing Pilot
- NRCan ZEVIP EV Charging stations design and installation

- Collaboration with the RD on grant application for Coastal Flood Inundation Mapping
- It is important to also recognize the considerable amount of staff time, partially funded through CARIP, spent on multiple other grant applications for high impact projects that were unsuccessful due to the programs being extremely competitive and oversubscribed. This demonstrates the value of consistent, sustained funding tied to climate action but not via a competitive application processes."

CEA's Interpretation: The use of CARIP funds has enabled an unusually high amount of leveraged funds. One small northern community stated that they would not have participated in the Clean Communities Fund 'Charge North' program without their CARIP funds providing their portion. Many local governments indicated the importance of funding to secure internal capacity to apply for grants and manage the projects funded by those grants. When provincial and federal governments have more grants for local government climate action, local governments would see a reduced capacity to access these grants without a well-designed replacement program.

Program design considerations: Existing and planned grant programs would benefit from a funding stream intentionally designed to support local governments in securing and stacking grants. Local governments require both internal capacity and flexible funds dedicated to climate action to secure the available grants. Special attention to how small local governments, either individually or regionally in accessing grants is also a consideration to reduce the likelihood that the grants are absorbed by the largest communities only.

Reporting

Survey Results: The survey was not designed to produce statistical results on reporting—responses provided by several participants referenced reporting and are provided below. Acting as the FCM Regional Climate Advisor for BC, CEA used CARIP reports to support **FCM PCP Milestone 4 submissions for 41 local governments**.

Quote from participants:

- **Vancouver Island, Small** "Only received ~\$1,000 annually, but the reporting requirements were very time-consuming and onerous. The grant went into general revenues."
- Lower Mainland, Small "The Environment and Climate Action Advisory Committee has devoted many volunteer hours to writing the grant criteria and evaluation structure which ensures a fair process for grant allocation. In years past, completing the CARIP grant forms was burdensome for staff and Council members but the most recent streamlining of the application as well as our experience with the process has made it much more simple. Completing the application has been a productive activity in that it reminds us what actions we have taken and demonstrates the areas where we are doing well, and what areas need work. It is extremely disappointing, after devoting all this time to making sure we had an efficient process, to be informed that it was all for nothing."

- **Central Interior, Medium** "The CARIP program is a critical part of community's climate action efforts, not only because of the financial support it offers but also the impetus to regularly track and report on corporate emissions and community-wide climate action efforts to Council and the community. The software licensing is affordable and consistent with the Province's emissions calculation methodology, and provides invaluable insight into our progress to carbon neutrality. Most importantly, the reliability and predictability of non-competitive funding makes multi-year action planning possible, which leads to more meaningful action on addressing climate change in our community."
- **Lower Mainland, Large** "The annual reporting requirement for CARIP has been critical in institutionalizing climate action in our organization. It ensures annual dialogue between climate action, operations, planning, and finance staff and provides a structured, transparent, and systems-based means of documenting progress and maintaining momentum. The [local government] uses the CARIP reporting process as fundamental tool for regular internal and external engagement and Council reporting on Climate Action. CARIP has allowed staff to connect with departments across the organization to emphasize the importance of climate action, share current activities and knowledge, and compile actions. The annual provincial reporting requirement and incentive to reduce fossil fuel use via the carbon tax rebate adds legitimacy and strength to the process and emphasizes that the Province is directly supporting the municipalities in the transition to corporate carbon neutrality with accountability (GHG accounting and financial accounting). Departments in the organization expect the annual request for climate actions completed and look forward to learning about actions in other departments, as well as the progress towards carbon neutrality and carbon tax implications. The public CARIP Report posted on the DNV.org website has also been a great tool to communicate climate action at the [local government] and the important connection to the Province and the Climate Action Charter. The public report provides transparency and communicates that climate action is being coordinated at the corporate, community, and provincial level. Staff regularly receive questions and comments on the public report including new ideas for how to accelerate action. The CARIP report has also been used as a historical record of activities to develop comprehensive submissions to external bodies, such as Partners for Climate Protection (e.g. [local government] submitted for Milestone 5 in 2021 relying in large part on CARIP reporting). Finally, the CARIP reporting process has serve as the familiar regular reporting tool for updating Council about the actions completed and valuable carbon tax rebate received as a comprehensive Information Report is submitted annually."
- **Lower Mainland, Large** "Without the requirements for reporting and potential gain of revenue from CARIP it becomes increasingly difficult to justify maintaining climate dedicated FTE"

CEA's Interpretation: The reporting requirement for small local governments was burdensome compared with the amount received. The reporting produced through the CARIP program is useful and could be even more useful with modest adjustments.

Program design considerations: Conscious evaluation of the cost of reporting vis-a-vis the funding received would benefit future programs. Engagement of local governments and other stakeholders in optimizing the value of the information reported could materially contribute to climate mitigation and adaptation efforts across BC.

Conclusions

Program Performance Summary

CEA does not have the policy objectives that the CARIP was designed to achieve though we can reasonably assume that these objectives include:

- 1. Local governments sign on to the Climate Action Charter
- 2. Measure emissions from local government operations
- 3. Accelerate local government climate action

CARIP appears to have been successful at achieving these assumed policy objectives.

- 1. 187 of 190 local governments have signed on to the climate action charter according to Province of BC (<u>B.C. Climate Action Charter Province of British Columbia (gov.bc.ca)</u>)
- 2. 147 of 190 (77%) of local governments are measuring emissions from their operations according to Province of BC (Summary Report on Local Government Climate Actions 2018Summary Report on Local Government Climate Actions 2018Summary Report on Local Government Climate Actions 2018)
- 3. According to our survey results, CARIP appears to have had an outsized impact on accelerating local government climate action due in part to it being flexible and durable. The remainder of this section explores this assumed policy objective further.

Report sections 'Funding Staff', 'Community-wide Mitigation', and 'Leverage' demonstrate that CARIP:

- 1. **Enabled significant leverage** of provincial, federal, utility and private foundation grants to address climate action in operations and across communities (leverage section). Examples were drawn from Lower Mainland, Kootenay-Boundary and Vancouver Island regions in the leverage section. An example from a small Northern community is highlighted at the end of the 'Community-wide Mitigation' section that also speaks to leverage.
- 2. Supported significant internal capacity: Section 'Funding Staff' highlights staffing responses from the survey. Staff capacity both supports leverage and is supported by leverage. From CEA's experience working with local governments across all of BC, staff capacity is a critical limiting factor for absorbing grants due to the capacity needed to define projects, write applications, manage projects and report. A local government that increases its staff capacity in mitigation has greater opportunity to use other available grants. Survey respondents indicated that CARIP provides the local government 'match' for utility co-funded positions.

