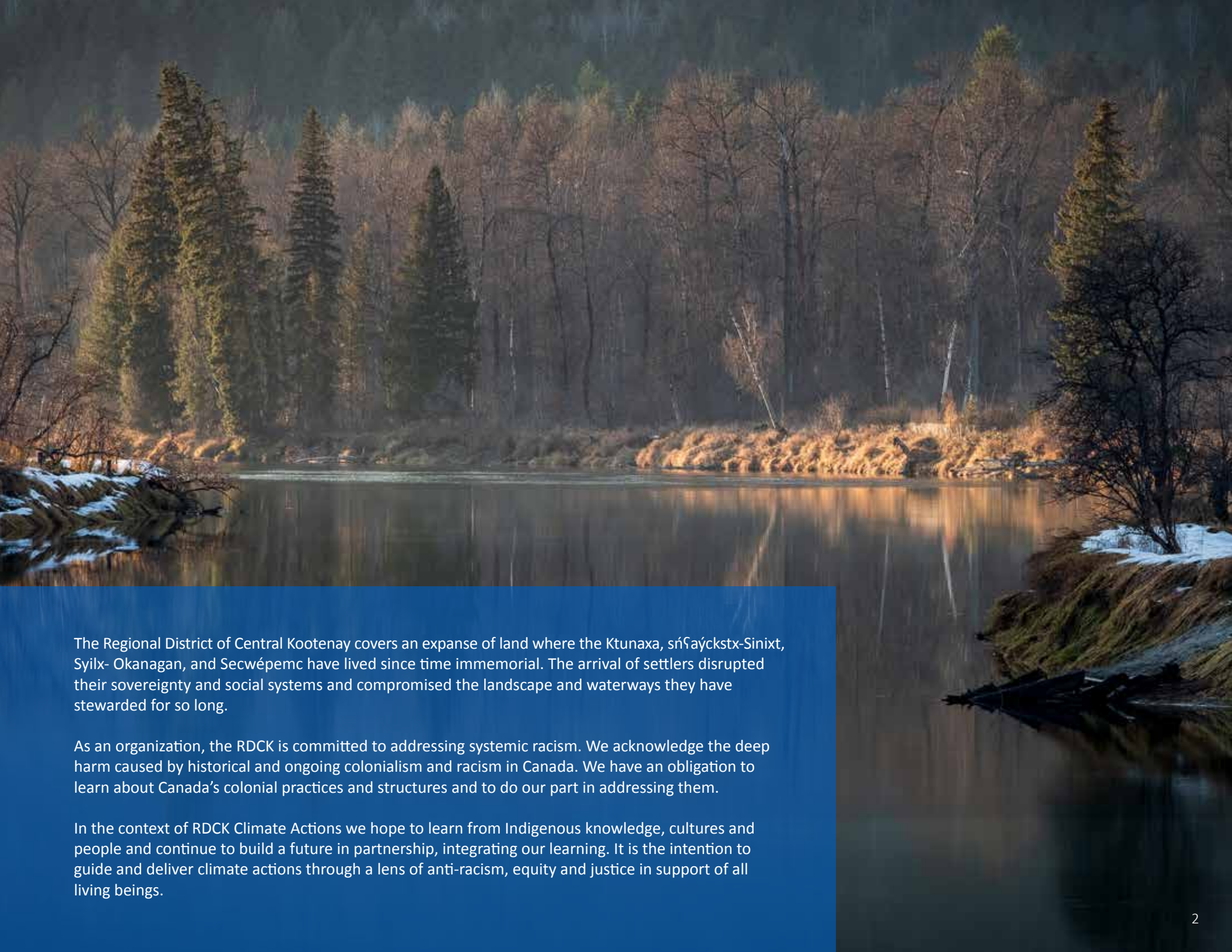
Building Momentum
in Rural Communities

RDCK Climate Actions

rdck.ca/ClimateAction



The Regional District of Central Kootenay covers an expanse of land where the Ktunaxa, sn̓ʕaýckstx-Sinixt, Syilx- Okanagan, and Secwépemc have lived since time immemorial. The arrival of settlers disrupted their sovereignty and social systems and compromised the landscape and waterways they have stewarded for so long.

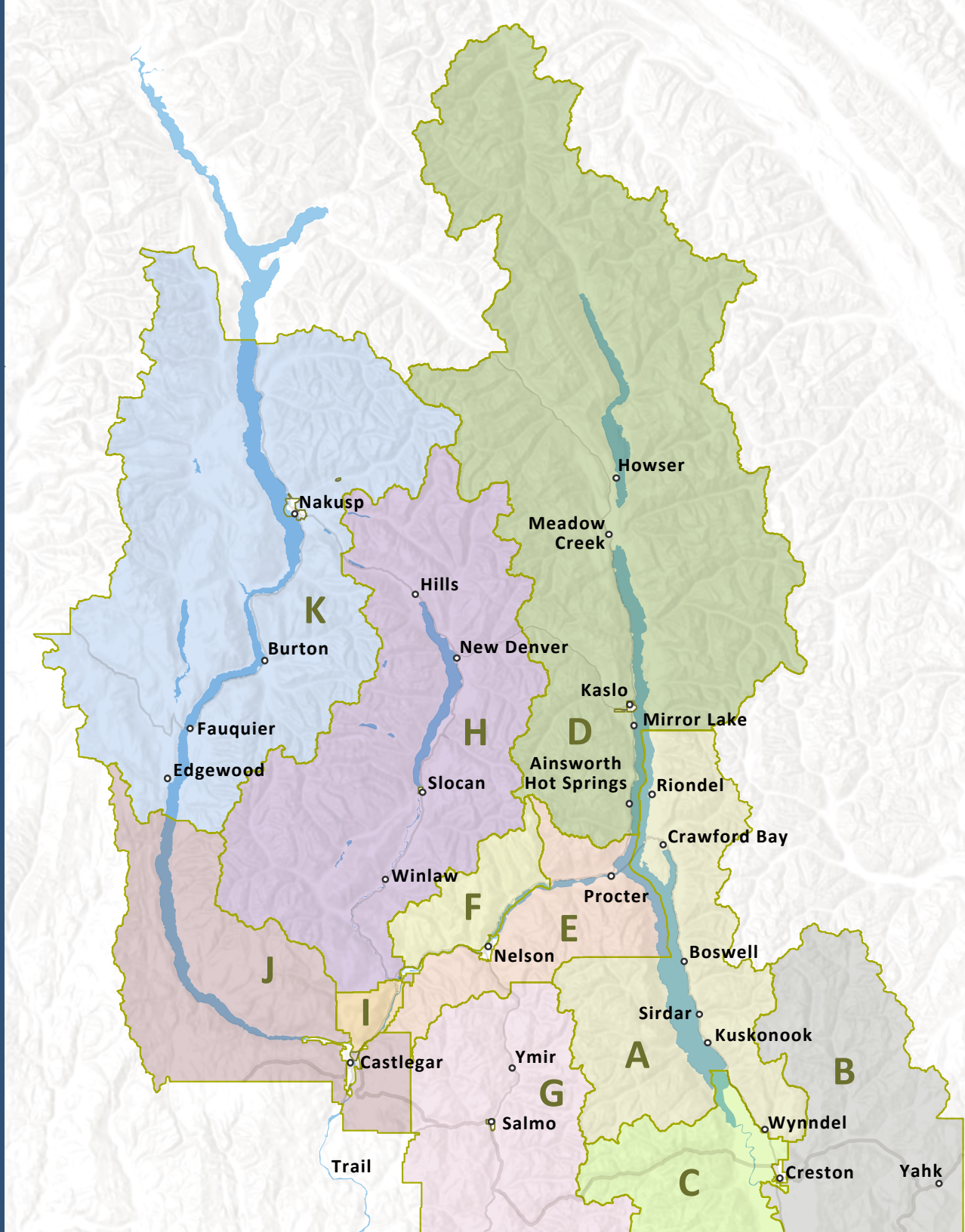
As an organization, the RDCK is committed to addressing systemic racism. We acknowledge the deep harm caused by historical and ongoing colonialism and racism in Canada. We have an obligation to learn about Canada's colonial practices and structures and to do our part in addressing them.

