

State of Climate Actions in the RDCK 2022 Update

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.

The region's climate action goals, objectives, targets and indicators are grouped into 10 pathways.



LAND USE & PLANNING



TRANSPORTATION & MOBILITY



ENERGY



BUILDINGS



RESOURCE RECOVERY



WATER SUPPLY



FOOD & AGRICULTURE



FLOODS & GEOHAZARDS



WILDFIRE



LEADERSHIP & OPERATIONS

HOW TO READ THIS DOCUMENT

The new State of Climate Action format is designed as levels –

Level 1 (page 1 and 7) is a quick snapshot of pathways, goals and the average score for each of the 10 pathways.

Level 2 (pages 3-6 & 8-12) provides more detail with objectives, indicators, whether the RDCK has controls or influence and an update. This update may explain the level of change for 2022 or why an indicator has not changed.

Level 3 provides links for more information and ways to get involved.

How did we get the score?

First we looked at each indicator and determined whether there was progress (green - 2), limited progress (yellow - 1), or no progress (red - 0). Once all indicators within a given pathway were scored an average was taken to provide the overall score for that pathway.



RDCK Climate Actions

While the RDCK is ambitious in its climate action, many of the actions will take years to show progress – 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. Take a look at <u>RDCK Climate Actions</u> to see where we are going.



& 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.



AVERAGED SCORE 1.2



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



AVERAGED SCORE 1.0



AVERAGED SCORE 1.15



AVERAGED SCORE

0.75

AVERAGED SCORE 0.25

¹net energy from renewable sources (like water, hydro, wind, and biofuel power) ²the amount of emissions produced equals the amount of emissions sequestered

SCORE



PATHWAY: LAND USE & PLANNING

OBJECTIVE	INDICATOR	ACTION or INFLUENCE	UPDATE
Update planning policies and bylaws to decrease urban sprawl while supporting active transportation and complete communities.	Number of Official Community Plans (OCPs) over 10 years old.	Action	 4 - No OCPs updated in 2022 4 more will hit the 10-year mark at the end of 2023
Integration of the <u>Community Wildfire Protection</u> <u>Plan (CWPP)</u> and floodplain mapping into OCP's.	Number of OCPs with updated policy framework for hazards (flood, fire, erosion).	Action	 To be done in upcoming OCPs Plans to update Floodplain Bylaw with new mapping considerations
Guide future development to create sustainable and complete communities where the risk threshold is reduced.	Number of OCPs with a hazard Development Permit Areas (DPA).	Action	Wildfire DPA template expected in January 2023, but unsure which communities will want their OCPs amended to include this
	Number of Industrial Commercial & Resort Commercial & Residential Cluster Development Permits.	Action	• 2 (1 completed)
	Number of Environmentally Sensitive & Watercourse Development Permits.	Action	• 6 (1 completed)



PATHWAY: TRANSPORTATION & MOBILITY

OBJECTIVES	INDICATOR	ACTION or INFLUENCE	UPDATE
By 2040, plan to shift all new cars to be zero emission vehicles (ZEV), which aligns with the provincial CleanBC goal, while making the transition from diesel large sized vehicles to run on low-carbon fuels.	Number of Zero Emission Vehicles (ZEVs) purchased by the RDCK.	Action	• 0 - Next steps towards updating the RDCK vehicle fleet are the completions of a Fleet Inventory and Assessment Study and plans to purchase 1 ZEV in 2023, these efforts are planned for 2023-2024 as part of RDCK Climate Actions
Monitor transportation GHG emissions and transportation greenhouse gas (GHG) emissions/capita (tCO2e every 2 years).	Level of community transportation GHG emissions (use from the fuel usage data).	Influence	The RDCK plans to develop a new fleet fuel tracking system in 2023
Promote and support mobility for residents with a focus on vulnerable communities.	Annual public transit ridership.	Influence	• 220,000 rides in RDCK (excluding Nelson) On track to recover to pre-COVID numbers by 2025-2026
Promote and support mobility for residents with a focus on vulnerable communities.	Number of new transportation trails added	Action & Influence	Grant secured to assess the feasibility of a Castlegar- Nelson route as active transportation corridor



PATHWAY: ENERGY

OBJECTIVES	INDICATOR	ACTION or INFLUENCE	UPDATE
Lower total workplace GHG emissions and energy consumption in both corporate and RDCK operated	Total corporate GHG emissions (tCO2e).	Action	Waiting for reports from Portfolio Manager
community building structures/facilities.	Total corporate energy consumption.	Action	Corporate energy consumption: 78,615 GJ - Total Corporate Energy Consumption 33,301 GJ - Buildings 45,314 GJ - Transportation
Support regional implementation of the West Kootenay 100% Renewable Energy Plan.	Implementation of 100% Renewable Energy Plan	Influence	• 100% Renewable Energy Plan integrated into the RDCK Climate Actions 2023-2026 plan