 CARIP has been a unique program for supporting climate-related staffing. While not required, many local governments have either
 - formally or informally restricted the use of CARIP funds to climate and energy-related activities. This provides a flexible fund that can be drawn on to support climate-related staff positions that would be difficult to fund out of general / tax revenue. Local governments may raise taxes to support climate action positions, but many find that they have challenges securing senior management, Council or public support for increases in taxes. CARIP provides a unique fund upon which many local government climate action positions depend.

- 3. **CARIP Data** in the form of local government measurement of emissions from operations and both corporate and community actions undertaken provides an essential resource for communities and those seeking to track climate action in communities. CEA has used CARIP information to support 41 FCM PCP milestone reports. The reporting requirement also provides significant benefits to some communities as noted in the 'reporting' section of the report.
- 4. **Multi-year** continuity is required to support staff positions and to flexibly respond to grants as they become available. A one time grant or uncertain application-based grand would not achieve the same results as CARIP

Program challenges identified centred on three topics:

- 1. **Low grant amounts**: Many small (<5,000) communities received grants of approximately \$1,000. Amounts of this size are difficult to make use of for significant climate action programs.
- 2. **Reporting**: While the grant amounts are low for small communities, several expressed frustration that the 'net' of the grant was negligible after deducting the effort required for reporting.
- 3. **Continued use of fossil fuels**: CARIP is a climate action revenue incentive, yet it depends on the ongoing use of fossil fuels in local government operations. The availability of electric pickup trucks will likely accelerate local government efforts to decarbonize, reducing the flexible and durable funds available to support community-scale decarbonization.

Overall the program was highly successful with mid and large local governments at significantly accelerating CleanBC implementation and implementation of local community energy and emissions plans as well as strategic energy management plans. The program was less successful with small local governments due in part to the low grant amounts received. However, some local governments did manage to translate an annual grant of \$1,000 into Clean Community Fund match funding for a regional initiative.

	Successes		Challenges
1.	Exceptionally high leverage of other funds	1.	Low grant amounts to small local governments were not
2.	Supported significant internal capacity in local governments on		sufficient to fund capacity or leverage in many cases
	climate action	2.	Reporting for small local governments further eroded low grant
3.	Reporting created valuable data on local government operations		amounts
	and actions that do not exist elsewhere	3.	Grant amount linked to continued use of fossil fuels in
4.	Enabled multi-year planning/programs		operations

Program Cancellation Risks

The following risks arising from the cancellation of the program and no similar replacement program emerged from the survey:

- 4. **Jobs** in local government: Communities noted that internal capacity, including core climate positions, part-time/temporary positions and summer students working on adaptation and mitigation, were partly or fully funded by the CARIP program. This includes, in some cases, the local government match for BC Hydro and FortisBC co-funded positions. If internal capacity is lost, it can be re-developed over time as staff develop internal relationships and re-establish momentum on programs. Experience with the Federation of Canadian Municipalities Staff Grant program, which funded 68 staff positions for two years in local governments across Canada, including BC, has shown that the hiring process can take the better part of a year and it can take a year or more for staff to gain momentum in a local government.
- 5. **Grant Uptake:** CARIP funds have been matched with many federal, provincial, utility, and private foundation grants to advance climate action. A survey response from a regional district noted that this risk is significant for regional districts because their other funding is less flexible than municipalities. Federal and provincial governments have significant competitive application-based grants available to local governments for mitigation and adaptation. We have not precisely determined the likely reduction in local government abilities to access these grants or the likely degree of further concentration of these grants to the largest communities.
- 6. **Targets:** With 8 ½ years to the approximately 50% emissions reduction targets in 2030, two or more years of internal capacity acquisition and redevelopment will impact local government abilities to meet the targets.

Program Design Considerations

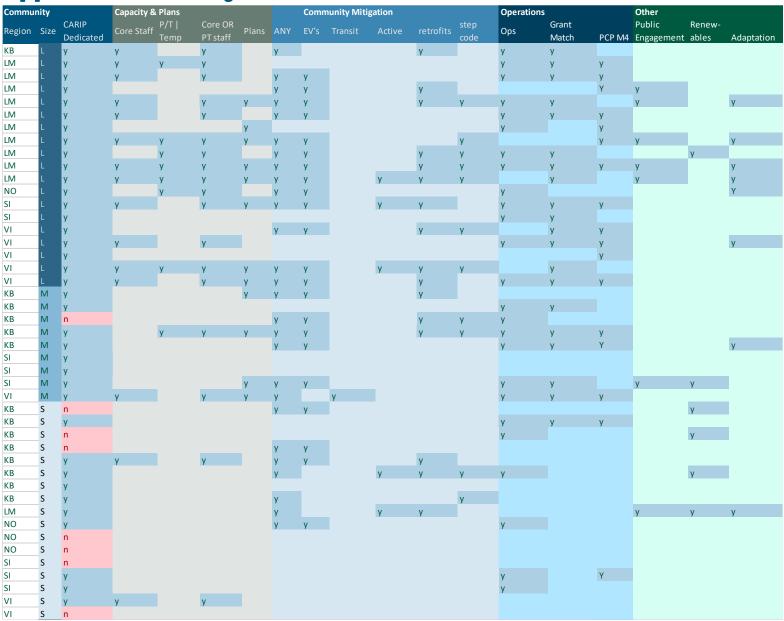
The CARIP program can inform future program design. Consideration for future programs to build on CARIP's strategic strengths and address its challenges include:

	Building on Strengths		Addressing Challenges
1.	Low barrier/not application-based	1.	A floor/minimum grant amount or a regional funding approach
2.	Durable so that planning can occur over multiple years		that provides value to small local governments
3.	Restricted to climate action with flexibility within the climate	2.	Rewarding local governments for climate action
	action context	3.	Capitalized appropriate to provincial/local ambition
4.	Stackable with all other grants	4.	Enhanced and streamlined reporting

There is potential to address CARIP challenges in future programs. Examples include:

- 1. **Floor** to grant amount: Future programs could balance the tension between providing meaningful grant amounts and managing the percapita investment. A 'floor' or minimum grant amount that the small local governments (118 to 5,000 population) would be eligible for is one way to ensure either meaningful grant amounts or managing the per-capita investment. However, it would be challenging to do both. An alternative could be a regional approach that is focused on multi-municipality collaboration in regions composed of primarily small to medium communities. Some of the most successful leveraging and impacts have come from the Kootenays, where there has been exceptional collaboration across three regional districts. This model could be replicated in other regions of BC.
- 2. **Rewarding** local governments for climate action rather than fossil fuel use in operations would be a more internally consistent approach to defining a climate action program. This could be accomplished through enhanced and streamlined reporting, which could be designed to be small relative to the grant amounts when combined with meaningful grant amounts to all communities.
- 3. Capitalization to the level of ambition could further support CleanBC implementation and CEEP/SEMP implementation. CARIP achieved an impressive acceleration of climate action with only \$8 million. Arguably, this amount is lower than the current stated level of ambition that the Province and many local governments have on climate action. A future program could be capitalized based on a targeted outcome of a specific impact on accelerating climate action through local governments rather than the program design constraint being designed a specific budget.
- 4. The reporting could be further enhanced by linking to local government plans to inform provincial progress tracking on CleanBC milestones. If the reporting required reporting of implementation against plans for community energy and emissions plans (CEEPs) and strategic energy management plans (SEMPs), along with an indication of progress towards targets, the Province could identify future challenges in meeting targets and more precisely configure an enabling environment for local governments. Structured appropriately, this may form part of the Province of BC's reporting into nationally determined commitments. This could be further enhanced through links to the community energy and emissions inventory tool to more directly link actions with outcomes (emissions) and enhance community-scale tracking for local governments.

Appendix 1 Summary Table



Appendix 2: Raw Results

The following table outlines a sample of communities compiled over three days, their approach to allocating CARIP funds, and the impact that those funds have had in these communities.

CARIP is a unique and highly strategic grant program that is leveraged in a flexible manner by communities to ignite large initiatives.

Region	Size	CARIP restricted to climate / conservation?	Examples of what CARIP has funded	Additional leverage
LM	L	Yes, CARIP refund is kept in a reserve specific for energy and climate action related activities. Yes, the CARIP grant funds are	Energy studies, building energy retrofits, Fleet EVs. Most importantly, it helps the City to supplement staffing costs. This is the main gap we see with provincial and federal programs currently available. There is an assumption that local governments have the staff resource to apply for and implement projects, and there is no program that funds staffing. • Purchase of infrared cameras to detect heat loss	The 'steady' source of CARIP refund also allowed the city to plan and execute multi-year phases without the resorting to multiple applications for funding. It also allows for the funds to be used as and when needed. The Environment and Climate Action Advisory
LIVI	5	allocated to community groups for community projects. The projects should be achievable within the year of the grant, relate to the evaluation criteria, and benefit the community. Criteria Community Action Projects that encourage and enable: Mitigation and adaptation to the impact of climate change Reduction of emissions of GHGs Alternatives to personal vehicle transportation	 Purchase of infrared cameras to detect heat loss in buildings. Available for loan from the Bowen Public Library. Purchase and installation of new solar panels on the community-funded Cove Commons building. Solar panels and electric charging station for the Bike Barn, project to be completed in 2021. Support for Island Food Sovereignty's initiative and report: Toward a Resilient Food System for Island. Support for SeaChange Marine Conservation Society project, replacing traditional mooring buoys with eelgrass-friendly mid-line float systems. To be allocated this year: 	Committee has devoted many volunteer hours to writing the grant criteria and evaluation structure which ensures a fair process for grant allocation. In years past, completing the CARIP grant forms was burdensome for staff and Council members but the most recent streamlining of the application as well as our experience with the process has made it much more simple. Completing the application has been a productive activity in that it reminds us what actions we have taken and demonstrates the areas where we are doing well, and what areas need work. It is extremely disappointing, after devoting all this time to making sure we had an efficient

		 Fire Smart improvements Use of electric vehicles of all types on island and for trips off island Water storage conservation, and source protection Environmental Protection Projects that: Increase understanding of 's 	Support for the documentary film - Uncharted Waters: The Young Voices of Howe Sound Contribtution to the project: Community-owned Commercial Greenhouses - Meeting the Needs of the OCP. Implementation analysis of community-owned, commercial greenhouses on Island to determine their viability to help address local food production/consumption.	process, to be informed that it was all for nothing.
		natural environment and how it contributes to quality of life Protect existing ecosystems Support maintain or restore green infrastructure related to marine and terrestrial systems on Bowen including removal of invasive species Educate and involve the community in local environmental stewardship initiatives		
NO	S	The funds are restricted for energy initiatives use a reserve account	CARIP funds have been used to support the installation of EV charging stations (level 3), LED street lighting, replacement of single-pane windows in the municipal office, installation of LED interior lights in the municipal office and the public library. Energy-efficient upgrades to the fire hall.	The Village was able to use the fund for the Charge North project. Without the CARIP funds, it is unlikely the Village would have had the funds to allocate to the project (\$5,000). "The understanding I had from the phone meeting is that they will be replacing it with another program. The strong feeling in the north is that an application-based process is not what small communities want to see implemented. Small communities lack the capacity."

VI	L		 EV Charging Stations Home Energy Rebates Energy efficiency education for home owners Builder forums on Energy Step Code Co-op students to work on climate initiatives used to leverage other addition funding for these climate and energy related initiatives and sometimes is our only source of funding for these initiatives. 	This funding has been key in helping us move our carbon neutral and climate initiatives forward, and helped us to establish our Carbon Neutral Reserve Funding where we allocate this funding and matching funds based on our tons of CO2e, which this program has been instrumental in helping us move forward.
КВ	S	Not formally, it is <\$1000	They are committed to exploring GHG reduction opportunities as stated in their new RFP. Level 2 station installed at Village Office. Exploring solar for the Columbia Discovery Centre.	
КВ	М	Yes	Downtown Area Plan Waterfront Master Plan Street Tree Master Plan	Intended future uses may have been put toward EV parking strategy and retrofit programming.
SI	S	Went directly into general revenue and no additional CARIP funds were accessed		
SI	S	In 2015 the LG created a Greenhouse Gas Reserve and has been placing the CARIP funds in that reserve each year. At year end 2020 we had almost \$33k in the reserve.	We had not used any of the funds until 2021, we have a \$10k firehall energy efficiency project that we have budgeted to fund from the reserve. It will include new baseboard heaters, programmable thermostats, windows, LED lighting. If we didn't have this reserve, this project could very likely have been bumped to a future year as we are a small community and funds are scarce. But we were able to suggest the reserve and not taxation.	
LM	L	Yes	Civic facility retrofits, sustainability and climate- focused staff positions, EV infrastructure, Energy Management software	Maximizing other funding sources (grants/rebates) to lower capital project costs.

