

# State of Climate Action in the RDCK 2023 Update

#### **ONGOING RDCK CLIMATE ACTION**

Many climate action measures are underway (through workplans and regulatory requirements) and have been in progress for years. The annual RDCK State of Climate Action report provides an update on work that is in progress.

#### The State of Climate Action (SoCA) is a reporting framework that aims to:

- ▶ Help the RDCK track the progress towards its climate action objectives and targets;
- Evaluate and improve its climate action initiatives and efforts;
- Maintain public transparency on these processes; and,
- Demonstrate climate action leadership.

By tracking and reporting on climate action, the RDCK will also be able to find ways to streamline its efforts, achieve co-benefits through integration and collaboration between projects and initiatives, and optimize the use of time and resources.

#### POTENTIAL FUTURE RDCK CLIMATE ACTION

The RDCK held an extensive public engagement process in 2023 on a draft Climate Action Plan.

Staff used the feedback from the engagement process to develop <u>RDCK Ideas for Climate Action</u>. In April 2024, the Board directed staff to explore climate action priorities that are practical and affordable and based on RDCK Ideas for Climate Action.

In order for an idea to move forward, staff would need to do a business case and bring it to the Board of Directors to vote on at a public meeting.

#### **HOW TO READ THIS DOCUMENT**

Pages 2 and 3 are a quick snapshot of pathways, goals and the average score for each of the 10 pathways.

Pages 4-12 provide more detail with objectives, indicators, whether the RDCK has jurisdiction and an update.

#### How did we get the score?

First we looked at each indicator and determined whether there was strong progress (green - 2), moderate progress (yellow - 1), or limited progress (red - 0). Once all indicators within a given pathway were scored, an average was taken to provide the overall score for that pathway.



#### **Progress on RDCK Climate Action**

While the RDCK is ambitious in its climate action, many of the actions in the following pages will take years to show progress as they are complex and often multi-year initiatives. Some indicators may not change for several years depending on what the work is. Read through the pages to get a sense of how progress is being made and where efforts may be taking longer.

A few highlights from 2023:

- Received funding for 96 solar panels at Creston & District Community Complex
- 411 FireSmart home assessments
- 30% increase in Transit rides

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## The RDCK's climate action goals, objectives, targets and indicators are grouped into the following pathways.

PATHWAY	GOALS	AVERAGED SCORE
LAND USE & PLANNING	Ensure RDCK policies and decision-making guidelines promote healthy, sustainable and low-carbon lifestyles for residents, and minimize risks associated with natural hazards.	0.9
TRANSPORTATION & MOBILITY	Develop an integrated active and low-carbon regional transportation network that supports universal access to services and amenities.	1.1
ENERGY	Build grid resilience and transition to a low-carbon future through clean energy efforts, including reducing emissions, improving efficiency and using sustainable energy sources.	1.1
BUILDINGS	Encourage improvements to existing buildings by improving energy efficiency and reducing carbon pollution.	1.2
RESOURCE RECOVERY	Improve the health of our natural ecosystem by reducing the RDCK's environmental impact through the assessment and diversion of waste from landfills, while simultaneously advancing the recovery of waste through improved waste management and new technologies.	1.2

## SCORING Strong Progress Moderate Progress Limited Progress

**PATHWAY GOALS AVERAGED SCORE** Strengthen watershed governance and implement strategies to **WATER SUPPLY** protect drinking water and agricultural water supply. Support a sustainable and resilient regional food system, through **FOOD SUPPLY &** climate adapted agricultural strategies that enhance local food AGRICULTURE security and ensure access for all residents. Reduce community vulnerability by promoting emergency **FLOODING** preparedness and risk assessments, and assessing infrastructure & GEOHAZARDS for opportunities to adapt against increased flooding and geohazard events. Reduce fire risk within and around each RDCK community, while WILDFIRE adapting to more frequent and intense fires. LEADERSHIP Incorporate a climate lens for all Board decision making to prioritize & OPERATIONS climate action and adaptation.

