State of Climate Action in the RDCK
2021 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. These pathways fall under two overarching categories:

1 Reducing Risks of Climate Change (Climate Mitigation)

- LAND USE & PLANNING
- TRANSPORTATION & MOBILITY
- ENERGY
- BUILDINGS
- RESOURCE RECOVERY

2 Building Climate Resilient Communities (Climate Adaptation)

- WATER SUPPLY
- FOOD SUPPLY & AGRICULTURE
- FLOODING & GEOHAZARDS
- WILDFIRE
- CORPORATE ADMINISTRATION

HOW TO READ THIS DOCUMENT

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

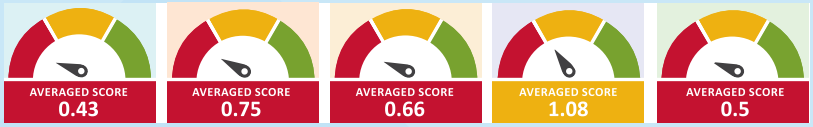
Level 1 *(page 1 and 7)* is a quick snapshot of pathways, goals and the average score for each of the 10 pathways.

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 2021 or why an indicator hasn`t changed.

Level 3 *(to come)* will provide links for more information and ways to get involved. This will be included in the online version.

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.



Why so red for 2021?

While the RDCK is ambitious in it 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.

1 Reducing Risks of Climate Change (Climate Mitigation)

GOAL 1 100% Renewable Energy[1] and Carbon Neutrality[2] by 2050. Mid Point - 50% reduction of GHG's by 2030.

GOAL 2 Develop sustainable land use patterns through robust planning policy and regulation to mitigate flood, geohazard and wildfire risks and preserve the landscape.

PATHWAY	LAND USE & PLANNING	TRANSPORTATION & MOBILITY	ENERGY	BUILDINGS	RESOURCE RECOVERY
GOALS	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.	A seamless regional transportation network to connect communities throughout the region through: • active transport lanes • zero emission vehicles • low carbon personal transportation • low carbon public transportation	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.	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 buildings with lifetime materials, energy efficiency and whole-systems thinking in mind will reduce greenhouse gas emissions.	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.
SCORE	 AVERAGED SCORE 0.43	 AVERAGED SCORE 0.75	 AVERAGED SCORE 0.66	 AVERAGED SCORE 1.08	 AVERAGED SCORE 0.5

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

PATHWAY: LAND USE & PLANNING

OBJECTIVE	INDICATOR	CONTROL 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.	Control	• 4/10 older than 10 years. • Area I OCP will be completed 2021/2022, areas H and J in the cue
Integration of the Community Wildfire Protection Plan (CWPP) and floodplain mapping into OCP's.	Number of OCPs with updated policy framework for hazards (flood, fire, erosion).	Control	• 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 (DPAs).	Control	• 0 - None in 2021, however meetings have been held in 2 electoral areas • Project for 2022 to develop wildfire DPAs
	Number of Industrial Commercial & Resort Commercial & Residential Cluster Development Permits.	Control	• 3
	Number of Environmentally Sensitive & Watercourse Development Permits issued.	Control	• 11

PATHWAY: TRANSPORTATION & MOBILITY

OBJECTIVES	INDICATOR	CONTROL 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.	Control	• 0
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 management system, but has not began this process yet
Promote and support mobility for residents with a focus on vulnerable communities.	Annual public transit ridership.	Influence	• Ridership increase in 2021 and a new transit plan was created by BC Transit and endorsed by the RDCK Board

PATHWAY: ENERGY

OBJECTIVES	INDICATOR	CONTROL or INFLUENCE	UPDATE
Lower total workplace GHG emissions and energy consumption in both corporate and RDCK controlled community building structures/facilities.	Total corporate GHG emissions (tCO2e).	Control	• Waiting for reports from Portfolio Manager
	Total corporate energy consumption.	Control	• 71.8 GJ heavy fuel oil • 9,070 L propane • 48,655 GJ natural gas • 86.2 GJ diesel/bio-diesel • 16,533 L diesel standard • 48,109 L gasoline
Support regional implementation of the West Kootenay 100% Renewable Energy Plan.	Adoption of 100% Renewable Energy Plan.	Influence	• Board committed to 100% renewable energy by 2050 (carbon neutrality) • Rural Affairs Committee met to review proposed actions and consider how to proceed with 100% renewable energy plan so that it supports the unique needs of the rural landscape.