In the context of RDCK Climate Actions we hope to learn from Indigenous knowledge, cultures and people and continue to build a future in partnership, integrating our learning. It is the intention to guide and deliver climate actions through a lens of anti-racism, equity and justice in support of all living beings.

The REGIONAL DISTRICT OF CENTRAL KOOTENAY is a partnership of rural areas and municipalities, empowered to work together to plan, provide services and deal with issues on a regional scale. The RDCK has 11 electoral areas and 9 municipalities.

ELECTORAL AREAS are the unincorporated areas outside of municipal boundaries. The RDCK is governed by a board consisting of two types of directors. Electoral Area Directors who are directly-elected by their area residents and municipal directors who are first elected to a municipal council and are then appointed by their council to the regional district board.

These local governments work together through the RDCK to provide and coordinate services in both urban and rural areas such as fire protection and emergency programs, recreation and libraries, water supply and resource recovery systems. The Board also sets up committees like the Community Sustainable Living Advisory Committee (CSLAC) that investigates, pilots and test sustainability issues related to water, energy, climate action, housing and food & agriculture. RDCK Climate Actions is a RDCK Board initiative that is focussed on climate action for all 20 members – municipalities and electoral areas while being explicitly focussed on the carbon pollution from rural areas.



THE CLIMATE REALITY TODAY

In the last years, we have witnessed floods, landslides, droughts, heat domes, atmospheric rivers, repeated and widespread heat records, food shortages, and catastrophic fires. These spikes in extreme weather events mirror global events. The physical and emotional loss and uncertainty experienced by so many residents highlights the importance for us to work together to reduce carbon pollution to mitigate the impacts of the climate crisis on our planet.

The warmer our climate gets, the worse the human-enhanced greenhouse effect becomes. The Inter-governmental Panel on Climate Change (IPCC) has underscored that our global climate must stay below 1.5 degrees Celsius of warming[1], or else the changing climate could be unstoppable. This target is especially important for Canada which, because of its northern latitude, is experiencing a rate of warming approximately twice the global average. This is why, along with the rest of BC, Canada and the world, the RDCK is acting now to mitigate climate change and its effects.

[1]above pre-industrial levels (1850–1900) Intergovernmental Panel on Climate Change (2019) Global Warming of 1.5 °

Our Vision

The Regional District of Central Kootenay is committed to building a resilient region for all residents. A region with secure access to food, clean water, low carbon energy, housing, transportation, and sustainable employment. A region where human and natural systems are balanced and integrated.

The RDCK recognizes and takes responsibility for decreasing carbon pollution, while actively adapting to a changing climate and minimizing the risks that come with frequent and intense weather events. This leadership role is demonstrated through the development of a foundation of equitable and just policy and regulation grounded in the unique rural reality of this region.

GUIDING PRINCIPLES FOR ACTION

Six principles were identified during the development of the RDCK Climate Actions that guided the selection of the actions, and will continue to be used to guide the implementation of actions within each pathway:

1 LEADERSHIP

Actions are bold and reflect the clear guidance that has been created by experts and advocates in the region and support residents to take action to build resilient communities.

2 URGENCY

Actions are swift and substantial with a focus first on reducing consumption then on fuel switching.

3 ITERATION

Some actions will need time to develop, some need technology that is still not available. Climate action in rural areas is a relatively new idea. We are creating space to work with residents for initiatives to be investigated, tested and refined. Rather than waiting for an unattainable 'perfect' solution, measures can be enacted that will undergo continuous improvements, becoming more comprehensive and robust over time.

4 COLLABORATION

Actions are relational. We seek to work with First Nations, provincial and federal governments, municipal partners, regional neighbours, businesses, organizations, and residents to learn, adjust and create. This includes supporting Indigenous-led actions towards increased self-determination, shared prosperity and a respect for the land, water and all beings.

5 EQUITY

Actions support an equitable distribution of the costs and benefits of climate action while transforming systems to make them more accessible to residents across the region, supporting those most vulnerable to the impacts of climate change. This is often referred to as a 'just transition' when discussing how to address the climate emergency. For this reason this plan heavily focuses on influencing culture.

6 INTEGRATION

Actions take into account the many variables embedded in an issue, and attempt to find solutions that address the many variables. Integration can involve working across departments to achieve co-benefits, while streamlining efforts, reducing resource requirements, and improving affordability.

CLIMATE ACTION CULTURE

RDCK Climate Actions is designed to support a culture that prioritizes low carbon and adaptive actions in all RDCK decision-making processes. Behavioural change does not happen without cultural change. RDCK Climate Actions focuses on tangible actions, as well as actions designed to shift our collective culture to prioritize low carbon and adaptive actions.

This includes the development of a regional culture committed to 2030 carbon reduction targets, where residents, institutions, and industries have a greater motivation for climate action. A culture that sees the RDCK as a partner in climate action; a place for information, accountability, and coordinated action.

Unlike the quick wins of installing high efficiency appliances or updating building codes, these cultural shifts often occur over longer periods of time and require extensive effort and patience from those influencing the change. However, similar to the COVID-19 pandemic, change can also happen quickly in response to a present threat. Building climate action culture is a multi-year process that will involve everyone and consider all aspects of the RDCK's services. RDCK residents are invited to share ideas and will be invited to inform, design, collaborate, change, and help make decisions.

RDCK Roles & Responsibilities

Rural regions like the RDCK are uniquely challenged by the impacts of climate change. For this reason, government delivery of services and ownership of infrastructure is often cost prohibitive. RDCK communities face pressures such as development in watersheds, resource extraction, limited and no access to public transit and energy grid instability. This context requires an unique climate action model.

The intent of RDCK Climate Actions is to identify actions that take advantage of current opportunities while advocating for and creating opportunities focused on more rural areas through pilots, capital projects, programs, policies, incentives, etc.