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PATHWAY: BUILDINGS

	OBJECTIVES	INDICATOR	ACTION or INFLUENCE	UPDATE
COMMUNITY	COMMUNITY BUILDINGS & PART 3 - Align with provincial <u>Step Code</u> timeline for Part 3 buildings	Number of buildings achieving Step 2/3/4.	Action (up to mandated Step)	No buildings for 2022RDCK supporting contractor training efforts
	RESIDENTIAL BUILDINGS & PART 9 - Align with provincial <u>Step Code</u> timeline for Part 9 buildings	Number of buildings achieving Step 3/4/5.	Action (up to mandated Step)	Step 3: 20% more efficient - 14Step 4: 40% more efficient - 4Step 5: Net zero ready - 1
	Encourage residents and businesses to retrofit existing buildings to meet 20-30% energy efficiency improvements.	Number of homes signed up to the Regional Energy Efficiency Program (REEP).	Influence	REEP 2.0 Approximately 373 homes had signed up by end of 2022
		Number of businesses that have <u>commercial energy</u> <u>audits</u> .	Influence	• 18 (down from 60 in 2021) - Potential drop due to introduction of a new application process and system
		Reduction of GHG emissions from REEP housing stock.	Influence	• From REEP fiscal year report (2021-2022) potential GHG reduction of 289.8 tCO2e for 126 homes that completed D assessments (pre-renovation) were calculated, but from a study on 9 homes completed E assessments (post-renovation) only 33% of the potential reductions were realized. (Annual target is 309 tCO2/yr)



PATHWAY: BUILDINGS

	OBJECTIVES	INDICATOR	ACTION or INFLUENCE	UPDATE
	Align with Provincial Government's Step Code and have all new corporate buildings be net-zero ready by 2030, 2 years ahead of Province's goal.	Number of buildings achieving Step 2/3/4.	Action	No buildings covered by the Step Code were built in 2022
CORPORATE	Corporate structures will adhere to the Better Building Policy for RDCK Facilities to ensure that all existing buildings continue to improve its energy efficiency.	Number of RDCK's existing facilities retrofitted to high performance attributes.	Action	 Beasley Fire Hall - new double paned windows Slocan Fire Hall - increased wall and roof insulation for addition, heat pump installation Lakeside Drive Office - high efficient HVAC replacement (dual fuel high efficiency RTUs) CDRD Child Care Centre - use of cross laminated timbers (CLT's), heat pump installation, increased building insulation, achieved more than 50% energy savings over conventional building Heat pump installations at several fire hall and resource recovery facilities Central (Salmo) Transfer Station attendant building - retrofit of non-efficient building - heat pump, windows and doors replacement
	Monitor energy efficiency for all RDCK buildings.	Drop in energy consumption of corporate buildings.	Action	Use of Portfolio Manager to monitor and improve the energy use of RDCK buildings has not been fully implemented. This is expected in 2023



PATHWAY: RESOURCE RECOVERY

OBJECTIVES	INDICATOR	ACTION or INFLUENCE	UPDATE
Align with CleanBC and aim to divert 95% of organic waste (food waste only) from landfills.	Degree of implementation of the updated Resource Recovery Plan.	Action	 Resource Recovery Plan complete, still under review by the Province, so components requiring long-term borrowing currently on hold Landfill assessments detailed in plan on hold due to staffing but expected to begin very soon Currently hiring a Resource Recovery Projects Advisor to assist with moving new projects/programs forward Organics diversion advancing on schedule - Creston compost facility is fully operational and the Central facility is well underway with the intent to start composting in Spring 2023 Ootischenia Landfill organics transfer infrastructure is complete and the Grohman Transfer Station infrastructure modifications will be completed this fall Phase 2 of curbside collection consultation to launch in early 2023
Achieve the provincial target of a disposal rate of 350 kg per person per year.	Change in the composition of the landfills from baseline results from the Waste Composition Study: Compostable organics, plastics, and other materials.	Influence	Cannot assess until after the completion of a waste composition study
Transition landfills to capture or treat (using flares or biofilters) methane.	Reduction in GHG emissions through methane capture or treatment.	Action	 Creston Landfill Phase 1E closure which included landfill gas capture is complete. It is connected to the existing collection and flare and is now operational. 2023 assessment will show change
Complete a waste composition study to create a baseline for the RDCK and measure effectiveness of Resource Recovery Plan and Organic Waste Diversion Strategy.		Action	Planned for early 2023 before the organics diversion program begins at Ootischenia Landfill

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WATER SUPPLY

Strengthen watershed governance and implement strategies to protect drinking water.