PATHWAY: BUILDINGS

	OBJECTIVES	INDICATOR	CONTROL or INFLUENCE	UPDATE
COMMUNITY	COMMUNITY BUILDINGS & PART 3 - Align with provincial Step Code timeline for Part 3 buildings, encouraging community organizations to push for Net Zero Ready for all new builds by 2030.	Number of buildings achieving Step Code 3/4.	Control (up to mandated Step)	• Step 1 adopted in all of RDCK but Creston as of Q1 2021
	RESIDENTIAL BUILDINGS & PART 9 - Align with provincial Step Code timeline for Part 9 buildings, encouraging residents to push for Net Zero Ready for all new builds by 2030.	Number of buildings achieving Step Code 3/4/5.	Control (up to mandated Step)	• Step 3: 20% more efficient – 34 • Step 4: 40% more efficient – 19 • Step 5: Net zero ready – 2
	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	• 617 registered as of September 3rd, 2021 • REEP progress slowed due to COVID • REEP 1.0 Now complete • REEP 2.0 will continue the support for residents under REEP to drive to target
		Number of businesses that have commercial energy audits.	Influence	• 60
		Reduction of GHG emissions from REEP housing stock.	Influence	• 223.9 tCO2e (target of 309 tCO2e)
CORPORATE	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 (aligns with 100% Renewables Kootenays goal).	Number of buildings achieving Step Code 3/4.	Control	• Castlegar Rec Centre being used as a test case - Aiming for Step 3/4
	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.	Control	• Board review of Better Buildings Policy & Procedures drafts in winter 2021 • Lakeside improvements using Better Building policy for guidance • 3 Rec Centres using recommissioning to improve performance • Arrow Creek Water facility feasibility study propane to natural gas
	Monitor energy efficiency for all RDCK buildings.	Drop in energy consumption of corporate buildings.	Control	• RDCK buildings profile on Portfolio Manager is being developed (some buildings left to set up)

PATHWAY: RESOURCE RECOVERY

OBJECTIVES	INDICATOR	CONTROL 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.	Control	• RDCK Resource Recovery Plan has now complete • Creston compost facility construction underway with intent to start composting spring 2022 • Central compost facility construction will start spring 2022 with composting to start fall 2022 • Construction of organics transfer infrastructure at Ootischenia Landfill and Grohman Narrows Transfer Station planned for 2022
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	• Dependent on completion of a waste composition study • Planned increases in curbside recycling collection services • Investigation of rural curbside organics collection service for area near facilities to continue in 2022
Transition landfills to capture or treat (using flares or biofilters) methane.	Reduction in GHG emissions through methane capture or treatment.	Control	• The opportunity to integrate compost into landfill cover systems to passively treat landfill gas emissions is being explored as a more cost-feasible approach to landfill GHG reductions or at least as a transitionary solution
Complete a waste composition study to create a baseline for the RDCK and measure effectiveness of Resource Recovery Plan and Organic Waste Diversion Strategy.		Control	• Development of an RDCK-specific waste composition study

2 Building Climate Resilient Communities (Climate Adaptation)

GOAL 1

Develop climate adaptation strategies and programs which inform and empower residents, business owners and local governments to create climate resilient communities.

PATHWAY	WATER SUPPLY	FOOD SUPPLY & AGRICULTURE	FLOODING & GEOHAZARDS	WILDFIRE	CORPORATE ADMINISTRATION
GOALS	Strengthen watershed governance and implement strategies to protect drinking water. Provide opportunities for residents to reduce water consumption. Upgrade capital infrastructure. Development, approval and implementation of a Leak Detection Strategy (LDS) and Metering Implementation Strategy (MIS).	Empower communities to build secure & sustainable food systems through climate adapted agricultural strategies.	Reduce community vulnerability through flood risk assessments and assess infrastructure for adaptation opportunities against increased flooding and geohazard events.	Reduce fire risk around the wildland - urban interface of communities and within each community of the region while adapting to more frequent and intense fires.	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.
SCORE	AVERAGED SCORE 1.0	AVERAGED SCORE 1.33	AVERAGED SCORE 1.0	AVERAGED SCORE 1.2	AVERAGED SCORE 0.6

PATHWAY: WATER SUPPLY

	OBJECTIVES	INDICATOR	CONTROL or INFLUENCE	UPDATE
COMMUNITY	Advocate and empower communities in managing their water systems.	Funding accessed for small water system users to support resilience planning.	Influence	• Limited funding available
	Focus on water protection as well as watershed landscape planning.	Implementation of the WGI.	Control	• Phase 2 complete, developing phase 3
	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	• No irrigation assessments were completed due to COVID and lack of funding • Formal WaterSmart program was not run, but tours and educational exercises happened in the demonstration xeriscape gardens
	Undertake and complete capital infrastructure upgrades to address system leakage, storage capacity, or water quality concerns.	Reduced number of mainline breaks and system leakage.	Control	
		Reduction in water consumption after metering installation.	Influence	• Consumption reports for the year not yet completed
CORPORATE	Continue management of our own systems.	Level of monitoring our systems.	Control	• Phase 3 of the WGI will determine feasibility of establishing monitoring stations in RDCK water systems
	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 LDS.	Control	• Strategy now approved by Board. • Passed 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 MIS.	Control	• Strategy now approved by Board. • Passed a Metering Implementation Strategy

