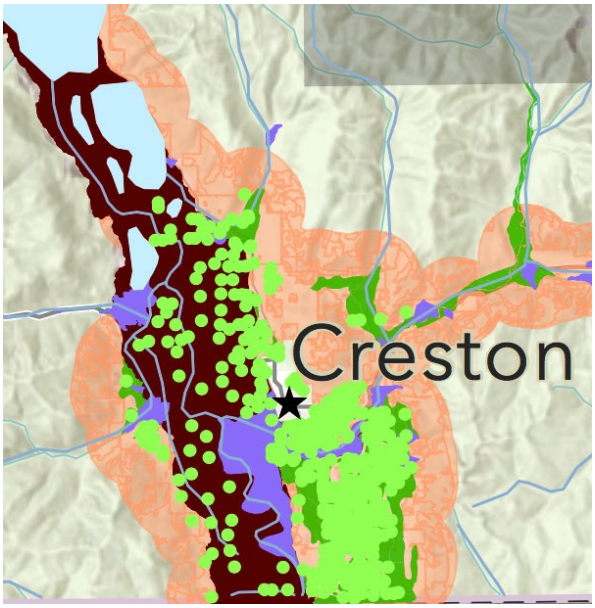
Evidence-based Food Policy Project

Case Study



CENTRAL KOOTENAY FOOD POLICY COUNCIL

Fostering a just and vibrant food system

Abra Brynne
Executive Director
December 2020

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With gratitude, the Central Kootenay Food Policy Council acknowledges the support of the Real Estate Foundation of BC. We also acknowledge and appreciate the funding support provided by the Columbia Basin Trust, and RDCK Directors Jackman, Watson, Faust, Newell, Cunningham, Popoff, and Peterson.

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Project Overview

The Evidence-based Food Policy Development Project 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.

This project was a civil society, government and academia collaboration, led by the Central Kootenay Food Policy Council. Our partners included 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 policy recommendations which also included the review of existing RDCK documents, including the Agriculture Land Use Inventory, Comprehensive Land Use Bylaws, and other relevant policies and plans.

The project was to wind up with a series of engagements and public education. The COVID-19 pandemic necessitated shifting plans. We were able to continue working with the RDCK to finalize the mapping products. We were also able to develop policy proposals to be considered in 2021 with the intent of lowering barriers for farmers and promoting sustainable food systems, vibrant agriculture economies, and climate change adaptation.

By mid 2020, it was clear that we would be unable to host any in-person public engagements. We therefore shifted our attention to creating a series of educational materials aimed at teenagers and adults to deepen their understanding of food systems and demystify public policy, thereby encouraging engaged and informed public participation in policy development. We have integrated a communications plan for the products of the project into the Council's 2021 Work Plan.

Methodology

The success of this project depended on partnerships between key actors, namely the food policy council, the regional district and academic partners. The partners brought technical expertise in planning, GIS, methodology, data analysis, policy, and food systems. These partnerships were readily put in place due to long established relationships with the Food Policy Council Executive Director. Each partner contributed significantly to the substance of this project:

- The Food Policy Council fulfilled the role of project lead, manager, and food systems content expertise;
- The Central Kootenay Regional District enabled access to proprietary datasets, and provided personnel to sit on the Advisory Committee and to assist the academic partners in their data access and analysis;
- The academic partners - the Institute for Sustainable Food Systems at Kwantlen Polytechnic University, and the Applied Research & Innovation Centre at Selkirk College - each provided a combination of faculty and students who undertook the data analysis and generated reports and maps.

In order to create an evidence base for the development of policy proposals, it was necessary to develop an understanding of what data sets were available and how they could be used to better understand impacts on the land, water, population and food systems of the Central Kootenay. We drew inspiration from Jessica Letizia's 2018 Thesis for her Masters in Environmental Studies is entitled "GIS as a Decision Support Tool in Regional Food Systems Policy Implementation". In her thesis[1], Ms Letizia, identified spatial data that could support decisions related to the implementation and monitoring of the specific goals in Calgary's 2017 regional food strategy.

Because we were not starting from a set of established goals, our approach was diametrically opposed to Ms Letizia's. We implemented an iterative approach to creating the evidence base that was driven by two interrelated questions:

1. What were our key research needs related to specific elements of the region that could strengthen or undermine the food systems of the region?
2. What data sets specific to the Central Kootenay Regional District exist and could be accessed?