#### **SCORING**

Strong Progress **Moderate Progress Limited Progress** 



## **PATHWAY: LAND USE & PLANNING**

OBJECTIVES	INDICATOR	UPDATE	JURISDICTION	STATUS
Update planning policies and bylaws to guide future development to create sustainable communities	Number of Official Community Plans (OCPs) over 10 years old	• 8/10 over 10 years old, soon to be 8/11 when the Area I OCP is updated but separated from the Area J	RDCK & member municipalities	Limited Progress
Leverage planning policy to reduce the risk threshold of community development decisions and projects	Number of Official Community Plans with updated policy framework for hazards (flood, fire, erosion)	<ul> <li>Wildfire Development Permit Areas will be added to Official Community Plans as they are updated</li> <li>Floodplain mapping will be added to the existing Flooplain Bylaw</li> </ul>	RDCK & member municipalities	Moderate Progress
	Number of Development Permits	<ul> <li>3 applications for Industrial Commercial Development Permits</li> <li>2 issued in 2023</li> </ul>	RDCK & member municipalities	Moderate Progress
	Number of Official Community Plans with hazard Development Permit Areas	<ul> <li>The proposed changes to update the Development Permit Areas for protection of the natural environment around Kootenay Lake are not being considered at this time. For now changes to Development Permit Areas will be left up to individual Areas (A,D,E,F)</li> </ul>	RDCK & member municipalities	Limited Progress
	Number of Environmentally Sensitive & Watercourse Development Permits issued	<ul> <li>10 applications for Watercourse or Environmentally Sensitive Development Permits</li> <li>7 issued in 2023</li> </ul>	RDCK & member municipalities	Moderate Progress

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## **PATHWAY: TRANSPORTATION & MOBILITY**

OBJECTIVES	INDICATOR	UPDATE	JURISDICTION	STATUS
Promote and support mobility for residents (with a focus on vulnerable communities) through locally initiated multi modal programs and infrastructure	Level of progress on implementing low-carbon transportation solutions	<ul> <li>Planning for a second Transportation Think Tank to further characterize regional partnerships and the role of the RDCK</li> </ul>	Federal, Provincial, RDCK & member municipalities depending on who owns or manages the piece of land or infrastructure that projects are affecting	Moderate Progress
	Annual public transit ridership	<ul> <li>706,420 rides - (April 2022-March 2023)</li> <li>Increase of 30%</li> <li>76% On Time Performance over the last 12 months</li> <li>BC Transit target is 73%, so 76% is considered excellent</li> </ul>	Provincial government	Strong Progress
Create an internal corporate structure and access to expertise that can support the shift to regional low-carbon transportation (zero-emission vehicles, buses, e-bikes/scooters, carshares, trains, ferries) within/between rural areas and municipalities	Progress on Regional Active Transportation Strategy Scoping	<ul> <li>Exploring funding opportunities</li> <li>Received coaching from the <u>Tamarack Institute</u> on a collective impact model for this work</li> <li>This work was slowed due to Climate Action Plan engagement process, but we were able to gather some public input during this process</li> <li>Staff are planning a second Transportation Think Tank for spring 2024</li> </ul>	RDCK & member municipalities	Moderate Progress
By 2035, align with the provincial CleanBC goal and transition the RDCK fleet to zero emission vehicles	Number of Zero Emission Vehicles (ZEVs) purchased by the RDCK	<ul> <li>Planning to purchase first EV fleet vehicle (an all- wheel drive SUV) for RDCK use</li> </ul>	RDCK & member municipalities	Moderate Progress
	Number of Electric Vehicle (EV)-ready buildings	<ul> <li>Supporting <u>Accelerate Kootenays</u> in their efforts</li> <li>First RDCK corporate charger being installed fall 2023 at Lakeside office in Nelson</li> <li>Gaps identified by Community Energy Association in charger network (North of Kaslo, and East Shore of Kootenay Lake)</li> </ul>	RDCK & member municipalities for corporate buildings and Provincial government for community buildings	Moderate Progress



