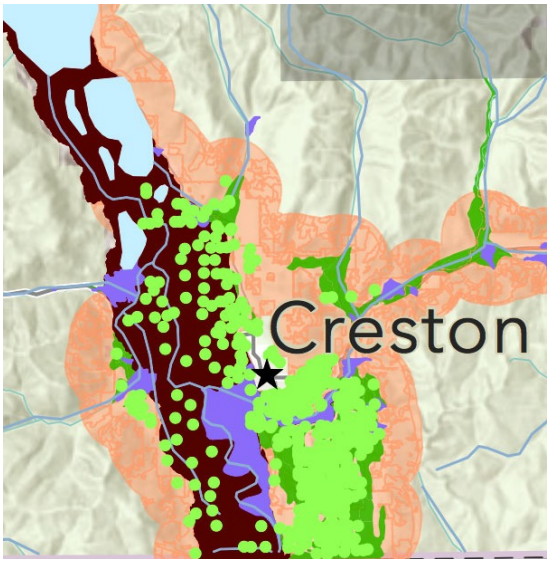
Evidence-based Food Policy Project

Policy Brief



CENTRAL KOOTENAY FOOD POLICY COUNCIL

Fostering a just and vibrant food system

Abra Brynne
Executive Director
December 2020

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Background

Project Overview

The Evidence-based Food Policy Development Project project was a civil society, government, and academia collaboration, led by the Central Kootenay Food Policy Council. Our partners included the Rural Development Institute and the Applied Research & Innovation Centre at Selkirk College, the Institute for Sustainable Food Systems at Kwantlen Polytechnic University, Interior Health, the Regional District of Central Kootenay, Kootenay & Boundary Farm Advisors, and the West Kootenay Permaculture Coop.

The project had the goal of developing an evidence base and strategic rationale for food policy development that can best support and promote sustainable land and water use and vibrant food economies for the long term. We sought to understand how factors such as land prices, climate change, proximity to flooding and fire risk, and other factors would impact current and future farmers and the overall resilience of the Central Kootenay food economy.

The first step, in collaboration with our academic partners and the RDCK, was to identify all accessible and relevant datasets and sources. Simultaneously, a scope of research document was created collaboratively by the partners to aid in focusing the work. Once this was completed, analysis of the available data was delegated to the appropriate project partner with the most relevant in-house expertise. Each academic partner created a set of products related to their respective data and research. These products fed into the formulation of the policy recommendations in this Policy Brief, along with existing RDCK documents, including the Agriculture Land Use Inventory, Comprehensive Land Use Bylaws, and other relevant policies and plans.

This project was launched in 2019, originally intended to wrap up in June 2020 but extended to the end of 2020 due to the impacts of the COVID-19 pandemic. The events of 2020 and the impacts on supply chains, essential workers, and economies have only reinforced the value of strengthening measures that enable and bolster a secure local food system.

Basis for Policy Formulation

The recommendations were formulated based on a combination of the original research questions and grounded in the results of the data analysis. Three key themes arose from the data analysis and these provided the framework used in the Brief for the recommendations: Land Use and Access; the Agricultural Land Reserve; and Climate Change impacts.

We have structured the recommendations to align with the consolidated land use bylaws and official community plans: Objectives followed by Policies. The policies formulated all apply to Official Community Plans, rather than the specifics of Zoning. We hope to see our recommendations embedded in zoning bylaws eventually. However, by introducing them at the level of objectives and policies, they provide direction and aspiration while allowing for the time that may be necessary to generate support amongst the impacted residents for any of the proposed changes before they are embedded in zoning.

Resources

As noted above, various resources developed over the course of the project by the academic partners provided the context for the formulation of our policy proposals:

1. "Potential Crops Suitable for Central Kootenay Region in a Changing Climate Regime" by the Institute for Sustainable Food Systems at Kwantlen Polytechnic University (KPU), June 2020.
2. "Research Brief on ALR Land Price and Non-farm use and Subdivision Activities in the Regional District of Central Kootenay" by Wallapak Polasub, Alexander Stark and Kent Mullinix at the Institute for Sustainable Food Systems (KPU), June 2020.
3. "ALR and Assessed Farmland Overlap in the RDCK" by the Applied Research & Innovation Centre at Selkirk College in collaboration with the Selkirk Geospatial Research Centre, June 2020.
4. The RDCK Food Policy Web App, powered by ESRI and hosted at https://selkirk.maps.arcgis.com/apps/webappviewer/index.html?id=b42d800ecc87400dbe28a0d97df32a7a
    I) Navigation Guide to the RDCK Food Policy Web App, found within the app
    II) Layers list for the Web App
    III) Glossary to the terms used and data sets available in the Web App
5. Map of ALR properties sold in 2018 by price per acre
6. Map of Soil Quality, Flood Risk, and Wildland Urban Interface Zones
7. Map of RDCK area covered by Zoning and Official Community Plans
8. Map of Soil Quality and Water Access points
9. Map of Agricultural Capability

All documents can be found on the dedicated Evidence Project page on the Food Policy Council's website: ckfoodpolicy.ca/evidence

Policy Proposals

Land Use & Access

Land Use & Access Background

The impacts of COVID-19 on long supply chains around the world and across sectors heightened an awareness of the value of having a secure source of the goods deemed essential. Food is clearly high on the list of essential goods and, for most food stuffs, relies on a land base and adequate water supplies to be realized. No less important are the people who farm that land. While homesteading and gardening have a long history of contributing to household level food security in the region, those engaged in commercial farming with product intended for markets are vital for our collective food security.