The answers to question number 1 was created through a group and iterative process led by the Food Policy Council. The goal was to refine specific research questions that could be addressed, at least in part, by an analysis of spatial and other relevant data. The research questions can be found in Appendix A. The questions were grouped by category and then numbered so that they could be cross-referenced with the data sets. Over time, it was determined that not all research questions could be addressed due to a lack of data or the lack

[1] Available here: http://dx.doi.org/10.11575/PRISM/5450

of time and resources to capture and make them accessible, such as plotting the location of contaminated sites, or of schools relative to fast food outlets.

The answer to question number 2 was facilitated by the fact that the Regional District owned or had ongoing access to some relevant data sets and which they made available to the project partners. Each of our academic partners also had existing contractual relationships with different bodies that enabled access to data sets that are not otherwise publicly available, such as those from BC Assessment. To understand the scope of the material that could be available for analysis, a spreadsheet was created on the cloud and filled in collaboratively by project partners. Each data set was then linked to a relevant research question. The spreadsheet can be found in Appendix B. The spreadsheet captures the availability of the data sets, their source and location. Data was also colour coded on the spreadsheet to identify, for instance whether or not it is geo-referenced (and therefore able to plot on a map) or requires permission to access.

When it was clear what data would be available and which questions could be answered, the specific tasks were delegated to each of the academic institutions, based on their respective personnel and program expertise and relevance. A memorandum of understanding and contract was created by the Food Policy Council for each of the academic partners.

The Institute for Sustainable Food Systems at Kwantlen Polytechnic University focused on land ownership, price, and status and provided a report on potential crops suitable for the changing climate in the Central Kootenay. The Applied Research and Innovation Centre at Selkirk College led the work on mapping and created a report that captures lessons learned over the course of this multi-disciplinary rural research project (see Appendix C). The two academic institutions shared information and also enabled access to each other's relevant data.

The Senior Planner with the Central Kootenay Regional District was involved closely throughout the project. He sat on the Advisory Committee, provided feedback and insights, and also directed his GIS staff to assist with the map development. The entire Advisory Committee was involved in supporting the project direction and implementation, representing diverse fields, including health and farming.

Parallel to the data analysis focused on local government purview was a complementary initiative to reach and engage citizens in the Central Kootenay. A specialized Advisory Committee was created to guide the development of educational materials that would foster "food citizens". This group represented diverse backgrounds and skills and contributed significantly to the refining of vision, audience, content and visuals. The intent was to create educational materials that would spark both curiosity and the desire to learn more, as well as an increased sense of agency in each individual about their ability to create food systems that contribute to a range of shared goals, including environmental, social, personal, and economic well-being.

Policy recommendations were created, led by the Executive Director of the Food Policy Council, an acknowledged food policy expert and lead author of the Central Kootenay's Agriculture Plan. The recommendations were grouped to align with the categories used in the original research

scoping document: Existing Farmers; New Farmers; Hunger & Nutrition; and Food Economy / Systems. (See Appendix D)

Results & Lessons Learned

Partner Collaboration

The project was able to launch quickly because of the existing and strong relationships that existed between the Food Policy Council and key personnel at each of the partner organizations. Questions related to sharing of data, expertise and platforms did not arise as a result of the strong trust that already existed.

Nevertheless, as can often be the case when a small non-profit collaborates on a project with an academic partner, there are many unknowns that can include administrative minutiae as well as academic cycles and student / faculty availability, some more complex to resolve than others. For this project, the formal arrangement with each academic partner took different forms, had distinct payment schedules, and involved navigating financial protocols at remote sites. It took longer than anticipated to finalize and formalize the research memoranda of understanding. Nevertheless, the protracted legal processes did not unduly delay progress on the substance of the work together. Despite these formal MOU's, there were still areas that were not covered, resulting in some confusion over who was responsible for copyediting documents created by project partners, for example.

The original project plan intended a contract with West Kootenay Permaculture Coop to help to create and then deliver educational materials. With the COVID-19 outbreak, this aspect of the project had to be reconfigured and no longer necessitated their services. A contract was drawn up to engage the illustrator hired to create the educational materials.