#### **PATHWAY: ENERGY**

OBJECTIVES	INDICATOR	UPDATE		JURISDICTION	STATUS
Engage in efforts to improve grid resilience and future-proof electrical infrastructure	Level of progress on community grid resilience pilot projects	Lardeau Valley Opportunity LINKS So assessment program similar to Fire S or renewable energy options that pron how to ensure grid resilience in program of the silience in program	mart but for power backup rovides recommendations	RDCK & member municipalities	Moderate Progress
Support a regional transition to 100% renewable energy by 2050	Level of engagement and outreach around the renewable energy transition	<ul> <li>RDCK staff newsletter has a month action and emission reduction procould be released to public</li> <li>The Climate Action public engagem to share information on transitionin</li> <li>Preparing for a 44 kilowatt solar paat the Creston and District Commu</li> <li>Supported the Cool It program, what awareness and education in classr</li> </ul>	grams. Similar articles nent process allowed staff ng to renewable energy nel system to be installed nity Complex in 2024 nich explored climate	RDCK & member municipalities	Strong Progress
Collect robust and comprehensive corporate & community energy & emissions data	Total corporate GHG emissions tons of CO2- equivalence (tCO2e) in 2022	Emissions Facilities Vehicles Contractors who provide RDCK servi Total emissions  Offsets Landfill flaring Creston composting facility Total offsets	1,659 tCO2e 116 tCO2e ces 5 tCO2e 1,775 tCO2e  1,012 tCO2e 819 tCO2e 1,831 tCO2e	RDCK & member municipalities	Strong Progress
	Total corporate energy consumption in 2022	Natural Gas Propane 2 Fuel Oil 7 Transportation:* (4,067 gigajoules) Gasoline Diesel 2	24,399 gigajoules 27, 962 gigajoules 2,882 gigajoules 21 gigajoules 3,065 gigajoules 6,967 gigajoules 6 gigajoules	RDCK & member municipalities (These numbers do not include member municipalities since they report their results separately.)	Moderate Progress

\*does not include fuel total for community recycling collection as these are reported by RecycleBC



## PATHWAY: BUILDINGS

OBJECTIVES	INDICATOR	UPDATE	JURISDICTION	STATUS
Align with Provincial Step Code timelines	Number of residential (PART 9) buildings achieving Step Code	Step 1       4         Step 2       7         Step 3       19         Step 4       22         Step 5       2	Provincial government	Strong Progress
Encourage residents and businesses to retrofit existing buildings to meet 20-30%	Number of homes signed up to the <u>Regional Energy</u> <u>Efficiency Program (REEP)</u>	• 348 registered in 2023	RDCK & member municipalities	Strong Progress
energy efficiency improvements	Reduction of GHG emissions from homes that have gone through the REEP program	<ul> <li>2022:</li> <li>90 pre-retrofit only assessments <ul> <li>354.2 t/CO2e potential reductions (3.77/house)</li> <li>80% of these savings from natural gas</li> </ul> </li> <li>40 pre and post-retrofit assessments <ul> <li>115.8 t/CO2e potential reductions (2.9/house)</li> <li>52.8 tCO2e reduced (1.32/house)</li> <li>90.7% of these from natural gas reductions</li> </ul> </li> </ul>	RDCK & member municipalities	Moderate Progress
	Number of Home Performance Contractor Network (HPCN) qualified contractors  Number of heat pumps in non-natural (methane) gas areas (e.g. heating oil/ propane/baseboard)	<ul> <li>Home Performance Contractor Network qualified contractors membership</li> <li>HVAC: 13 active, 10 applicants in progress</li> <li>Insulation: 1 active, 6 in progress</li> <li>Windows/Doors: 2 active, 4 in progress</li> <li>95% of assessed homes were recommended heat pumps, air pumps and/or air conditioning</li> <li>16 homes installed heat pumps</li> <li>17 homes installed air conditioning</li> </ul>	This network is managed by a not-for- profit society rather than a government entity	Strong Progress
Corporate structures will adhere to the Better Building Policy for RDCK Facilities to ensure that all existing buildings continue to improve on energy efficiency	Level of training provided to Project Managers on the BetterBuilding Policy (BBP)	Basic training has been given to Project Managers on the Better Building Policy	RDCK & member municipalities	Strong Progress
Lower total workplace carbon pollution and energy consumption in both corporate and RDCK-managed community buildings/facilities	Energy Consumption (GJ) & Emissions (tCO2e) from RDCK facilities	<ul> <li>All corporate buildings are now reporting energy consumption via Portfolio Manager</li> </ul>	RDCK & member municipalities	Strong Progress
	Number of RDCK's existing facilities retrofitted for high performance	<ul> <li>Developed training strategy to help staff to use energy data to optimize operations and plan for future upgrades</li> <li>Installation of solar panels at Creston and District Community Complex in late 2023</li> <li>Heat pump installations at 3 Fire Halls and 5 Resource Recovery facilities</li> <li>LED lighting upgrades at 5 Fire Halls</li> </ul>	RDCK & member municipalities	Moderate Progress