With that said it is important to recognize that the RDCK has varying levels of control and/or influence over different actions.

The actions in the Plan are organized in the following way:

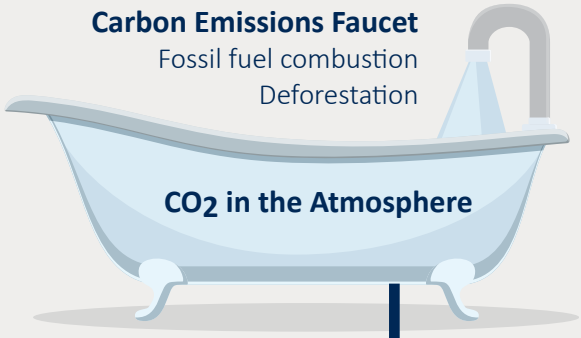
- Control Direct: Leading by example through local government operations, i.e. RDCK Better Corporate Building Policy and RDCK Purchasing Policy
- Control Indirect: Changes to land use, buildings, resource recovery planning and policy, creating regulation and providing incentives, i.e. Organics Diversion Program and Environmental Development Permit Areas to protect riparian areas
- Influence Direct: Collaborative programs and partnerships with other organizations and levels of government, i.e. Creston Valley Flood Management Partnership and Regional Wildfire Tables
- Influence Indirect: Advocacy, information sharing and local government education programs, i.e. Watershed Governance Initiative and BC Transit decisions

WHAT IS CARBON POLLUTION AND WHAT DOES IT DO?

Carbon pollution (otherwise known as greenhouse gases or carbon emissions) is primarily made up of carbon dioxide (CO2), methane (CH4), nitrous oxide (N2O) and fluorinated gases (f-gases). Though these gases do occur naturally in our environment and atmosphere (with the exception of fluorinated gases), human activities are generating and causing these gases to be added to our atmosphere at a much faster rate than our natural ecological systems can manage. This increases the natural greenhouse effect that our atmosphere has, which has drastic impacts on our climate and weather systems.

To explain this further, the carbon pollution provides a blanket around the earth that limits the amount of heat that can be released, which causes the temperatures to increase. As temperatures increase air molecules get larger and can contain more water vapour, which absorbs more heat from the sun, which then gets trapped under our blanket of carbon pollution, and the cycle continues.

THE CARBON BATHTUB



Carbon Pollution in the RDCK

The following summarizes the carbon pollution sources for RDCK rural areas. In 2018, the total carbon pollution in the RDCK rural areas (excludes municipalities), was estimated at 192,000 tonnes of CO2 equivalent per year (6 tonnes per capita). This is referred to as "community emissions," but is inclusive of emissions associated with operations by the RDCK, "corporate emissions." The majority of the carbon pollution from RDCK rural areas results from burning transportation (mobility fuels).

70%
Transportation
mobility fuels

20%
Buildings
heating fuels – propane, oil, methane gas, wood

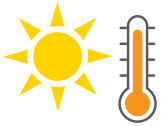
9%
Waste
food & yard waste in landfills

1%
Electricity
while is a low carbon energy source, there is still carbon pollution associated with electricity

REGIONAL CLIMATE PROJECTIONS

This data was sourced from the Pacific Climate Institute Consortium (PCIC) from a standard set of Global Climate Model (GCM) projections and shows projected changes in various climate variables from the baseline historical period (1961-1990) for the Central Kootenay region.

TEMPERATURE



2020's	+1.7%
2050's	+3.2%
2080's	+5.0%

SUMMER RAIN CHANGES

2020's	-3.9%
2050's	-8.1%
2080's	-10%

FROST-FREE DAYS

2020's	+24%
2050's	+45%
2080's	+78%

PRECIPITATION AS SNOW

2020's	-19%
2050's	-28%
2080's	-42%

2020's (2010-2039)
2050's (2040-2069)
2080's (2070-2099)

2X more

Days per year **over 25°C** by 2050

Baseline: 19 days/year

17% increase

1-in-20 Hottest Day* temperature by 2050 about a **5°C** increase *(by 2050)*

Baseline: 31°C

25% more

Days with heavy rain**

30% more

of rain will fall in heavy rain events

REDUCED SNOWPACK

Winter and spring warming will reduce snowpack throughout much of the region, particularly at low elevations.

STREAM & RIVER FLOWS

Winter and spring flows will also be affected by more rapid snowmelt in the spring and increased spring precipitation, while summer flows will be affected by warming summer temperatures and decreased summer precipitation.

DISAPPEARING GLACIERS

Streams fed by glaciers will begin to warm and decrease in flow affecting fish habitat and drinking water.

**A 1-in-20 hottest day refers to the day so hot that it has only a one-in-twenty chance of occurring in a given year. Individual locations could be considerably warmer than the regional average but an increase of about 5°C (by 2050) in the 1-in-20 year hottest day is quite consistent around most of the region.*

***Heavy rain days (i.e., the 95th percentile wettest days) represents the total amount of rain that falls on the wettest days of the year, specifically on days when precipitation exceeds a threshold set by the annual 95th percentile of wet days during the baseline period (1971–2000).*

TARGETS

In April 2019, the RDCK declared a climate action imperative for all orders of the government to apply a low carbon resilience lens to decisions on:

- LAND USE & PLANNING
- TRANSPORTATION & MOBILITY
- ENERGY
- BUILDINGS
- RESOURCE RECOVERY
- WATER SUPPLY
- FOOD & AGRICULTURE
- FLOODS & GEOHAZARDS
- WILDFIRE
- LEADERSHIP & OPERATIONS

This imperative obliges the RDCK to pursue opportunities that will further catalyze the RDCK as a climate action leader.

The RDCK has set carbon pollution reduction targets that are aligned with maintaining a 1.5 degree world. The targets cover all community and corporate carbon pollution emissions produced within the boundaries of the RDCK.

2030 ▶ **REDUCE** emissions by **50%** *(below 2018 levels)*

2050 ▶ **REDUCE** emissions by **100%** *(below 2018 levels)*

REDUCE ANNUAL CARBON POLLUTION

To reach our targets, RDCK rural areas must reduce our annual carbon pollution from 192,000 tonnes CO_2e (2018 emission levels) to 96,000 tonnes CO_2e (2030 goal).

For the 2023-2026 RDCK Climate Action Plan, this equates to reducing our emissions by 12,000 tonnes CO_2e per year for a total reduction of 48,000 tonnes CO_2e by 2026.

HOW WILL WE GET THERE?

Reimagining Our Future

RDCK Climate Actions outlines a path to creating a healthier more resilient region.

Since 2019, the RDCK Climate Action Strategy (Inform, Guide, Act) and the State of Climate Action report (SoCA) have supported planning and reporting on climate action in the RDCK in an effort to be more intentional and strategic with our climate actions. Now with clear climate actions, the RDCK is defining what it will do to reduce its carbon pollution and our region's vulnerability to the climate crisis in the next 4 years.