An unplanned partnership with the University of British Columbia's Land & Food Systems program was integrated into the final four months of the project. This partnership was covered by an agreement between the Council and UBC and included learning outcomes for the students as well as an expectation that they would create educational materials for the Evidence Project.

The partnerships implemented through the project resulted in some unanticipated benefits. The two academic partners had not previously worked together and found a lot of alignment between their respective community-oriented and applied research mandates. It is expected that this will result in future partnerships between the two, including a possible bio-regional food systems project that has been in development for the Columbia Basin for some time, led by the Institute for Sustainable Food Systems.

The funds that the Council provided to Selkirk College for the work being undertaken by the Applied Research & Innovation Centre were used as matched funding for two successful Mitacs applications, resulting in additional resources to support the students who were contributing their time and expertise to the project.

Data access & use

The idea to make better use of data accessible to or owned by the Regional District actually originated with a GIS Technician with the idea using it to support decision-making processes. They were anticipating access to LIDAR data being generated by the province about the same time that the project launched.

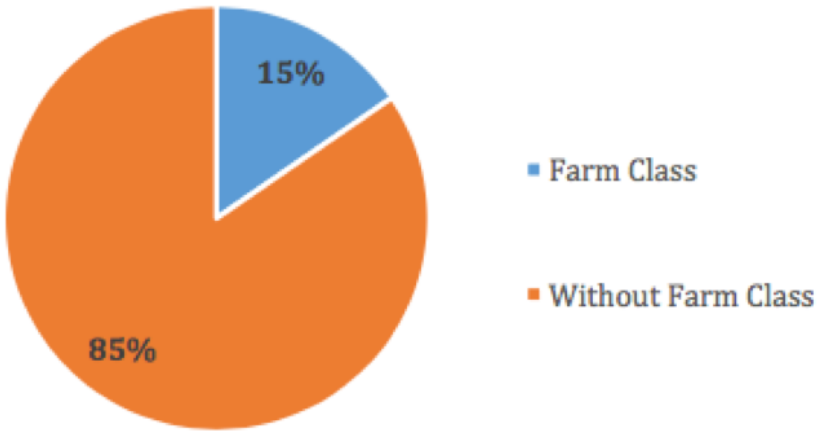
The idea to make best use of data to guide decisions originated within the RDCK. As a result, the project team had ready access to RDCK data in addition to the regular participation by the Planning Manager and other relevant personnel over the course of the project. Unfortunately, the promised LIDAR data never materialized. Initially there were equipment issues that delayed the start of the data gathering. Any access to the data was aborted completely when the aircraft carrying the data-gathering cameras crashed and destroyed the equipment. Nevertheless, the RDCK was able to make valuable datasets available and also worked closely with the GIS faculty and students.

Both academic partners had contractual relationships with data sources that they were able to make available to the project. (See Appendix B for data sources) Beyond sharing data, the two academic institutions also collaborated on analysis and refinement of materials being created for the project.

Some research questions could not be answered due to lacuna in the data available. Other data could not be used due to a lack of geo-referencing. Without a geo-reference, it is not possible to link the information to a specific community or region, which defeated the purpose of our research, which was to understand what is happening specific to a place.

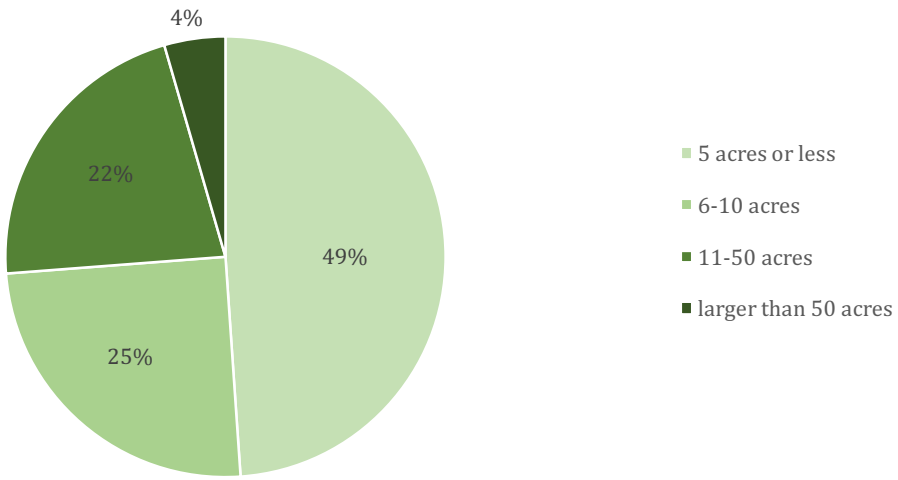
Despite some of the shortcomings related to the data, together with the project partners we were able to generate a wealth of information and materials that can be used to guide future land use planning, both at the level of the local governments and of the farm and related businesses. The study of data related to the Agricultural Land Reserve generated a lot of useful information. This pie chart provides a visual that points undeniably to the high turnover of agricultural land when farmers are not the land owners.