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## **PATHWAY: RESOURCE RECOVERY**

OBJECTIVES	INDICATOR	UPDATE	JURISDICTION	STATUS
Align with CleanBC and aim to divert 95% of food waste from landfills	Level of progress on Organic Waste Diversion	<ul> <li>Held an online survey for households where curbside collection for garbage, organics and recycling is feasible and received 1,290 responses. Online platform at engage.rdck.ca used to consult in Electoral Areas where households had been identified as feasible for potential curbside collection of garbage, recycling, and organics.</li> <li>Two organics facilities now open (Creston and Salmo)</li> <li>819 tCO2e reduction - Creston (March 2022-March 2023)</li> <li>Estimated 2,784 tCO2e reduction in 2024 in Salmo</li> </ul>	Provincial government	Strong Progress
	Progress towards a financially self-sufficient resource recovery system	<ul> <li>Contractor selected for system efficiency study</li> <li>Working on collecting financial data needed to complete the assessments</li> <li>Study results expected by mid-2024</li> </ul>	RDCK & member municipalities	Moderate Progress
Improve understanding of, and data availability for, the RDCK waste volumes and composition in the RDCK for all relevant sectors (residential, commercial, industrial, agricultural)	Development of an RDCK-specific waste composition study	Preliminary Waste Composition study completed. Results to follow.	RDCK & member municipalities	Strong Progress
Reduce the greenhouse gas emissions resulting from regional waste streams	Reduction in GHG emissions through methane capture or treatment	• 1,012 tons CO2e avoided by flaring in Creston in 2022. Staff expect around a 23% increase going forward due to a new closure and expansion of the landfill gas (LFG) management system	Provincial government	Strong Progress

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#### **PATHWAY: WATER SUPPLY**

	OBJECTIVES	INDICATOR	UPDATE	JURISDICTION	STATUS
	Enhance regional water conservation	Number of residents in RDCK water systems signing up for irrigation assessments or attending Xeriscape Demonstration Garden tours	<ul> <li>Work was done to collect public feedback</li> <li>Columbia Basin Trust funding for this work is no longer available</li> <li>The RDCK Water Services Committee voted against continuing this work</li> </ul>	RDCK & member municipalities	Limited Progress
SYSTEMS	Creating the conditions for regional collaborative decision making to protect watersheds where drinking water sources are at risk	Implementation of the <u>Watershed</u> <u>Governance Initiative (WGI)</u>	<ul> <li>Service Case Analysis being conducted for possible Drinking Water Watershed Service</li> <li>Updated Storymap and web map</li> <li>Participated in BC Water, Land &amp; Resource stewardship engagement process</li> </ul>	RDCK & member municipalities	Strong Progress
WATER		Increase level of surface and groundwater monitoring programs	<ul> <li>Worked with Living Lakes Canada on Surface Water Monitoring survey to identify potential stream monitoring sites across Columbia Basin</li> </ul>	RDCK & member municipalities	Strong Progress
COMMUNITY WATER SYSTEMS		Level of engagement and collaboration with First Nations	<ul> <li>Working with the Okanagan Nation Alliance on the Slocan Lake and River Partnership</li> <li>Yaqan Nukiy concerned about stream flows in the Goat River. RDCK drafted an agreement to allow them to locate flow monitoring equipment on an RDCK bridge crossing the river</li> <li>Provided Yaqan Nukiy with Lister Water System consumption data after a request for stream flow/ground water aquifer monitoring data</li> <li>Working with Yaqan Nukiy in the Duck Creek watershed</li> </ul>	RDCK & member municipalities	Strong Progress
SYSTEMS	Improve management of RDCK- operated water systems to prepare for the impacts of climate change	Reduced number of mainline breaks and system leakage	<ul> <li>A 750 meter long 4 inch asbestos cement water main servicing Balfour Wharf Road was replaced with 6 inch industry standard PVC</li> </ul>	RDCK & member municipalities	Strong Progress
RDCK-OWNED SYSTEMS		Development and implementation of a Leak Detection Strategy	<ul> <li>Performed leak detection throughout the whole distribution systems of both Edgewood and Burton.</li> <li>In both cases the significant leak was found to be a single service. Both of the significant leaks have been repaired.</li> </ul>		