Provide opportunities for residents to reduce water consumption.

Upgrade capital infrastructure in RDCK-operated water systems



AVERAGED SCORE 1.1



FOOD SUPPLY & AGRICULTURE

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



FLOODING & 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 perspective 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.



averaged score
1.13



AVERAGED SCORE

1.0



averaged score
1.2



AVERAGED SCORE

0.67



PATHWAY: WATER SUPPLY

	OBJECTIVES	INDICATOR	ACTION or INFLUENCE	UPDATE
	Advocate and empower communities in managing their water systems.	Funding accessed for small water system users to support resilience planning.	Influence	 \$25,000 approved from CSLAC to support a cumulative impact study in Duck Creek watershed on proposed logging activities
COMMUNITY	Focus on water protection as well as watershed landscape planning.	Implementation of the <u>WGI</u> .	Action	 Continuing to build relationships with First Nations, provincial and local elected officials and staff Investigating tools of the Water Sustainability Act, Nature Directed Planning and Cumulative Effects Study, story & web mapping Investigate a Drinking Water and Water- shed Protection Service
	Educate residents on ways they can substantially reduce outdoor water consumption.	Number of residents in RDCK water systems signing up for irrigation assessments or attending Xeriscape Demonstration Garden tours.	Influence	 Plans to reinstate Water Smart Ambassa- dor program in 2023
	Undertake and complete capital infrastructure upgrades to address system leakage, storage capacity, or water quality concerns RDCK-operated water systems.	Reduced number of mainline breaks and system leakage.	Action	
E	quality concerns ribert operated water systems.	Reduction in water consumption after metering installation.	Influence	No new meters installed 2022 (100 funded meters in Erickson delayed till 2023)
CORPORAT	Continue management of RDCK-operated water systems.	Level of monitoring our systems.	Action	 Investigating monitoring of ground and surface water quality and quantity
COR	Proactive leak detection; the LDS is a planning tool to ensure due diligence in cost-effective allocation of resources in determining which systems are the best candidates for investing in leak detection interventions & potential capital upgrades.	Level of development and implementation of a Leak Detection Strategy	Action	Strategy now approved by BoardPassed a Leak Detection Strategy
	High level guidance and evaluative tool for water managers to utilize in their efforts to prioritize which systems to meter, and when.	Level of development and implementation of a Metering Implementation Strategy	Action	Strategy now approved by BoardPassed a Metering Implementation Strategy



PATHWAY: AGRICULTURE & FOOD SUPPLY

OBJECTIVES	INDICATOR	ACTION or INFLUENCE	UPDATE
Establish adapted water management techniques that respond to climate variability — flood and drought conditions and support consistent production (Align with the Kootenay and Boundary Adaptation Strategies for Agriculture plan).	Degree of implementation of the Kootenay and Boundary Adaptation Strategies for Agriculture Plan.	Influence	 Linking Farmland to Floodplains project complete Supporting Riparian Health for Flood Management project field days The wildfire communications project underway Decision Aid System coming to Kootenays in 2023
Support producers in their farm practices as shifting temperature and precipitation patterns result in food systems variability and overall resilience (align with the Kootenay and	Overall increase in agriculture production: number of acres in production (farmland use).	Influence	Awaiting 2021 Census results, 2016 results: 127,129 of hectares in production \$90,878,389 average gross farm receipts 1,157 farms
Boundary Adaptation Strategies plan).	Overall increase in agriculture production: (gross farm receipts).	Influence	Agricultural production metrics may not be representative of a support for farmers in a given year as there can be droughts and other circumstances out of our control
	Overall increase in agriculture production: number of new farms.	Influence	Conclusions drawn from Census Canada Agriculture data for the Kootenays can be skewed as around 95% of the produce is cherries from Creston
	Number of ALR exemptions (ALC applications).	Action	 0 - Public can no longer apply to remove land from the ALR. Other application types in 2022: 4 for 'Subdivision within the ALR' and 2 for 'Non-Farm Use within the ALR' ALC has not made a decision yet
Maintain the agricultural extension service through the <u>Kootenay Boundary Farm Advisors</u> in the RDCK.	Continuation of agricultural extension service in RDCK through KBFA.	Action	Extension service maintainedFood security Action Plan