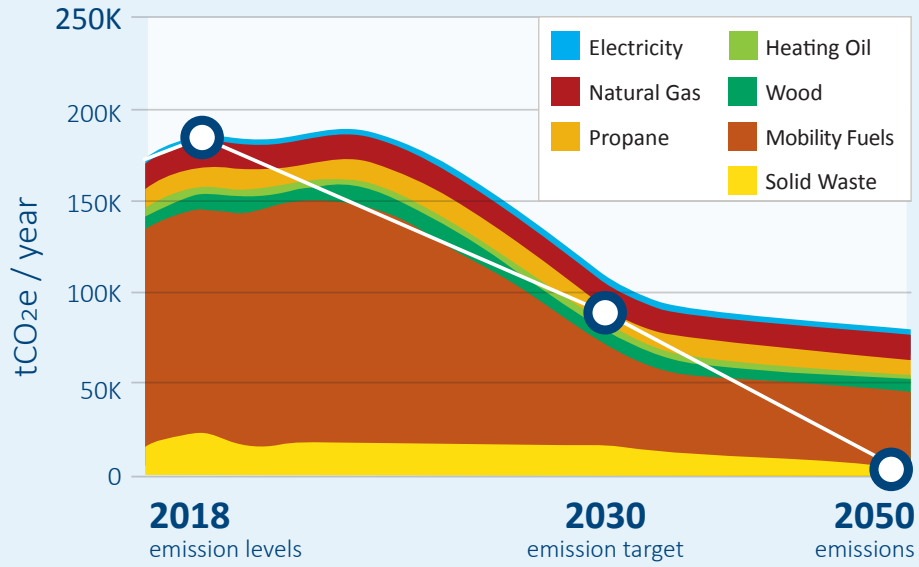
Achieving the targeted carbon pollution reductions will require changes from all of us. For this reason, a significant focus of RDCK Climate Actions is about building our local climate action culture. How can we work together to change our systems toward creating more resilient, connected and equitable communities?

RDCK Climate Actions has

over **100 Actions**

across **10 Pathways**

RDCK Emission Reduction Goals



REDUCE annual carbon pollution ▶ **12,000** tonnes CO_2e per year ▶ **48,000** tonnes CO_2e by **2026**

Of the reductions outlined above, two gaps are evident:

- *Commercial vehicle emissions*
- *Non-electricity heating (propane and oil) in existing buildings*

These gaps are in line with the lack control local government has for these areas, and reflect the lack of proven technologies in these areas. Electrification of commercial vehicles is on the horizon, potentially reducing commercial vehicle emissions. And provincial retrofit code is also expected in the next few years and could reduce the building emissions. Propane and heating oil heating are both expensive compared to natural gas, and are emission heavy, making them prime candidates for replacement with low-carbon heating such as heat pumps (air or ground source).

PATHWAY SUMMARY

Reducing Risks of Climate Change & Building Climate Resilient Communities

LAND USE & PLANNING

Achieving a sustainable land use pattern that supports the RDCK's goals while preserving the integrity of the landscape done through land use/planning policy and regulation to better prepare for and reduce flood, geohazard and wildfire risk.

TRANSPORTATION & MOBILITY

A seamless regional transportation network to connect communities throughout the region through:

- active transport opportunities
- zero emission vehicles
- low carbon personal transportation
- low carbon public transportation

ENERGY

Transition from a high carbon energy dependent region to reach a low carbon dependent future through 100% renewable and clean energy technologies and strategies by 2050.

BUILDINGS

Accelerate improvements to existing buildings to increase energy efficiency and reduce greenhouse gas emissions.

Newly adopted Step Code standards will support the process of the region in becoming 100% renewable by 2050.

Designing long lasting buildings with lifetime materials, energy efficiency and whole-systems thinking in mind will reduce greenhouse gas emissions.

RESOURCE RECOVERY

Improve the health of our natural ecosystem by assessing and diverting waste from RDCK landfills while simultaneously advancing the recovery of waste through improved waste management and new technologies.

WATER SUPPLY

Strengthen watershed governance and implement strategies to protect drinking water.

Provide opportunities for residents to reduce water consumption.

Upgrade capital infrastructure.

FOOD & AGRICULTURE

Empower communities to build secure and sustainable food systems through climate adapted agricultural strategies.

FLOODS & GEOHAZARDS

Reduce community vulnerability through flood risk assessments and assess infrastructure for adaptation opportunities against increased flooding and geohazard events.

WILDFIRE

Reduce fire risk around the wildland - urban interface (WUI) of communities and within each community of the region while adapting to more frequent and intense fires.

LEADERSHIP & OPERATIONS

Incorporate a climate lens for all decision making and policies through the RDCK Board, to demonstrate that the RDCK prioritizes integrating climate action and adaptation into corporate actions and assets.

In the next pages, learn more about each pathway and the actions necessary to reach our targets. For further detail, you can click on the Climate Action Workbook to read the full list of actions. There are also accompanying data sets that allow us to track our progress, and tell us whether and where more effort is needed to achieve our goals. You will be able to learn about this progress through our annual State of Climate Action reporting.

LAND USE & PLANNING

The ways we inhabit and interact with the land are critical to the long-term resilience of our communities. The actions in this pathway intend to promote healthy, sustainable, and low-carbon lifestyles by building as-complete-as-possible communities, taking into account the rural, low-density landscape and limitations to the RDCK's control, specifically the ability to influence roads and transportation infrastructure. The goal is that through land use planning, the RDCK can support residents to access their basic needs for work, recreation, leisure and transportation. Actions take an equitable approach by considering their impacts on the most vulnerable demographics and communities: accessible housing in rural communities, support for local agriculture, universal access to low-carbon transportation, and focused efforts on high-risk hazard areas.

LAND USE & PLANNING

ACTION	TIMELINE	NEXT STEPS	CONTROL / INFLUENCE	MITIGATION /ADAPTION
Integrate climate action into Official Community Plans	2023-2030	Focus on renewable energy and development that supports accessible services	Control	Mitigation & Adaption
Advocate for rural priorities and address outdated regulation that limits climate action	2023-2026	Advocate for changing regulation on rainwater, greywater & blackwater	Influence	Mitigation & Adaption
Work with Ministry of Transportation and Infrastructure and BC Parks to increase connectivity and multi-modal options for mobility and active transportation	2023-2030	Pursue collaboration for multi-modal transportation	Influence	Mitigation
Incentivize climate resilient farming, increased farm use, and decreased redevelopment of Agricultural Land Reserves	2023-2030	Maintain the Agricultural Land Reserve & collaborate with regional partners to provide support to established and new farmers	Control & Influence	Mitigation & Adaption
Consider Regional Growth Strategies in areas experiencing growth pressures	2023-2026	Continue education and engagement processes & coordinate regional development strategies with municipalities and electoral areas	Control & Influence	Mitigation & Adaption
Guide resilient development in high-risk areas	On-Going	Continue to integrate hazard and riparian Development Permit Areas into regional planning	Control	Mitigation & Adaption

▶ Find out more in the Climate Action Workbook

CO-BENEFITS

affordability

community & cultural connectedness

health & well-being

WHAT YOU CAN DO

Planning is meant to be a collaborative process, the creation of Official Community Plans and Zoning Bylaws require information, feedback and review from you. Find out more through Planning 101

TRANSPORTATION & MOBILITY

70% of the region's carbon pollution comes directly from the burning of transportation fuels – diesel and gasoline. With a goal of supporting universal access to services and amenities, the actions in this pathway aim to support the evolution of an integrated network of active and low-carbon transportation options (trails, buses, bikes, car-shares, e-bikes, electric vehicles, etc.), otherwise referred to as the 'transportation ecosystem,' within and between communities.