				Covered incremental capital project cost of using energy efficient technology.
КВ	L	Not formally – from their website; This funding supports the City's efforts in: • Working towards becoming carbon neutral in our corporate operations; • Measuring and reporting on our greenhouse gas emissions; and • Creating a complete, compact, energy-efficient community.	Retrofits have been completed at municipal facilities, including most significantly Western Financial Place. And energy manager has also been in place to support those activities.	Additional funds leveraged for the retrofit projects.
LM	L	Funds allocated to a Climate Action Reserve fund	Established a Climate Action Reserve fund for future projects 2019 Participation in Empower Me program (\$15,000) 2019/2020 EV Charger feasibility study and installation of 5 duel point Level 2 EV Charging stations (\$80,000) 2021 installation of 10 dual-point Level 2 charging stations (\$275,000)	-NRCan funding for 2020/2021 Level 2 EV charging (\$70,000)
КВ	S	From OCP "Climate Action Revenue Incentive Program (CARIP) funding between 2008 and 2011 shall be used for current emission reduction projects and the remainder put into a fund to be used for future emission reductions or offset purchases. CARIP funding from 2012 onwards will be used directly to meet the LG's carbon neutrality goal	A number of municipal facility efficiency measures have been taken, including the construction of a step 3 district office building.	The district leveraged significant funding for the construction of their district office.

КВ	M	through either emission reductions or the purchase of offset credits" This led to the "energy conservation reserve fund" There is a 'reserve' fund, though not registered. The savings from energy efficiency activities at municipal buildings was also previously dedicated to that fund.	Energy efficiency measures across existing buildings – lighting, mechanical systems. Organics pilot program. Many opportunities were guided by the GHG Emissions Plan Implementation Committee.	Energy efficiency initiatives leveraged additional funding for completion. The establishment of the fund provided opportunity to dedicate cost savings into the reserve to grow the seed funding for initiatives.
SI	S	Yes	used the refunds to undertake small scale retrofits of our buildings like upgrades to LED lighting, bolstering insulation, etc.	
КВ	S	Not formally	In the early years, LG did allocated carip funds directly toward the purchase of offsets to be carbon neutral. Funds support efficiency activities, small projects like solar at the Beach hut.	
SI	L	Yes – Council directive Note: City's Climate Action Fund is 100% funded by CARIP	 \$500K used towards retrofit of Canada (City contribution for Clean BC Communities grant) \$200k used to fund Energy Step Code (leveraged BC Hydro Implementation Fund) \$32k/year to fund corporate Energy \$25k/year to fund City's contribution to the Wood Stove Exchange Program (City contribution for Provincial funding) \$66K to purchase EV chargers for \$20k for Community EV & E-Bike (match funding from BC Hydro) \$16.8k/year for City's contribution to Community Energy Specialist salary (FortisBC Climate Action Partners Program) 	

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			8. \$15k for municipal contribution to 'top up' Home	
			Energy Assessment rebate (Clean BC)	
			9. \$15K for Home Energy Retrofit Program	
			10. \$20k for purchase E-bikes for City's Bylaw	
			Services	
			11. \$25k for Community Climate Action Plan (City	
			contribution for FCM MCIP grant)	
			12. \$42k for 24kW solar PV system at West Highlands	
			Community Centre (City contribution for CELP	
			grant)	
			13. \$9K for pilot of idling reduction technology pilot	
			project for select corporate fleet	
			14. \$75k for installation of cold water ice resurfacing	
			technology at 2 rinks	
			15. \$16k for purchase/installation of community bike	
			racks	
			16. \$15k for study to help prepare City to transform	
			Account Payables to an EFT system to reduce	
			paper waste	
			17. \$50k for Sewage Micro Hydro Study	
			18. \$39k for implementing enhanced waste	
			management system and engagement campaign	
			at Sandman Centre	
			19. \$120k for initial installation/implementation of	
			telematics system (GPS) on City's municipal fleet	
			20. \$50k for 3 buildings to participate in Continuous	
			Optimization Program (City contribution to BC	
			Hydro funding)	
SI	L	Yes - the funds are placed in an	LED Streetlight conversion*	CARIP funds are used in conjunction
		Energy Management Rebate	Rutland arena heat recovery project	with Fortis rebates.
		Reserve, and then used for	Energy efficient boiler upgrades and multiple	CARIP funds have been identified as matching
		corporate Energy and/or GHG	civic facilities	funds in multiple grant applications (to date
		reduction initiatives.	LED lighting upgrades at multiple civic facilities	these have not been successful yet).

			3 energy studies	
			Utility monitoring, GHG tracking and weather normalization software	
SI	L	Yes	Established Climate Action Reserve Fund. Corporate projects only	
КВ	M	Not formally	Significant projects have been completed, including facility retrofits, installation of level 2 charging, acquisition of a PHEV, incentive programs for EK's most aggressive Step Code policy	Leveraged capital funding for retrofits; leveraged Accelerate Kootenay for additional charging stations.
LM	L	Yes	 Corporate building retrofits to community buildings Development of Climate Adaptation Plan Development of Climate Action Strategy Installation of Level 2 charging stations and a DCFC Retention of Sustainability staff to push climate action/conservation initiatives Pilot projects such a multi-stream public spaces waste receptacles, electric generators for events, building automation technologies and lighting upgrades Feasibility study of district energy systems at a local level School education and workshops on climate education Residential heat pump top up programs Step Code Demonstration Home Series for local builders and trades 	 Was a crucial funding strategy for the Township's Climate Action Strategy Provided matching funding for grant opportunities related to sustainability
VI	S	No, went into general revenues.	Only received ~\$1,000 annually, but the reporting requirements were very time-consuming and onerous. The grant went into general revenues.	None
NO	S	The District has never specifically used CARIP to fund climate		