The RDCK has diverse ecosystems, soil types, markets and land values. Agriculture requires a secure land base, both as a region but also for the individual farmers. Farmland in the Nelson and Creston areas consistently have the highest average prices in the regional district. Nevertheless, larger parcels also consistently have lower prices per acre, offering options for those able to secure and, perhaps, share the land.

The challenges faced by those who want to get into farming are well documented. Programs like Young Agrarians and FarmLink help to overcome those challenges. There are, however, additional initiatives that could be put in place to increase the number of active, successful farmers, including various incentives for land-sharing. Nebraska provides tax incentives to to those who large land holdings to carve out a portion and make available to new farmers (https://nextgen.nebraska.gov/bf_eligibility.html). There are also models for crop share arrangements that reduces the need for the new farmers to provide cash up front that they may not have or that could be put to better use investing in infrastructure such as fencing or irrigation. Land sharing on established farms comes with many benefits which can include access to equipment (machinery, hand tools), infrastructure (barns, irrigation, fencing), established healthy soils, markets, and mentoring. The success rate of new farmers is enhanced when they are able to build their skills, markets, and savings while working on shared farmland.

Key information identified in the data analysis:

- 42% of the land sold is less than 5 acres; 67%% is less than 10acres.
- low percentage of properties sold with farm class relative to the whole is an encouraging indicator that established farmers are not likely to sell until they are ready to stop farming at that site.

Land Use & Access Objectives

1. To foster stable farmland tenure.
2. To reduce the amount of un-used farmland.
3. To lower barriers to accessing land for new farmers or those wishing to expand their operations.
4. To create circumstances for best chance of success for new farmers.
5. To privilege commercial farming over other uses on land zoned for agriculture or in the ALR.
6. To eliminate, to the degree possible, speculative investments in farmland and privilege local ownership.

Land Use & Access Policy Proposals

7. Promote consolidation of agricultural parcels wherever possible.
8. Explore options for lower mil rates (taxes) for landowners who provide extended (5 years +) leases to landless farmers.
9. Consider developing zoning specifically for collective or cooperative farms in order to remove barriers to multi-party farm enterprises that may need special provisions, for example, dwellings.
10. Promote construction of accommodation above existing farm buildings in order to limit stress on land available for production.
11. Require credible business plans for collective / cooperative farms.
12. Ensure enforcement of decommissioned buildings removal in the ALR (which helps to lower land values).

Land Use & Access Related Proposals

13. Engage with the provincial government to revise farm income levels necessary for farm tax status, with the goal of maximizing agricultural use of the land.
14. Explore options with the area's Credit Unions and the Columbia Basin Trust to establish an "Aggie Bond", dedicated to providing loans for start-up farmers.

Agricultural Land Reserve

ALR Background[1]

The RDCK contains almost 162,000 acres of ALR land and almost 31,000 acres classified as farm land by the BC Assessment Authority. Of the land in the ALR, only 16% is actively farmed. Of the land that meets the BC Assessment criteria for income derived from farming, 83% is in the ALR.

- 73% of properties in the ALR do not have farm tax classification.
- non-farm use applications to the ALC tend to be approved more readily than subdivisions, in keeping with their mandate to preserve agricultural land.
- 85% of the properties that were approved for subdivision by the ALC were sold in the following year.
- Between 2006 and 2018, 306 agricultural parcels in the RDCK were sold multiple times.

ALR Objectives

1. Maintain viable agricultural parcels in the RDCK.
2. Maintain or expand the area of land in the ALR.
3. Maximize active farming on ALR land and reduce the acreage of long-term fallowed land.

ALR Policy Proposals

4. Wherever possible, ensure that residences and related infrastructure are sited close to property lines and not on land best suited to cropping.
5. Consider reducing the maximum limit for residential footprint on farmland.
6. Consider creating a Regional Growth Strategy that will help to alleviate stresses on individual agricultural parcels to “development” for other uses than farming.
7. Explore amending rural residential zones to include secondary use that provides off-site accommodations for farmers and farm workers.

ALR Related Proposals

8. Engage with the provincial government to remove tax incentives on ALR land that is not commercially farmed.
9. Collaborate with Selkirk College’s Applied Research & Innovation Centre and Rural Development Institute to assess the factors that drive repeated sales of the same agricultural properties in order to identify options for stabilizing agricultural land ownership.
10. Collaborate with farm organizations and economic development agencies in the region to provide full service supports for strengthening the business of and expanding opportunities for established and new farmers.
11. Work with the Real Estate Foundation of BC and Kootenay Real Estate organizations to reduce speculative investment in farm land.