While the electrification of passenger vehicles is an important part of this plan and the transition to an active and low-carbon transportation ecosystem, private ownership of electric vehicles (EVs) isn't currently available to many residents. This pathway maintains an emphasis on solutions that benefit all residents, particularly those with mobility challenges and financial limitations. Active mobility such as walking, cycling, and rolling provides health benefits from physical exercise, and offers more equitable choices for residents who are unable or choose not to drive.

TRANSPORTATION & MOBILITY

ACTION	TIMELINE	NEXT STEPS	CONTROL / INFLUENCE	MITIGATION /ADAPTION
Consider innovative low-carbon & active transportation solutions	2022-2026	Coordinate across RDCK departments to support low-carbon & active transportation solutions projects and collaborate with regional groups with focus on equity and universal access	Control & Influence	Mitigation
Increase Transit ridership	On-Going	Advocate for free ridership (or cheaper) for all or for certain demographics (i.e. low-income, seniors, students, etc.)	Influence	Mitigation
Transition RDCK fleet to Zero Emissions Vehicles	2022-2030	Complete Fleet inventory & assessment and implement recommendations	Control	Mitigation & Adaption
Coordinate electric vehicle network in RDCK	2023-On-Going	Complete regional inventory of suitable charging spaces and implement recommendations	Control & Influence	Mitigation
Support electrification of Kootenay Lake ferry	2023-2030	New electric ready vessel will begin service in 2023 Advocate for all electric operation of new vessel prior to 2030	Influence	Mitigation

▶ Find out more in the Climate Action Workbook

CO-BENEFITS

air quality

health & well-being

community & cultural connectedness

WHAT YOU CAN DO

- Travel by walking/hiking, rolling, biking, or rideshare
- Join Kootenay carshare or get a group of people together and start a carshare chapter: www.carsharecoop.ca
- Switch to an electric or hybrid vehicle
- Tell your local RDCK Director about your interest in active and low-carbon transportation modes in the RDCK

ENERGY

As part of the RDCK's goal of 100% renewable energy by 2050, the actions in this pathway support a regional transition to a low-carbon and energy-resilient future through clean energy strategies, technologies, and cultural shifts.

Similar to the 'three R' waste management principles (reduce, reuse, recycle), the actions in this pathway consider the impacts of energy-use by applying the prioritized 'three E' energy principles:

- **Eliminate emissions** – conserve energy use by walking/biking instead of driving, avoiding or combining vehicle trips, turning off lights and heat when not using spaces, passive building design
- **Electrification or fuel-switching** – choose an induction cooktop over a gas stove, EV over a combustion-engine vehicle, woodstove instead of diesel generator for backup heat source
- **Efficient systems** – upgrading to energy-efficient technologies and systems like public transport, rideshares, heat pumps, programmable thermostats

The actions in this pathway support a regional culture that is aware (through education) and empowered (through training, support and incentives) to make reductions in carbon pollution.

Grid resilience and future-proofing electrical infrastructure (micro-generation, storage, bi-directional charging) are also explored. The actions also explore how to improve grid resiliency and future-proof electrical infrastructure (micro-generation, storage, bi-directional charging).

ENERGY

ACTION	TIMELINE	NEXT STEPS	CONTROL / INFLUENCE	MITIGATION /ADAPTION
Assist rural communities in increased electrical grid resilience	2023-On-Going	Investigate & pilot ways to improve rural energy resiliency and reduce emissions	Influence	Mitigation & Adaption
Advocate for future-proofing existing EV infrastructure with regional utilities	2023-2026	Engage with the utilities on grid resilience pilots	Influence	Mitigation & Adaption
Provide education around how to achieve regional emission targets	2023-On-Going	Focus on switching off 'non-renewable gas', and promoting energy-conservation principles	Influence	Mitigation
Ensure all buildings have active transportation connections	2023-2024	Integrate and promote active and low carbon transportation	Control & Influence	Mitigation
On-going focus and coordination of renewable energy installations	On-Going	Investigate ways to integrate renewable generation	Influence	Mitigation

▶ Find out more in the Climate Action Workbook

CO-BENEFITS

eco-system health

air & water quality

local economy

WHAT YOU CAN DO

The average BC resident lifestyle is responsible for 13.7 tonnes of CO2 equivalent each year. In the RDCK we do not have heavy industry so our emissions are lower per capita but our lifestyles tend to reflect higher consumption. How will you reduce 3.45 (25%) tonnes CO2 equivalent from your life? Reducing 1 tonne looks like:

- 43.6 bags of waste recycled or composted instead of landfilled
- Every 5th single passenger trip, choosing a zero emission form of transportation (walk, bike, bus or zero emission vehicle) assuming ~20,000 kms of fossil fuel travel per year
- Reducing your home natural gas consumption by 17 gigajoules (GJ) per year

DID YOU KNOW

Natural gas is a mixture of gases primarily composed of methane. Methane is a powerful greenhouse gas with 80 times the warming power of CO2 over the first 20 years after it enters the atmosphere. Even though CO2 remains in our atmosphere for longer, methane sets the pace for warming in the near term. At least 25% of today's global warming is driven by methane from human actions. Cutting methane emissions is a critical opportunity we have to immediately slow the rate of global warming.

RESOURCE RECOVERY

Waste is the third-largest contributor to carbon pollution in the RDCK. This is mostly due to methane, a potent gas that is released when organic waste (such as food and yard trimmings) decompose in a landfill. Gas and diesel powered collection vehicles also pollute our air and add to our greenhouse gas emissions. The actions in this pathway reflect those outlined in the 2021 Resource Recovery Plan, specifically to divert 95% of organic food wastes from landfills by 2030, and to reduce the regional annual landfilling rate of 490kg per year per person to 350kg by 2030. The actions will increase composting and recycling opportunities for residents, as well as local businesses and institutions, while providing opportunities and education specific to residents in low-density, rural areas where waste collection services are unavailable.

To find out more about the RDCKs plans to improve resource recovery systems and the public can participate in specific programs individual efforts, residents are encouraged to review the 2021 Resource Recovery Plan.