Figure 4: Percentage of sale transactions by farm class in RDCK, 2006 - 2018

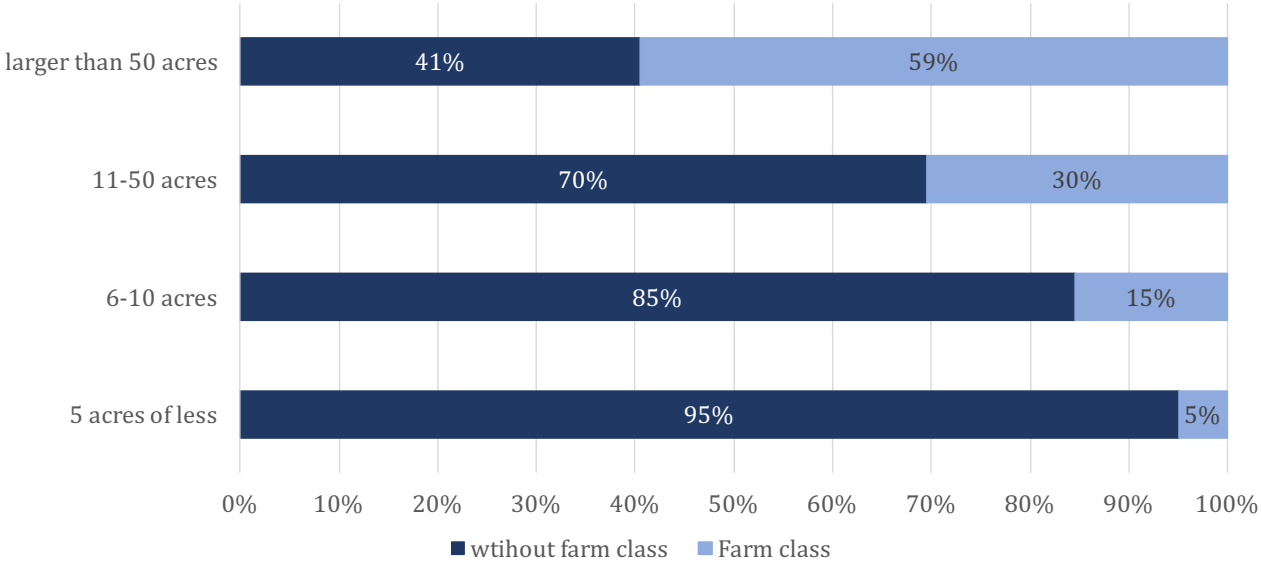


Just as telling and important for consideration by those making land use decisions are the following table and chart[2]. The first conveys the proportion of sales related to parcel size; the second depicts the percentage of those sales by parcel size that were instigated by active farmers.

Number of sale transactions by parcel size category, 2006 - 2018



Percentage of sale transactions by farm class and parcel size category in RDCK, 2006-2018



Together, these three data pieces point to the relative stability of the established farmers, who likely only sell their properties when they are done with farming on that site. It also points to the need for additional creative measures to assist those who wish to farm access the necessary land to do so. Various related recommendations can be found in the Policy Brief. (Appendix D)

[2] Pie charts & Table source:Polasub et al, Institute for Sustainable Food Systems, 2020.

COVID-19 Pandemic

The project launched in early 2019, with a projected end date of mid 2020. The results of the analysis and the products generated by the academic partners were just moving into the educational work and policy analysis when the pandemic broke out in British Columbia.