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[1] This section draws on the reports produced by project partners at Selkirk College’s Applied Research & Innovation Centre and the Selkirk Geospatial Research Centre and at the Institute for Sustainable Food Systems at Kwantlen Polytechnic University found on the Project website: ckfoodpolicy.ca/evidence.

Climate Change

Climate Change Background
Climate change is affecting precipitation patterns across the seasons and could negatively impact the agricultural capability of the region without significant mitigation and adaptation measures, including changes in crop varieties and types as well as management practices. Precipitation is predicted to increase during the autumn, which may affect harvest across many sectors, in addition to impacting peak flows timing and channel stability. Increased precipitation in the winter that comes in the form of rain will increase flooding events. Reduced snowpack combined with higher average daily temperatures in the spring will result in earlier spring freshet, reduce summer flows and decrease groundwater storage. (see Table 6, Potential Crops) Decreases in summer precipitation may result in adverse effects on drought sensitive forage crops such as Timothy and alfalfa, which are under pressure around the world as a result of climate change. Increasingly unpredictable and severe weather events will also impact some tree fruit varieties more than others, necessitating better adapted cultivars. (Potential Crops, pages 14 - 15)

“Facing the increasingly difficult challenge of adapting to climate change, farmers in the RDCK are looking for alternatives to maintain and increase the production of their farming operations, while remaining ecologically and economically viable.” (Potential Crops, page 15) While new crops may be possible under the changing conditions, these will not succeed without a learning curve to master any different agronomic practices as well as the development of and access to markets. Crop and cultivar trials will be necessary, as well as the support provided by the Kootenay Boundary Farm Advisors.

While autumn, winter, and spring will bring more precipitation with climate change, increased heat and reduced precipitation during the summer could result in an expanded use of mulches. Where the mulches are plastic, this could result in an additional waste stream that will need to be managed effectively. Other measures to support soil health include reduced or no-tillage, cover cropping and crop rotations. Peer to peer farmer training as well as the services of Kootenay Boundary Farm Advisors will assist in increasing the rate of adoption of these practices. Summer heat and reduced precipitation also increases wildfire risk.

Locally adapted seeds are more tolerant of weather shocks and other pressures. Grain and some vegetable producers in the area already save their own seed but commercial production of local seeds would provide another income stream for farmers and build up the supply of locally adapted seeds. (Potential Crops, page 27).

The impacts of climate change, as documented in the Institute for Sustainable Food Systems’ Potential Crops Report, as well as in many regional climate change reports of the past decade, point to the importance of ongoing support for farmers as they seek to adapt to the changing climate.

The multi-layered map created by the Selkirk Geospatial Research Centre faculty and staff and housed on the RDCK’s mapping platform provides a dynamic tool for use by RDCK staff and elected officials to ground land use planning decisions in real world data. Assessment by RDCK staff indicates that much of the data will be readily or routinely updated, ensuring the ongoing utility of the tool.

Climate Change Objectives

1. Support farmers adapting to the impacts of climate change on their production, harvests and management practices.
2. Support farmers to institute changes that can reduce their greenhouse gas emissions.
3. Ensure adequate water available for irrigation and other essential uses on farm.
4. Protect structures from flood damage.
5. Ensure that increased use of plastic mulches does not result in increased waste stream burden for the RDCK.

Climate Change Policy Proposals

6. Privilege food production access to water, linked to requirements to follow best practices in irrigation timing and equipment.
7. Amend bylaws to require maintenance, and enhancement where possible, of riparian areas in all zones in order to mitigate flood events and GHG emissions, and to provide an effective fire break.
8. Establish a more frequent schedule than has been done in the past and use current data to update the Floodplain Management Bylaw, specifically definitions and setbacks related to floodplain and flood construction levels.

Climate Change Related Proposals

9. Maintain the funding contribution to the Kootenay Boundary Farm Advisors program, in the absence of a provincially run and funded agricultural extension service.
10. Work with partners to develop and deliver a granting program to support farmers to transition to irrigation equipment that will maximize water use efficacy and reduce water loss.
11. Work with relevant partner organizations (Columbia Basin Trust, accelerate Kootenays, BC Hydro and others) to continue to expand electric charging options in communities and provide incentives for on-farm fast charging stations.
12. Establish and maintain relationships with the Applied Research & Innovation Centre, Kootenay Boundary Farm Advisors, and BC Agricultural Climate Adaptation Research Network and the Ministry of Agriculture to access research on impacts, adaptation strategies, and best practices closely tied to the sectors and on-farm practices within the RDCK.
13. Work with area farm organizations and business leaders to develop market opportunities for new varieties and crops that can thrive in our region under a changing climate.
14. Ensure that the Emergency Operations Centre has access to a current database of livestock farms in the Region to facilitate emergency removal of animals in the event of wild fire or flooding. The provincial Premises ID is a key source but may not include all area farms.
15. Work with local agricultural organizations, stream keepers, and tree nurseries to encourage and enable planting of deciduous trees in riparian areas, along streams, and on non-arable farmland.
16. Draw on the model in the District of Kent and other innovations in recycling to minimize agricultural plastic waste that may come from an increased use of plastic mulches.

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