RESOURCE RECOVERY

ACTION	TIMELINE	NEXT STEPS	CONTROL / INFLUENCE	MITIGATION /ADAPTION
Support curbside organics and recycling collection and in-home management in rural areas	2023-2030	Communicate benefits of organic collection and composting and build out rural transfer stations for organic collection	Influence	Mitigation
Align initiatives with provincial ban on all organics from landfills by 2030	2023-2030	Continue to support implementation of organics diversion program	Control & Influence	Mitigation
Support circular economy innovation	On-Going	Circular Economy Think Tank with initial focus on construction materials	Control	Mitigation
Perform waste composition study to create a baseline for the RDCK diversion	2023, 2026	Compare 2023 and 2026 waste composition studies to assess progress of diversion programs	Control	Mitigation

▶ Find out more in the Climate Action Workbook

CO-BENEFITS

local economy

eco-system health

air & water quality

WHAT YOU CAN DO

Our goal is to reduce annual waste disposal by 30% which means each of us needs to reduce 22 kg of organics that goes to the landfill each year, equivalent to about twenty 4 Litre milk containers.

- Follow the 5-Rs (in this order): Refuse, Reduce, Reuse, Repurpose, Recycle
- Champion for composting and free-cycling at your work place

BUILDINGS

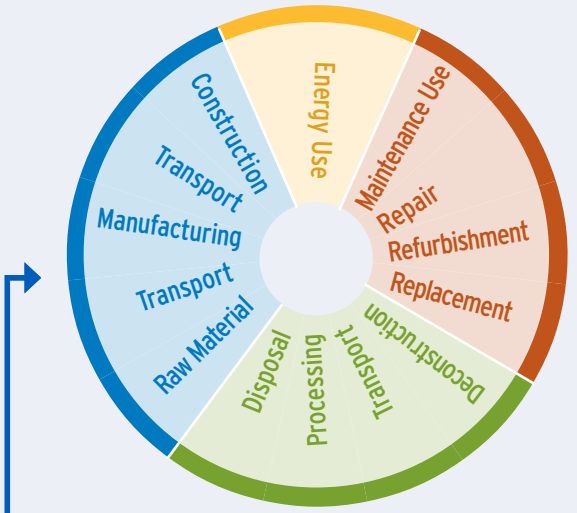
Buildings represent a big part of our livable environment. They are our homes, workplaces, community spaces, schools, and businesses. Buildings also use a lot of energy and are the second largest regional contributor to carbon pollution. The actions in this pathway will ensure our buildings are energy-efficient and use clean energy sources. Mostly this means making them more efficient – building envelope air-sealing, window improvements as well as promoting low carbon heating, ventilation, air-conditioning and domestic water heating systems.

As well as efforts to improve the energy efficiency of buildings, it is also important to consider embodied emissions that are primarily emitted in or prior to the early phases of a building's construction and can represent up to 50% of the building's carbon pollution.

CARBON LIFECYCLE

When building or renovating a house, it is important to consider not only the operational costs but also the construction and deconstruction costs.

Operational Carbon Emissions is the carbon dioxide (CO_2) from building energy consumption.



Embodied Carbon Emissions is carbon pollution associated with materials and construction processes throughout the whole lifecycle of a building. As shown above, this can be a significant percentage of the building`s total carbon pollution.

BUILDINGS

ACTION	TIMELINE	NEXT STEPS	CONTROL / INFLUENCE	MITIGATION /ADAPTION
Support transition to provincial energy step code (net zero by 2032).	2023-2030	Consider ways to support or encourage building materials that store carbon or are low carbon, work with contractors and advocate for rural-specific concerns	Control & Influence	Mitigation
Encourage residents and businesses to pursue energy audits and/or upgrades	2023-2030	Improve and refine Regional Energy Efficiency Program (REEP) with focus on rural communities, promote applicable educational, funding & grant programs and explore a contractor incentive program for rural communities	Influence	Mitigation
Provide support for heat pump, building envelope and insulation installations	2023-2026	Consider incentive funding to rural area heat pump retrofits Support programs to strengthen the BC Home Performance Contractor Network (HPCN)	Influence	Mitigation
Support integration of RDCK Better Corporate Building Policy	2023-2024	Develop program to support internal capacity for best practices in construction and maintenance of RDCK assets. Implement and utilize building monitoring software	Control	Mitigation

▶ Find out more in the Climate Action Workbook

CO-BENEFITS

affordability | eco-system health | air & water quality

WHAT YOU CAN DO

- Get an energy assessment of your home
- Install a heat pump when it's time to replace your old furnace (they provide heating and cooling!)
- Turn down your thermostat in the winter
- Buy energy efficient appliances
- Learn about low-carbon building materials

DID YOU KNOW

Natural gas is a mixture of gases primarily composed of methane. Methane is a powerful greenhouse gas with 80 times the warming power of CO_2 over the first 20 years after it enters the atmosphere. Even though CO_2 remains in our atmosphere for longer, methane sets the pace for warming in the near term. At least 25% of today's global warming is driven by methane from human actions. Cutting methane emissions is a critical opportunity we have to immediately slow the rate of global warming.

FOOD & AGRICULTURE

Agriculture is an important part of life in the RDCK. Local farmers rely on quality harvests to make a living, and we rely on the food our farmers produce. Climate change makes our weather less predictable, with more drought in the summer, an increased risk of flooding in the spring, and more intense and frequent extreme weather events year-round.

Though federal and provincial governments have jurisdiction over agriculture, the Regional District can influence through partnerships, advocacy, and policies in some key areas such as land use and planning, education and training, and emergency preparedness. The RDCK supports regional food and agriculture primarily through 2 key partnerships – Kootenay Boundary Farm Advisors and Central Kootenay Food Policy Council. The actions in this pathway were developed to ensure vibrant food systems exist for all residents by supporting the development and growth of local, climate resilient agriculture, and striving to maintain a high level of regional collaboration on initiatives. By including all residents in the future of our food supply and production we can further cultivate a culture that values and supports local agriculture that is robust in the face of climate change.

FOOD & AGRICULTURE

ACTION	TIMELINE	NEXT STEPS	CONTROL / INFLUENCE	MITIGATION /ADAPTION
Support local producers to implement climate adapted agricultural strategies	2023	Support innovative management practices for increased climate variability through engagement, education, and networking opportunities and advocate to Province for seasonal extension & irrigation infrastructure	Influence	Adaption
Encourage and support local food production	2023-2024	Consider ways to support regional agrotourism	Influence	Mitigation & Adaption
Explore partnership opportunities to support efficient water use in agriculture and food production	2024	Support uptake of water consumption tracking tools	Influence	Adaption
Continue funding and active collaboration with the Central Kootenay Food Policy Council (CKFPC)	Annual	Participate in CKFPC strategic planning	Control	Mitigation & Adaption
Maintain the agricultural extension service through the Kootenay Boundary Farm Advisory (KBFA) in the RDCK	Annual	Advocate to Province for agricultural extension service, participate in KBFA strategic planning	Control	Mitigation & Adaption

▶ Find out more in the Climate Action Workbook

CO-BENEFITS

local economy

carbon absorption

community & cultural connectedness

WHAT YOU CAN DO

- Buy local food - visit a farmers' market. You can access the Central Kootenay Farm & Food Directory for more information
- Are you producer? KBFA offers workshops and consultants to support you
- Learn about the Central Kootenay Food Security Action Plan

WATER SUPPLY

With the variability in weather patterns that climate change brings, access to a secure and safe supply of water will become an increasingly concern. The actions in this pathway focus on strengthening watershed governance and implementing adaptive strategies to protect drinking and agricultural water supplies. This includes infrastructure upgrades, improved management of RDCK water systems, watershed protection and planning efforts, and regional collaboration.