PATHWAY: AGRICULTURE & FOOD SUPPLY

OBJECTIVES	INDICATOR	CONTROL 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	• As a result of the KBFA Adaptation Strategies for Agriculture Plan, a number projects were developed under the Climate Agriculture Initiative (CAI) • **Completed Projects:** On-Farm Flood Planning and Preparedness project; Weather Monitoring Assessment project; Enabling On-Farm Research project • **On-going/future projects:** The Irrigation Optimization project (nearing completion); Collaboration for Floodplain Restoration project; Soil Management Practices for Vegetable Production project
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 Boundary Adaptation Strategies plan).	Overall increase in agriculture production: number of acres in production (farmland use).	Influence	Awaiting 2021 Census results, 2016 results: • 127,129 ha • $90,878,389 • 1,157 farms
	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).	Control	• 16 ALC applications (non-adhering residential use, non-farm use, subdivision applications) • Changes to ALR exclusion requirements made in 2020 – must request through OCP or similar policy project, or as block request (5+ properties or >5 hectare areas) to apply
Maintain the agricultural extension service through the KBFA in the RDCK.	Continuation of agricultural extension service in RDCK through KBFA.	Control	• Extension service maintained • Food security Action Plan - spent 335,000 leveraged 1.6 million

PATHWAY: FLOODING & GEOHAZARDS

OBJECTIVES	INDICATOR	CONTROL or INFLUENCE	UPDATE
Consider flood and geohazard risk within the RDCK when making land use decisions.	Number of Site-Specific Floodplain Exemptions.	Control	• 5 (1 cancelled)
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 and being available for the public.	Control	• Currently in Stream 3 of the Natural Disaster Mitigation Program (NDMP) • Short list to be created from 16 high priority hazard areas identified in Stream 2 • Mitigation concept designs to be developed for shortlisted areas, and options analyses with costs and recommendations on preferred options to be brought to the Board
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	• Currently challenging a denied grant application to acquire a tool suitable for the development of risk tolerances in the RDCK
Create risk reduction strategies for identified high risk areas.	Development of risk reduction strategies for identified high risk areas.	Control	• Once developed can create a land-use map that considers these risk reduction strategies
Establish acceptable risk tolerance threshold for all areas in the RDCK.	Incorporate risk tolerance and risk reduction into zoning and OCP's.	Control	• Future OCP's will include risk reduction strategies for identified high risk areas
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	• NEPP handbook/guide completed in 2021 and 8 communities have began this process (Silverton, Argenta/Johnson's Landing, 6-Mile, Bonaventure Trailer Park, Burton, Riondel, 4-Mile, Sproule). • Currently a template for NEPP is being finalized

PATHWAY: WILDFIRE

OBJECTIVES	INDICATOR	CONTROL or INFLUENCE	UPDATE
Increase the number of FireSmart Neighbourhoods that participate in the FireSmart Community Recognition Program.	Number of FireSmart Neighbourhoods recognized as FireSmart Communities.	Influence	• 14 (22 established FireSmart neighbourhoods currently pursuing recognition)
Increase the number of FireSmart Home Partners Home Assessments.	Number of FireSmart Home Partners Home Assessments completed annually.	Influence	• 326
Increase the number of FireSmart Home Partners certifications given.	Number of homeowners received FireSmart Home Partners certification.	Influence	• 3
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.	Control	• Acquired a Community Resilience Investment (CRI) grant for the inclusion of urban wildfire interface areas in development permit areas (DPAs), and currently drafting a Request For Proposal for Wildire Hazard DPAs
Mitigate and adapt to wildfire risk by creating fuel-breaks around at-risk communities.	Number of hectares treated (or number of dollars spent).	Control/ Influence	• Landscape-level fuel mitigation is funded through a variety of funding sources, so accurate and consistent data is currently hard to collect

PATHWAY: CORPORATE ADMINISTRATION

OBJECTIVES	INDICATOR	CONTROL 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.	Control	• A Better Building Policy has been drafted and will be brought to the RDCK Board winter of 2021
	Carry out a carbon budgeting tool.	Control	• An internal carbon pricing tool has been drafted and will be brought to the RDCK Board for review
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.	Control	• Asset Management Planning is being brought to the Board in winter of 2021
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.	Control	• Plan to update on 4-year cycle