## PATHWAY: AGRICULTURE & FOOD SUPPLY

OBJECTIVES	INDICATOR	UPDATE	JURISDICTION	STATUS
Support efforts to improve the capacity, feasibility, and climate resiliency of local agriculture	Number of farms in the RDCK (according to Canada Census of Agriculture)	• 461 farms	RDCK & member municipalities	Moderate Progress
Establish and nurture partnerships with a wide variety of involved organizations, and actively maintain a high level of regional collaboration	Continuation of funding and collaboration with the Central Kootenay Food Policy Council	<ul> <li>The Central Kootenay Food Policy Council continued their efforts. For more information on their programs and services, please visit their website</li> </ul>	RDCK & member municipalities	Strong Progress
on local agriculture initiatives	Continuation of agricultural extension service in RDCK through Kootenay Boundary Farm Advisory	<ul> <li>The Kootenay Boundary Farm Advisory continued their efforts. For more information on their programs and services please visit their <u>website</u></li> </ul>	RDCK & member municipalities	Strong Progress



## **PATHWAY: FLOODING & GEOHAZARDS**

OBJECTIVES	INDICATOR	UPDATE	JURISDICTION	STATUS
Increase emergency preparedness and resilience of communities	Active neighbourhoods in the Neighborhood Emergency Preparedness Program (NEPP)	• 13 active neighbourhoods in 2023, which is an increase from 8 in 2022	RDCK & member municipalities	Strong Progress
	Level of improvement made to Neighbourhood Emergency Preparedness Program (NEPP)	<ul> <li>Received Board approval to advance with Neighbourhood Emergency Preparedness Program (NEPP) 2.0 Strategy, which includes creating a webinar to guide participants in developing their plans</li> </ul>	RDCK & member municipalities	Strong Progress
Support communities in developing resilience to flood and geohazard risk	Have updated flood/geohazard maps for identified high risk areas and being available for the public	<ul> <li>Began conversations with the City of Nelson to identify risks from Giveout Creek to collaborate on developing a detailed risk mitigation design for the creek, with funding from Union of BC Municipalities</li> <li>Worked with residents of Duhamel Creek to advocate to the Province for risk mitigation work to be pursued on this creek</li> </ul>	RDCK & member municipalities	Strong Progress
	Development of risk assessments for identified high hazard areas	<ul> <li>Shortlist of 3 high priority areas identified with detailed designs created on how to mitigate risks for each area</li> </ul>	RDCK & member municipalities	Strong Progress
Consider flood and geohazard risk within the RDCK when making land use decisions	Number of Site-Specific Floodplain Exclusions	<ul> <li>4 applications were received in 2023</li> <li>2 in progress</li> <li>1 granted</li> <li>1 cancelled</li> </ul>	RDCK & member municipalities	Strong Progress