Similar to the agriculture pathway, access to a safe and secure water supply is something that all residents should have, and must be approached through a lens of equity.

Perhaps the most important piece of ensuring a resilient supply of water to residents will be the creation of and support for a strong local culture of water conservation. By reducing unnecessary water usage, we can limit the impact that we have on the supply of this limited natural resource. Conservation also helps to ensure that we reduce our impacts on the natural systems around us through the extraction and use of water supplies.

WATER SUPPLY

ACTION	TIMELINE	NEXT STEPS	CONTROL / INFLUENCE	MITIGATION /ADAPTION
Re-establish Regional WaterSmart Ambassador program	2023-2024	Improve/update through engagement to ensure program educates and supports water conservation measures	Control	Adaption
Support demand side management	On-Going	Continue to promote conservation and monitoring (water metering), implement Leak Detection System and Metering Implementation Strategy	Influence	Mitigation & Adaption
Implement the Watershed Governance Initiative	2023-2026	Relationship building, developing watersheds planning tools, on-going story and web mapping	Influence	Adaption
Re-establish regional surface and ground water monitoring	2023-2026	Work with Living Lakes on surface and ground water monitoring programs	Control	Adaption

▶ Find out more in the Climate Action Workbook

CO-BENEFITS

affordability

ecosystem health

good governance

WHAT YOU CAN DO

- Become WaterSmart
- Xeriscape your garden, create a rain garden and create a tree canopy for shade and habitat
- Install a low-flow shower head
- Learn about RDCK's water metering program
- Are you a small water user? You may be interested in the RDCK's Water Governance Initiative

DID YOU KNOW

The hot dry summers are putting pressure on our water sources. We need to reduce our consumption. Did you know that during the growing season water use can increase by as much as 200%? Avoid watering in the hot sun. You'll lose almost 50% of the water to evaporation. Watering in the hot sun lowers the health of your plants/ lawn while also inviting pest and diseases that are difficult to treat. And instead of lawns, considering growing a food or drought tolerant garden.

WILDFIRE

With the increased heat and drought conditions of climate change and the forested ecosystems of our rural communities, wildfires are an increasingly important risk for us to plan and prepare for. The actions in this pathway aim to both incorporate wildfire adaptation measures through building and land planning management to reduce wildfire risk, as well as encourage and empower individuals and communities to prepare for wildfires by reducing their own risks.

FireSmart offers a number of programs for residents to manage their own wildfire risks and provides financial incentives to support these efforts. Community Wildfire Resiliency Plans (CWRPs) are also a great resource that can help inform communities and local governments on wildfire risks, and help guide appropriate risk reduction measures.

WILDFIRE

ACTION	TIMELINE	NEXT STEPS	CONTROL / INFLUENCE	MITIGATION /ADAPTION
Support better wildfire mitigation practices	2023-On-Going	Investigate best practices including historic and current Indigenous practices and low carbon practices such as hugelkultur	Control & Influence	Mitigation & Adaption
Increase FireSmart Home Assessments	On-Going	Continue to promote uptake of the FireSmart program	Influence	Mitigation & Adaption
Incorporate wildfire best practices into all planning	2023-2030	Provide education of appropriate building materials to contractors, suppliers, homeowners, and integrate development permit areas (DPAs) into Official Community Plans (OCP).	Control & Influence	Mitigation & Adaption
Coordinate landscape level fuel-treatment efforts	On-Going	Establish and support community FireSmart resiliency committees	Control & Influence	Mitigation & Adaption

▶ Find out more in the Climate Action Workbook

CO-BENEFITS

resilience | community & cultural connectedness | health & well-being

WHAT YOU CAN DO

- Apply FireSmart principles that provide simple measures to protect your home from fire
- Book a free FireSmart home assessment
- Sign up for the RDCK Emergency Notification System

DID YOU KNOW

Each year, thousands of people face emergency situations that could change their lives forever. Don't be caught off-guard. Know the hazards in your area and take the time now to assemble your family "Grab and Go" Emergency Kit and plan where you will go if you need to evacuate. Remember to include your pets and livestock.

FLOODS & GEOHAZARDS

As climate change amplifies the frequency and severity of extreme weather events we must improve and expand on our current preparedness and adaptation measures to create more resilient communities.

Floods are the most frequent natural hazards in Canada, and the most costly in terms of property damage. They can occur at any time of the year and are most often caused by heavy rainfall, rapid melting of a thick snow pack, ice jams, or more rarely, the failure of a natural or human-made dam. Locally ,the spring melt each year results in a heightened risk of flooding on all systems, from our small brooks and creeks to our rivers and lakes.

The actions under this pathway reduce community vulnerabilities by assessing risks and evaluating infrastructure upgrades and other opportunities and strategies to mitigate and manage these risks. This includes a major focus on engaging and educating the public, industries, and both internal and external professionals working in the fields of risk assessment and risk reduction. Similar to the Wildfire pathway, this also includes enacting adaptation measures through building and land planning management to reduce flood and geohazard risks.

FLOODS & GEOHAZARDS

ACTION	TIMELINE	NEXT STEPS	CONTROL / INFLUENCE	MITIGATION /ADAPTION
Expand and enhance the Neighbourhood Emergency Preparedness Program (NEPP)	On-Going	Promote community involvement in NEPP	Control	Mitigation & Adaption
Increase outreach and education focused on riparian management and habitat conservation	2023-2026	Continue to support community workshops, work with Friends of Kootenay Lake (podcasts) & Kootenay Conservation	Control & Influence	Adaption
Increase expertise regarding flood risk	2023-2026	Build internal expertise and develop capacity of staff	Influence	Adaption
Develop criteria for qualified professionals to determine what is 'safe' when developing hazard areas	2023-2024	Secure grant funding to provide guidance on how to develop a definition for 'safe for use intended'	Control	Adaption

▶ Find out more in the Climate Action Workbook

CO-BENEFITS

ecosystem health

resilience

health & well-being

WHAT YOU CAN DO

- Get prepared for a flood
- Learn about debris flows
- Sign up for the RDCK Emergency Notification System
- Learn about the Neighbourhood Emergency Preparedness Program (NEPP)

DID YOU KNOW

Each year, thousands of people face emergency situations that could change their lives forever. Don't be caught off-guard. Know the hazards in your area and take the time now to assemble your family "Grab and Go" Emergency Kit and plan where you will go if you need to evacuate. Remember to include your pets and livestock.