L	related initiatives. Goes to general revenue so inadvertently they have been used to leverage other grants for climate action initiative Yes	GHG reduction initiatives: Partial salary for Energy Manager EV charging stations Supplemental funding for capital projects to enhance energy/emissions performance beyond the original budget allocation	
S L	Goes back into general revenue Yes – All funds are specifically reserved for projects related to energy conservation and efficiency with a measurable GHG impact.	 2016 City Hall external lighting replaced with LEDs Arena ice surface lighting upgrades Community Centre lighting controls installed Interior and exterior lighting upgrades for Park washrooms Library boiler efficiency design work and decoupling installation Maintenance Yard LED lighting retrofit Century House boiler replaced with efficient model Arenex lighting fixture retrofit Police headquarters LED lighting fixture retrofit Energy Audit of Greenhouses 2017 C House Youth Gym Centre lighting replaced with LEDs LED Lighting replacements for Centre Streetlight LED retrofits along R Avenue 	CARIP funds have allowed the City to pursue higher efficiency equipment, or innovative technologies, which come with a capital cost premium, that would not typically have been included in the capital plan (in excess of the capital budget allocated by a given department). By investing CARIP funds to support upgrading technology selection, the City has been able to grow trust in emerging technologies and integrate them into standard practice in subsequent years. In turn, the City's CARIP funds, in recent years, are being directed to more complex climate action initiatives which continues to accelerate the City's progress towards our aggressive climate action goals. The CARIP funds continue to provide the opportunity to update our City's definition of "business as usual" and supports opportunities for innovation and transformation.

• Aging pump station infrastructure replaced with efficient models

2018

- Air curtains installed at Engineering Operations garage
- Commercial LED lighting retrofits
- RTU and Air Handling unit study and replacement
- LED lighting upgrades at Fire Hall
- Unit heaters at Engineering Operations upgraded to condensing heaters to conserve energy
- 13 vehicles converted from standard diesel to dual diesel/propane systems to reduce fleet GHGs

2019

- Purchase of E-bikes to offset employee use of fleet vehicles
- Fleet Roadmap financial study to understand the financial costs associated with an electric fleet conversion
- Energy conservation study conducted for 13 buildings to identify future efficiency and conservation projects
- Various LED lighting and fixture retrofits

2020

- Energy efficiency upgrades at various facilities
- Heat pump installation at Police headquarters
- Replacement of gas-heated building space with electrical equipment at the new Sportsplex
- Purchase of an EV for the fleet to replace an ICE vehicle

LM	L	The annual reporting requirement for CARIP
		has been critical in institutionalizing climate
		action in our organization. It ensures annual
		dialogue between climate action, operations,
		planning, and finance staff and provides a
		structured, transparent, and systems-based
		means of documenting progress and
		maintaining momentum.
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		The D uses the CARIP reporting process as
		fundamental tool for regular internal and
		external engagement and Council reporting on
		Climate Action. CARIP has allowed staff to
		connect with departments across the
		organization to emphasize the importance of
		climate action, share current activities and
		knowledge, and compile actions. The annual
		provincial reporting requirement and incentive
		to reduce fossil fuel use via the carbon tax
		rebate adds legitimacy and strength to the
		process and emphasizes that the Province is
		directly supporting the municipalities in the
		transition to corporate carbon neutrality with
		accountability (GHG accounting and financial
		accounting). Departments in the organization
		expect the annual request for climate actions
		completed and look forward to learning about
		actions in other departments, as well as the
		progress towards carbon neutrality and
		carbon tax implications.
		The public CARIP Report posted on the
		website has also been a great tool to
		communicate climate action at the D and the

			important connection to the Province and the Climate Action Charter. The public report provides transparency and communicates that climate action is being coordinated at the corporate, community, and provincial level. Staff regularly receive questions and comments on the public report including new ideas for how to accelerate action. The CARIP report has also been used as a historical record of activities to develop comprehensive submissions to external bodies, such as Partners for Climate Protection (e.g. D submitted for Milestone 5 in 2021 relying in large part on CARIP reporting). Finally, the CARIP reporting process has serve as the familiar regular reporting tool for updating Council about the actions completed and valuable carbon tax rebate received as a comprehensive Information Report is
LM	L Yes	 Staffing: 1 dedicated sustainability staff member wage (provided partial funding for past 3 years to develop City's Climate Action program, including the completion of the City's Climate Action Plan) Partial funding for recently approved additional 2 year temporary sustainability staff member wage (to assist in Climate Action Plan implementation to meet City's climate targets, including facilitating cross departmental projects and capitalizing on other potential funding streams to support identified projects) 	 CARIP funding is the backbone of our Climate Action Plan that will slow significantly and funds several FTE that will likely not be employed much longer without some sort of continued funding like CARIP. Removing CARIP as a non-competitive funding stream means that small municipalities like City are left cash stranded as staff capacity limits the ability to apply for other funding opportunities and the high competitive nature of existing grants is difficult for small municipalities to remain competitive

 1 dedicated environmental coordinator FTE wage who supports the City's adherence to provincial and federal environmental legislation

Climate Action Plan:

- 2022 Projects: funding for the implementation of several planned high impact actions (coastal flooding strategy, zero emissions mobility plan, community-wide climate adaptation education campaign)
- Plan Development: consultant assistance to develop City's first Climate Action Plan (including public and stakeholder engagement)
- 2021 Projects: financing backbone of City Climate Action Plan implementation (zero emissions buildings plan for new and existing buildings, sustainability report card for development update, deep energy retrofits of corporate facilities, develop extreme weather response plan)
- Ongoing community engagement on climate action
- BCSEA Cool it! Climate Leadership programming for youth in City schools
- BC Energy Ste Code early adoption strategy
- Solar panel feasibility study
- Electric vehicle charging station installation
- Scoping tri-cities electric vehicle strategy study (UBC Sustainability Scholar project)
- Envisio project management of the Climate Action Plan

- Additionally, with the loss of CARIP competition for existing funding streams will become even more competitive,
- Likely resulting in short term halting of Climate Action Plan implementation and risk of not meeting climate action targets in short, medium and long term
- Without the requirements for reporting and potential gain of revenue from CARIP it becomes increasingly difficult to justify maintaining climate dedicated FTE
- current funding streams that LGs have been told to target instead of CARIP are silod, project based, don't support FTE, and often require large amounts of administrative time that small muni's don't have and favour large reduction projects that cut small municipalities out of the running very quickly even if percentage or per capita the results are promising
- loss of CARIP is expected to result in political uncertainty at the local level. If the Province is not directly supporting municipalities in achieving climate action targets, muni's may feel it is no longer a priority, especially with competing COVID-19 costs
- CARIP funding is the backbone of our Climate Action Plan that will slow significantly and funds several FTE that will likely not be employed much longer without some sort of continued funding like CARIP.