## **PATHWAY: WILDFIRE**

OBJECTIVES	INDICATOR	UPDATE	JURISDICTION	STATUS
Increase participation in FireSmart Program	Number of FireSmart Neighbourhoods recognized as FireSmart Communities	• 27 in 2023, which is an increase from 20 in 2022	RDCK & member municipalities	Strong Progress
	Number of FireSmart Home Partners Home Assessments completed annually Number of rebates given out for partial completion of FireSmart recommendations	<ul> <li>411 FireSmart Home Assessments completed in 2023, which is an increase from 285 in 2022</li> <li>Over 100 rebates were given out</li> </ul>	RDCK & member municipalities	Strong Progress
Incorporate wildfire adaptation measures through building and land planning management to reduce wildfire risk	Level of progress on creation and use of a Wildfire Development Permit Area	<ul> <li>January – consultant completed final report</li> <li>February – Wildfire Development Permit Area created with funding from the Union of BC Municipalities</li> <li>July – The Board passed a resolution calling for Wildfire Development Permit Area amendments to Official Community Plans in areas that request this or in Official Community Plan updates</li> <li>Looking for further Union of BC Municipalities funding for outreach and education in 2024</li> </ul>	RDCK & member municipalities	Moderate Progress
Mitigate and adapt to wildfire risk by creating fuel-breaks around at-risk communities	Fuel mitigation project sizes, funding, and other details	<ul> <li>Selous Creek fire mitigation work is continuing. Selkirk College and FP Innovations are researching the ecological impacts of wildfire mitigation work</li> <li>FP Innovations is installing sensors that work as early warning systems and will be tested when prescribed burning happens at Selous Creek</li> <li>Window for burning didn't line up in 2023</li> </ul>	RDCK & member municipalities & Provincial government depending on funding sources, and the land on which these projects occur	Moderate Progress



## PATHWAY: LEADERSHIP & OPERATIONS

OBJECTIVES	INDICATOR	UPDATE	JURISDICTION	STATUS
Develop and maintain robust carbon pollution and energy inventories to accurately inform decision makers and to track direct impacts and progress towards climate action targets	Level of comprehensiveness of RDCK GHG data collection	Data was collected on RDCK buildings, but improvements are needed to ensure accuracy of RDCK fleet and stationary equipment emissions data	RDCK & member municipalities (Member municipalities report their corporate GHG emissions separately.)	Moderate Progress
Provide leadership and participate in multi-agency initiatives to accelerate climate action & mitigation efforts within the RDCK	Level of collaboration with other agencies	<ul> <li>Participated in a year-long process with the <u>Tamarack Institute</u></li> <li>Increased collaboration with local municipalities and community interest groups</li> <li>Supported the <u>Cool It</u> program, which explored climate education in classrooms around the RDCK</li> </ul>	RDCK & member municipalities	Strong Progress
Update and improve RDCK systems and guiding documents to better support and further climate actions and initiatives	Create an Asset Management Plan and inventory	• Consultant hired to review the Asset Management Plan and Better Building Policy and make recommendations on how to integrate carbon emission reduction goals. This should be completed in spring 2024.	RDCK & member municipalities	Strong Progress
	Enhancement of Emergency Management Services Development of a Business Continuity Plan	<ul> <li>No work done on Business Continuity Plan, although this will likely be brought into legislation in 2024</li> <li>A backup Emergency Operations Center was built in Robson</li> </ul>	RDCK & member municipalities	Moderate Progress
Align decision making with the RDCK's carbon pollution targets in all areas (i.e. land use & planning, building construction, project management) and provide staff with resources to support climate targets and goals	Update and implement new climate-related policies and provide support and education	Held an extensive public engagement process on the draft Climate Action Plan	RDCK & member municipalities	Moderate Progress
	How are climate impacts considered in Board Reports and decisions	• Staff hope to amend the Board Report template in 2024 to include more detailed consideration of potential climate impacts	RDCK & member municipalities	Limited Progress
	Level of digitization of RDCK processes	Many departments have streamlined their signing processes by using digital signatures	RDCK & member municipalities	Moderate Progress