LEADERSHIP & OPERATIONS

To lead the way on climate change, climate-related information and considerations must be integrated throughout the RDCK's decision-making processes and procedures. Actions in the Leadership and Operations pathway will ensure that climate change is a consideration in Board reports, annual budget requests, and purchasing processes. Over the next 4 years, all existing policy documents will be reviewed to ensure they support climate action, anti-racism and equity. The actions in this section will ensure the RDCK is accountable, both to our climate commitments and to our residents.

The success of RDCK Climate Actions depends on meaningful community engagement and collaboration. Partnerships that build creative, innovative opportunities to makes changes and try out ideas. The culture change tools we are exploring include:

- Portals - MyRDCK, MyIdea, website, conversations, campaigns to share ideas
- Innovation spaces – learning labs, pilots, hubs to support collaboration, prototyping and creativity
- Guidelines and programs - policy, training, decision making tools, regulation, incentives, messaging that reflects climate action commitments

LEADERSHIP & OPERATIONS

ACTION	TIMELINE	NEXT STEPS	CONTROL / INFLUENCE	MITIGATION /ADAPTION
Collect corporate and community energy and carbon pollution data and update regularly	2023, 2024, 2025, 2026	Use carbon pollution data from buildings, fleet and landfills to enhance data provided through annual Provincial CEEI updates	Control & Influence	Mitigation
Develop a RDCK Asset Management Plan with a climate resilience lens	2023-2026	Integrate mitigation and adaptation considerations into Asset Management Plan	Control	Mitigation & Adaption
Review and (re)develop RDCK policies to reflect climate action & equity commitments	2023-2026	Ensure that climate actions are included in all policies, including: purchasing, trip avoidance and carbon budgeting	Control & Influence	Mitigation
Enhance Emergency Management Services	2023-2025	Review Emergency Management Framework documents to guide the RDCK in emergencies including development of Business Continuity Plan	Control & Influence	Adaption
Require all RDCK Board decisions to include an assessment of climate impacts	2023	Build internal climate and equity expertise to support decision making, include commitments on all RDCK materials, and in decision making	Control	Mitigation & Adaption
Review RDCK investment portfolio to be sure we are divested from fossil fuel creators	2024-2025	Investment portfolio review	Control	Mitigation & Adaption
Collaborate with other agencies to determine common goals and work together	2023-2030	Explore programs to facilitate inter-agency collaboration (i.e. Tamarack Institute's Climate Transitions Network)	Control & Influence	Mitigation & Adaption

▶ Find out more in the Climate Action Workbook

CO-BENEFITS

good governance

community & cultural connectedness

health & well-being

WHAT YOU CAN DO

- Learn about local government
- Participate in your government: talk to your local RDCK Director about what is important to you and/or attend a community planning, climate action or RDCK Board meeting
- Read about RDCK's commitment to inclusion, diversity and anti-racism

DID YOU KNOW

The RDCK is a local government covering over 22,000 square kilometers that was established on the traditional territories of Ktunaxa, sn̓ʕaýckstx-Sinixt, Syilx- Okanagan, and Secwépemc. Our region consists of 11 electoral areas and nine member municipalities. We deliver 160 services to an estimated population of 60,000 residents, including grant administration, fire protection, emergency management, building inspection, sustainability, bylaw enforcement, planning and land use, mapping, resource recovery, street lighting, recreation, parks, cemeteries, economic development, community halls, transit and water systems.

METHODOLOGY

In order to leverage and avoid repeating previous efforts, RDCK Climate Actions carefully considered previous works including but not limited to:

- RDCK Resource Recovery Plan
- West Kootenay Transit Plans
- Official Community Plans
- Stronger Together (Creston Valley-Kootenay Lake Economic Action Partnership)
- Community Economic Development Strategy: Co-ordinated Leadership (Kaslo and Area D Economic Development Commission)
- West Kootenay 100% Renewable Energy Plan (Castlegar, Kaslo, Nelson, New Denver, Slocan, Silverton)
- North Kootenay Lake Food Shed (North Kootenay Lake Community Services Society)
- Nelson Next - Climate Change Action Plan
- Central Kootenay Food Policy Council Evidence-based Food Policy Project
- Food Security Action Plan
- Kootenay Boundary Farm Advisors (KBFA)
- Regional Adaptation Strategies: Kootenay & Boundary (Climate Change Adaptation Program)
- RDCK's Strategic Community Energy Emissions Plan & Integrated Community Sustainability Plan

RDCK Climate Actions was also built on engagement with residents, community groups, elected officials, and staff over a number of years, including but not limited to:

- Ktunaxa Nation Council, Sinixt-Colville Confederated Tribes, Secwépemc Nation and Syilx-Okanagan Nation AllianceState of Climate Action - indicators to track performance
- Content expert & community engagement (climate action experts, community groups, municipal partners) that builds on leading practices
- Side by side with RDCK staff to reflect the work plans, strategies and aspirations of RDCK staff
- RDCK Board – Climate Action Advisory Group to advise, oversee and inform
- Climate Action Working Group – to steer, edit and be curious with

And lastly, this document is inspired by and at times informed by the work of other local governments across Canada, notably, the Township of Langley's Climate Action Strategy, thank you for your generous support.

Thank you to all those who provide leadership on which we can build.

TRANSPARENT & ACCOUNTABLE

To keep the RDCK Climate Actions dynamic and relevant, communication and engagement – how we communicate to you, and how you communicate with us, is critical. We have some ideas of how to do this and would like to shape and develop them with you. You are invited to share ideas and will be invited to inform, design, collaborate, change, and help make decisions. ClimateAction@rdck.bc.ca

2023-2026

The 4-year development cycle of RDCK Climate Actions creates a responsive framework that can integrate emerging policies, regulation and capabilities.

The timing and length of RDCK Climate Actions aligns with the local government electoral cycle (2023-2026). The short turn around leaves opportunity for feedback and continuous improvements.

MONITORING & REPORTING

The annual of State of Climate Action will monitor progress and identify success and unforeseen gaps.

The mid-term review to take stock:

- A full community and corporate carbon pollution inventory
- A progress update on carbon pollution targets
- A full review of the actions to ensure we are on track for the 2030 and 2050 targets
- Update of Climate Action Culture and what we are learning from each other through our conversations and investigations.

STAYING FLEXIBLE

As new technological advancements and government policies continue to arise, RDCK Climate Actions will evolve and adapt to ensure we're taking advantage of all opportunities. New actions and initiatives will be added or modified as technologies and market economics change over the coming years. As each action is implemented, the RDCK will continue to engage with subject matter experts and the public to understand the challenges and opportunities, and to ensure actions are implemented efficiently and equitably.

WE ARE IN THIS TOGETHER

Making the necessary changes to respond to climate change is a multi-year process that will involve everyone and consider all aspects of the RDCK's services. RDCK Climate Actions` success requires action from all levels of government, utilities, businesses, community groups, and residents. By working together to support climate action, we can help ensure a sustainable, resilient, and livable communities for future generations.

We look forward to working with you.

RDCK Climate Actions

rdck.ca/ClimateAction