				 losing CARIP is putting dedicated sustainability FTE jobs directly at risk cutting off CARIP mid-way through 2021 when most municipalities have budgeted for 2021 CARIP rebates to come through in 2022 puts municipal budgets at risk and leaves little to no time for planning, resulting in the immediate halting of many climate action priorities Many grants available require matched or a portion of funds dedicated from municipalities. Without CARIP, many muni's won't be eligible for those grants as they cannot match any funds loss of public accountability and coordinated reporting as a result of ending this program that has been valuable for corporate asset planning, public accountability, climate plan tracking, and provided consistency in reporting across BC municipalities
VI	М	Yes, CARIP funding goes into Climate Action Reserve Fund	 Community Efficiency Financing Feasibility Study Recreation Complex Thermal Energy Study Bus on-demand transit pilot project - first ondemand pilot in BC Transit service area in the Province 	 Study funded 80% through FCM Green Communities Fund, 20% CARIP Recreation Complex Thermal Energy Study was completed in 2020 and has lead to the City implementing two large energy efficiency projects, reducing emissions by over 300 tonnes per year; City received over \$150,000 in Fortis funding towards implementation

NO	L	Yes. The CARIP funds are reserved for climate-related projects. The City intends to bring to Council a Bylaw to ensure the funds are further protected for climate-related projects.	 City contribution for Climate Change Mitigation Plan, Adaptation Plan and Climate Forward Implementation Strategy City contribution to Charge North program Installation of EV chargers for City fleet vehicles Purchase of an Electric Vehicle (Chevy Bolt) Energy Audits for City buildings LED bulb upgrades 	On-demand bus technology funded through Built in Canada Innovation Grant, driver salaries funded through CARIP Note: My main concern regarding the loss of CARIP funding is that small-medium municipalities, such as the City of PG, already struggle so much with our lack of capacity and ability to put grants together. I believe the loss of this program will very much prevent us from being able to implement many projects. Putting together grant applications is so cumbersome – and I'm concerned that the focus will be on large-scale projects when so many of the smaller operational projects are just as important. Smaller municipalities are going to become even further behind on climate action due to the loss of CARIP. We are concerned that larger municipalities with more resources will benefit much greater by grant programs than smaller, more rural and remote municipalities. The loss of the funding will also further contribute to the mindset that "climate action initiatives are too expensive" resulting in shelving climate action plans and further reduction in environmental staff.
КВ	S	Not formally – it is <\$1000.	Small amount of money received, but early years this was dedicated to offset purchases. Value-add opportunities were identified for the new library building including solar and Level 2 charging. Contributed to Accelerate Kootenay for the charging station and continue to operate with that money	Small amount to leveragebut does help to alleviate the operations cost of their Level 2.

VI	L	Yes	Directly co-funds a FTE Corporate Climate Action staff position. Supports other departments undertake key mitigation and adaptation projects, plans etc. Examples: undertakes annual corporate GHG accounting, developed corporate climate risk framework, , provides direct capacity building support to staff, initiates key projects (ex. RNG), develops and monitors corporate climate policy (ex. green fleet, green buildings), facilitates multiple departments in accessing climate related grants.	Accessed up to \$300k FCM GMF grant for zero emission fleet, currently leading NRCan ZEVIP application (assumed \$150k) and CleanBC Go Electric Fleets, allows us to access \$50k/year BCH CEM funds for an additional position to focus on community portfolio, etc.
VI	M	Yes	Partial wages for energy manager	Energy Manager secured has helped secure over \$460,000 in additional grant funding
КВ	M	Yes	NOTE ON THE IMPACT OF REMOVING CARIP: CARIP has served as an invaluable tool and support system for the development of climate / conservation programs within the RD, serving to enable and support funding applications from other parties and through providing a flexible, quickly available pot of money which can be allocated and pivoted when required without the need for lengthy funding applications or additional levels of administration. Removing the CARIP funding will certainly impact the ability for RD to quickly access funding to support or begin important campaigns for climate action which are so important to reaching the ambitious climate goals we need to hit to continue living as we do. The financial structure of Regional Governments in particular make rapid reallocation of tax funds very challenging therefore putting much emphasis on the need for funding applications from external bodies, be it federal, provincial or private	Enabled \$387.5k FCM grant for retrofits and Step Code Education, additional \$20k of FortisBC funding for SaveNow energy efficient product campaign Kootenay Clean Energy Transition - CARIP contribution from RD and contributions from RD & RD allowed CEA to apply for larger scale funding applications to CBT for ~\$1m REEP – CARIP funding allowed application of RD FCM funding application of \$387,500 and of additional \$20k of Fortis funding to support the SaveNow energy efficient product campaign.

and not having this fund to add to matched contributions will reduce the opportunities we are able to apply for in numerous realms.

Step 1 Step Code rebates for BC Hydro and FortisBC customers

Watershed Governance Initiative mapping & collation project

Regional Energy Efficiency (REEP) program contribution – supports residents, businesses and community facilities through the region with advice on rebates, step code, energy assessments and energy awareness. Also provided rebates for energy assessments, presence at events and provision of energy saving equipment to residents.

Funds admin time for CARIP reporting – also provides info for internal carbon tracking towards goals Portfolio Manager project

Climate Action student intern to support the continued development of the RD State of Climate Action reporting and monitoring process Integration and implementation of Energy Star Portfolio Manager into all RD facilities to support more robust and accurate monitoring and reporting of energy consumption

Carbon Neutral Kootenays corporate inventory CARIP funding approved, but not allocated;

- Wood heat stove exchange program additional to the provincial funding, RDCK put a reserve of CARIP funding to allow for additional uptake if demand was high
- Support for communities to develop their Sustainable Communities Energy Efficient Plans