PATHWAY: FLOODING & GEOHAZARDS

OBJECTIVES	INDICATOR	ACTION or INFLUENCE	UPDATE
Consider flood and geohazard risk within the RDCK when making land use decisions.	Number of Site-Specific Floodplain Exemptions.	Action	• 4 (2 approved)
Develop the flood risk maps for high risk areas and continue to pursue funding for maps of other high hazard areas.	Have updated flood/geohazard maps for identified high risk areas available to the public.	Action	Yes, the updated mapping is available here: https://www.rdck.ca/EN/main/services/community-planning/flood-map-study.html
Support communities in developing resilience to flood and geohazard risk.	Develop risk tolerance working group of the Board and staff to identify acceptable risk tolerance.	Influence	Waiting on funding to support these efforts
Create risk reduction strategies for identified high risk areas.	Development of risk reduction strategies for identified high risk areas.	Action	Waiting on funding to support these efforts
Establish acceptable risk tolerance threshold for all areas in the RDCK.	Incorporate risk tolerance and risk reduction into zoning and OCPs.	Action	Waiting on funding to support these efforts
Increase the preparedness and resilience of neighbourhoods in cases of emergency.	Implementation of the Neighborhood Emergency Preparedness Plan (NEPP) (number of NEPPs developed or updated)	Influence	 Staff continuing to promote the NEPP program across the region 25 community/neighbourhood groups have responded, and staff are working with them to arrange planning workshops 8 Neighbourhood Emergency Teams (NETs) have developed Emergency Preparedness Plans



PATHWAY: WILDFIRE

OBJECTIVES	INDICATOR	ACTION or INFLUENCE	UPDATE
Increase the number of <u>FireSmart</u> Neighbourhoods that participate in the FireSmart Community Recognition Program.	Number of FireSmart Neighbourhoods recognized as FireSmart Communities.	Influence	 Restarted the Nelson and Area Wildfire Risk Reduction Committee to coordinate and collaborate efforts for landscape level mitigation and community resiliency Started the Nakusp and Area FireSmart Committee In the beginning stages of starting one in Creston, and Castlegar
Increase the number of FireSmart Home Partners Home Assessments.	Number of FireSmart Home Partners Home Assessments completed annually.	Influence	285 - This slight decrease (326 in 2021) in Home Assessments could be due to the fact that this summer was not as intense of a fire season
Increase the number of FireSmart Home Partners certifications given.	Number of homeowners received FireSmart Home Partners certification.	Influence	• 1
Incorporate wildfire adaptation measures through building and land planning management to reduce wildfire risk.	Development of policies to support wildfire adaptation measures through building and land planning management.	Action	 Funding by Forest Enhancement Society of BC: <u>Selous Creek</u> fuel mitigation project: Successfully implemented fuel modification treatments along the Great Northern Rail Trail by reducing hazardous forest fuel loading by completing a manual hand treatment, mechanical treatment, and prescribed burning Queens Bay fuel mitigation project: Successfully reduce the forest fire hazard adjacent to the FireSmart Neighbourhood Queens Bay by manual hand treatments cleaning up the fuel loaded forest floor reduce the effect of powerline sparks starting fires, as has historically been the case Regional Roundtable: Started the interagency fuel management planning table for landscape level coordination and collaboration with multi – governmental / First Nations and funders
Mitigate and adapt to wildfire risk by creating fuel-breaks around at-risk communities.	Number of hectares treated (or number of dollars spent).	Action/ Influence	Though specific data on the number of hectares treated or dollars spent on wildfire fuel mitigation efforts has not yet been collected



PATHWAY: LEADERSHIP & OPERATIONS

OBJECTIVES	INDICATOR	ACTION or INFLUENCE	UPDATE
Align decision making with the RDCK's GHG reduction targets in all areas (ie. land use/planning, building construction, project management).	Update and implement new policies.	Action	 RDCK Climate Actions drafted being reviewed by the Board and public Staff have been investigating precedents, a proposal to revise the purchasing policy to reflect climate action goals
	Carry out a carbon budgeting tool.	Action	 Not expected to be introduced in the next few years, but discussed in the drafted RDCK Climate Actions
Develop an asset management plan for climate adaptation starting with an asset inventory while incorporating region specific climate projections and impacts.	Create an Asset Management Plan and inventory.	Action	Corporate Inventory completed
Maintain robust GHG emissions data collection to accurately inform decision makers and to track direct impacts and improvements.	Incorporating region specific climate projections and impacts.	Action	Next update in 2024