			Proposed plans to use CARIP funding in the coming year (under development and pending Board approval); RD EV fleet infrastructure support – to complement NRCan/CleanBC funding RD building upgrades to higher energy efficiency products along with maintenance budgets and possibly Fortis Custom Incentives program	
КВ	М	Loosely – always dedicated to activities	Seed funding for Accelerate Kootenays; Seed funding for Kootenay Clean Energy Transition; Contribution toward builder workshops; Contribution toward Community Energy Manager positions. Early years, they did buy offsets.	Seed funding leveraged with other RD and public/private funding for the \$2M Accelerate Kootenays program. Builder capacity building leveraged into \$400K of training and support leading to highest literacy of Step Code in Province. CEM position has leveraged millions to support EVs, organic waste diversion, step code, etc.
КВ	M	Restricted - Climate projects (community & corporate)	Accelarate Kootenay (RD contribution - tri regional initiative) Kootenay Clean Energy Transition - tri regional initiative RD EV Pilot Program - first EV & charger RD Fleet EV infrastructure Study & Design Installation of EV charging infrastructure and associated electrical upgrade State of Climate Adaptation and Resilience in the Basin by Rural Development Institute - Selkirk College Kootenay & Boundary Adaptation Strategies Plan - BC Agriculture & Food Climate Action Initiative Lighting projects at facilities RD Corporate Greenhouse Gas Reduction Plan	Federation of Canadian Municipalities (FCM) Funding Province of BC (MEM) Columbia Basin Trust FortisBC RD & RD RD & RD Government of Canada FCM Funding Columbia Basin Trust Internal funding FCM funding - 50% study cost GoElectric (Plug in BC) funding Government of Canada Federation of Canadian Municipalities Other local governments within the region Province of BC Other local governments within the region

				Columbia Basin Trust
CI	L	Yes but money has never been spent	Nothing – no projects funded but money kept aside for 8 years	none
LM	L	Yes. Energy conservation and mitigation initiatives, as well as GHG emission reduction and electrification opportunities for both the City's corporate buildings and facilities, as well as community-wide initiatives.	The City has received \$2.5M in CARIP funding since 2009. It has been used extensively since for a number of initiatives, including: Incentive Funding: Leveraging incentive funding for energy efficiency programs from BC Hydro and FortisBC, including the Building Benchmarking Challenge, and Energy Efficient Spray Valve for Small Restaurants, Richmond Carbon Market. Capital Projects: Some CARIP funding was used in capital projects such as a rooftop solar PV array at Fire Hall #1, and a greenhouse gas reduction project at Richmond's Library & Cultural Centre. Capacity Building: Building Air Tightness Training and Blow Door Tests (to support capacity-building for Part 9 builders) RE: implementation of the BC Energy Step Code. Policy Development: Policy and technical analysis for initiatives such as the EV parking requirements for residential developments, and Community Energy & Emissions Plan. Staffing: While core City staff are not funded by CARIP, it has been used to fund students and short term support staff. Note: Our annual CARIP funding is combined with annual Gas Tax Provision to help fund energy and climate action initiatives for our department's two operating budget lines: Community and Corporate Energy & Climate Action.	CARIP provided additional leverage on the following initiatives: \$ \$750,000 MCIP Grant from FCM \$ \$500,000 from BC Hydro and FortisBC for energy efficiency and GHG reduction projects \$ \$130,000 from BC Real Estate Foundation to advance building energy benchmarking in BC.

КВ	S	Yes	Active Transportation grant leverage funding. New Building Step Code incentive rebates Existing Building Renovation Rebates. Purchase of 3 e-bikes as part of City fleet. Carshare Membership Purchase of Solar Monitoring Equipment	\$130,000
VI	L	Yes – used solely for climate action, primarily community-side	 Staff wages to support development of climate policy and programs (including grant applications to leverage departmental funding such as those listed in next column). Many of these staff-led projects result in high impact actions and/or policy changes, a few examples including: EV-Ready Infrastructure Requirements for new development Development of the Home Energy Labelling Disclosure Report to support provincial wide implementation of the BC Energy Step Code (with funding also from BC Hydro); Step Code implementation Sea Level Rise Mapping Urban Sustainability Directors Network and ICLEI Membership fees Hiring consultants and contractors for multiple projects – some outlined below GPC Basic+ Community-wide GHG Emissions Inventory for 2017 that formed the basis of the updated 2020 Climate Plan Feasibility analysis, design and installation of multiple rounds of Electric Vehicle (EV) charging stations; Multiple communications campaigns for home energy efficiency upgrades, the Oil to Heat Pump 	 Matching funding for staff wages (Community and Corporate Energy Managers) through BC Hydro Sustainable Communities program Multiple projects with 50% matching funds required from the municipality that were supported by CARIP (e.g. BCH Ideation projects supporting EV Ready MURBs, Commercial Building Analysis and Program design, etc.) Multiple grant applications, many in collaboration with other municipalities and the Regional District, that were supported by CARIP through funding staff time and/or direct financial contributions, some recent examples include:

KB S Yes Funds CARIP inventory completion KB S Loosely Funds have been dedicated to step code incentive Leveraged additional funding for BC Hydr	CI	M	Unknown	program and Better Home BC rebates amongst others; Municipal top-ups to provincial rebates for home energy retrofits; Analysis and engagement to support the adoption of the BC Energy Step Code; Update to the Sustainability Statement Guidelines for Rezoning and Development Permit Applications; Support for engagement and analysis related to electric mobility; Development of the Saanich Electric Mobility Strategy; Support for continuation and expansion of the One Planet project; Analysis required and web costs for updating the Carbon Calculator to incorporate Consumption Based Emissions Inventory; Funding for the B.C. Sustainable Energy Association (BCSEA) Cool It! School climate leadership education program; Installation and maintenance of Bike kitchens at facilities; Analysis and engagement to support the introduction of the Greener Garbage program; Workshops on local food production and processing, support for local urban food garden tours and the funding towards MyFedFarm during COVID. Establishing Climate Action Reserve Fund	o Collaboration with the CRD on grant application for Coastal Flood Inundation Mapping It is important to also recognize the considerable amount of staff time, partially funded through CARIP, spent on multiple other grant applications for high impact projects that were unsuccessful due to the programs being extremely competitive and over-subscribed. This demonstrates the value of consistent, sustained funding tied to climate action but not via a competitive application processes.
KB S Loosely Funds have been dedicated to step code incentive Leveraged additional funding for BC Hydr	KB	S	Yes		
programs for several years to support new home grant of \$20K to be dedicated toward	КВ	S	Loosely	Funds have been dedicated to step code incentive	Leveraged additional funding for BC Hydro

	1	T		
			construction to meet low-mid steps of the BC Energy	supporting education and incentives for step
			Step Code.	code.
CI	M	Yes	Corporate GHG reduction projects, such as electrical equipment for the Parks department, idling reduction equipment for all new pickup trucks, variable speed drives for pumps, HVAC upgrades and heat pump installs, Realice project, and electric zamboni. -District matching contributions to grant projects, such the comprehensive climate action planning project (building energy audits, green fleet action plan, updates to both corporate and community energy & emissions plans), integrated solar project, EV fast chargers installs -LED retrofits in the arena, curling club, and works offices (all remaining building lights are budgeted for LED retrofits in 2022) -seed funding for the District's Green Revolving Fund -Community education events (rainbarrels, net metering, EVs, home energy retrofits, Coollt! School	Used as seed funding for grants, Green Revolving Fund, supporting staff position that is dedicated to climate action. The CARIP program is a critical part of Summerland's climate action efforts, not only because of the financial support it offers but also the impetus to regularly track and report on corporate emissions and community-wide climate action efforts to Council and the community. The software licensing is affordable and consistent with the Province's emissions calculation methodology, and provides invaluable insight into our progress to carbon neutrality. Most importantly, the reliability and predictability of noncompetitive funding makes multi-year action
LM	L	Yes	program, etc.) -Community engagement events: Earth Week, Earth Day, Waste Reduction Week, Go By Bike Week Staff – full cost coverage + leveraging for other	planning possible, which leads to more meaningful action on addressing climate change in our community. • Funding for community climate staff
			 staff funding Climate adaptation risk analysis, strategy, and project staffing GHG reduction analysis, modelling, planning Industry engagement on Step Code strategy/policy Building industry education Localizing Step Code building costing analyses Passive house building energy/urban design guidelines 	 allows for other external funding to be leveraged from Federal and utility programs to cover 1-3 projects each year Funding for corporate climate staff allows for other external funding to be leveraged from Federal and utility programs annually for 5-10 energy studies, 10-15 lighting improvements, 2-5 equipment replacements, and 1-2 unique building or vehicle focused projects

equity in climpolicies, pro Development to effective through engineers.	gement focused on centering ate action (and related) planning, rams, etc. of an equity tool to support staff account for local equity issues gement and action planning/design oment of globally-recognized Seed funding for Zero Emission Building
	ate Emergency Action Plan, Action Plan, EV Ecosystem Centre of Excellence (ZEBx); support for biennial Globe Forum and other green

- Strategy, Climate Adaptation Strategy, Zero Emissions Building Plan
- Funded programs to develop embodied carbon requirements in new construction
- Research GHG reduction estimation methodologies, Lighting efficiency audits;
- Funded work to develop energy efficiency requirements for new buildings in Vancouver, as well as participating in development of BC Energy Step Code
- Hire 20+ students per year to work on climate
- Sustainability Staff (especially when we were establishing our dept, but also for project support staff)
- Capacity-building, development and launch of corporate sustainability programs (zero waste; building energy retrofits and management; staff commute; etc.)
- Membership Dues for Peer Networks:
- 1. C40 Cities
 - Chair: District energy working group
 - Collaboration on GHG monitoring and reporting
- 2. Carbon Neutral Cities Alliance
 - Philanthropic donations to support deep decarbonisation
- 3. Urban Sustainability Directors Network
 - Broad knowledge sharing and innovation funding
 - Co-Chair USDN Electric Vehicle network
- Supporting multiple departments across City in their climate work (including parks, facilities,

- business-sector development work via Vancouver Economic Commission
- Of The \$15 Billion In Projects VEC Identified In Their 2019 COVID-19 Infrastructure Alignment Report, Almost All Of The Local Government Projects Therein (About 150) Used CARIP Funding As A Catalyst.
- Leverage Additional \$50,000 from UBC for Greenest City Scholars
- Programs, networks, partnerships catalyzed by CARIP:
- 1.Coastal Flood Risk Assessment (targeted coastal risk assessments):
 - NRCAN: Enhancing Competitiveness in a Changing Climate program
 - UBCM: Infrastructure Planning Grant Program
 - 2. Electric Vehicle Charging Infrastructure Program:
 - FCM: Green Municipal Fund
 - BC Hydro
 - 3. Development of green building policies:
 - BC Hydro
- Sends a strong message to City Council that the Province supports and expects this work to happen in cities
- CARIP reporting raises awareness re: climate with senior managers, particularly CFO

- community services, Economic Commission,
 Development, Buildings & Licensing)
- Climate adaptation programs: risk and vulnerability assessments, risk reduction strategies, emergency response planning, asset management, natural asset management strategies, strategic and financial planning
- Programs to engage, audit and support retrofits of detached, rental, and multi-unit residential buildings
- Green IT program (server optimization, desktop optimization, etc)
- Green Operations strategy
- Green jobs surveys, economic analyses
- Catalyzed internal funding sources (matchfunding) for variety of projects:
- energy retrofits of City and non-City buildings;
- partnerships with NGOs/industry/utilities;
- climate adaptation planning;
- EV charging infrastructure deployment;
- partnerships with post-secondary institutions (BCIT, UBC, SFU, CityStudio program);
- policy development around renewable district energy systems;
- business case for zero waste and landfill gas collection program expansions;
- active transportation networks and public bike share;
- green infrastructure policy development and planning;
- support for sustainability-focussed community-led programs and citizen engagement (via Greenest City Fund).

CI	L	Unknown	Esta	ablished Climate Action Reserve Fund	
VI	L	Yes	•	Co-funds staff positions, including Corporate	
				Energy Manager (BC Hydro), Community Energy	
				Manager (BC Hydro), and Community Energy	
				Manager (FortisBC)	
			•	Funds plans and strategies such as the Climate	
				Leadership Plan, EV Strategy, and CEEP	
			•	Funds EV charging infrastructure, energy and	
				emissions retrofits in corporate facilities, and	
				other programs including developing a Regional	
				Retrofit Service	

CARIPs used to support Milestone 4

Totals

ort Milestone 4				
2021	2020	2019	2018	2017
1	2	7	25	6
Squamish	City	Abbotsford	Clearwater	Campbell River
	Kamloops	Kaslo	Rossland	Burnaby
		Quesnel	RD Nanaimo	Duncan
		Powell River	Maple Ridge	Langley Township
		Creston	Midway	Montrose
		Ucluelet	Terrace	Slocan
		RD Capital	Elkford	
			Central Saanich	

Terrace Slove Elkford
Central Saanich
Lumby
Port Coquitlam
RD East Kootenay
Nelson
Victoria
RD Comox Valley
Qualicum Beach
Delta
New Westminster

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Smithers Salmo

Gibsons Granisle

RD Central Kootenay RD Kootenay

Boundary

RD Cowichan Valley

Coquitlam