The longterm impacts of the pandemic were not at all clear in the early days but it was clear that our plans to create and disseminate educational materials through public engagement events would have to be put on hold at least initially. Our plans to engage with educators and with school children took a back seat to the more urgent questions on how to safely provide any educational opportunities for children at all. Likewise, it was clearly not the time to be providing public events aimed at an adult audience distracted by the impacts of the pandemic on their households, health and employment.

Local Government also had other more urgent matters to attend to. In the early stages of the pandemic when it became abundantly clear that long supply chains were vulnerable, the Food Policy Council was approached by the Emergency Operations Centre of the Regional District to assist them in developing an emergency food security plan, which we did. Our regular contacts at the Regional District, like so many others, both pivoted their work focus and priorities and also began working remotely. Because the Evidence Project was established from the start to work virtually, accommodating the fact that we had far flung partners closely involved in the project, we were able to continue our work but had to adjust timelines and expectations when it came to the availability of our local government partners. The end result has been the formulation of policy proposals to be considered in 2021both for general considerations and priorities and integrated into any scheduled land use planning activities such as updates for official community plans.

We were able to secure the approval of the project's two main funders to extend the project timeline by six months, which gave us time to regroup and reformulate our approach to the educational component of the project as well as give our local government partners more time to work with us on the completion of the map platform.

The Food Policy Council convened a weekly COVID Roundtable in the first four months of the pandemic, switching to bi-weekly in July and monthly starting in September. The intent of the Roundtable has been to provide space for those involved in food systems (farmers, food processors and businesses, non-profits, local government) who live and work in the Columbia Basin to discuss our work, our challenges and to help find a path forward in this pandemic – for the immediate and the long term.Though not directly related to this project, these meetings with a range of food system actors across the Columbia Basin provided information that we have been able to integrate into our policy formulation.

Educational Materials

In September, when we re-initiated the creation of our educational infographics, we discovered that Illustrator we had engaged in January was no longer available. With support from the local arts college, we were able to secure the skills of a talented recent graduate. We then established virtual meetings of the Advisory Committee with the Illustrator to support the development of the infographics.

September also saw the creation of an unexpected but serendipitous partnership with the University of British Columbia's Land and Food Systems program. Six third year students were mentored by the Executive Director of the Food Policy Council in a community-service module during which they were to create the educational materials for the Evidence Project. Weekly meetings were established during which the interests and skills of the students were drawn upon to help formulate the content for the educational materials. The original intent was to create two distinct infographics: one would be based on a pantry stocked with foods from diverse cultures; and the second one was intended to foster a healthy relationship with food and one's body, aimed at mid-teens. More than half-way through the process, the academic advisory team required that the students amend their deliverables, which they felt were too ambitious.

This change forced another adaptation of our plans for developing educational materials. The UBC students decided to not create an infographic but rather to create a presentation aimed at a mid-teen audience that would include a powerpoint and accompanying instructional guide for the teacher. The students administered a survey on the suitability and value of the content they created, which was completed by a small sample of teachers and teenagers. The UBC students integrated the feedback into their final products which was a complete lesson plan, ready for any teacher to deliver to their students. The content focuses on prompting reflection and curiosity in the students about food, its meaning, how they are influenced in their food choices, and what agency they can have in their own food experience. The materials are too large to integrate into this document but can be found here. The UBC students did create an infographic that was part of their academic requirements and which captured their process of working with the Food Policy Council. It is included in Appendix E.

Despite the happy addition of the UBC students, with the intervention by their academic team, we had to adjust our plans and focus on creating the infographics in-house, to be drawn by our contracted illustrator. The Advisory Committee worked closely with Council staff and the Illustrator, to determine audience, communications goals, medium, imagery, colour schemes and format.

In spite of the pandemic delay, the UBC change in plans, and the short timeline, we were able to create two infographics that we believe will appeal to a broad audience and contribute to deepening people's understanding of both food systems and of food policy. The first infographic is of a tomato plant in soil. The tomato plant has a set of statements that convey broader food systems information about tomatoes intended to get people thinking more about the red fruit on their plate or in their sandwich. The statements cover topics from climate change, to biodiversity, mass production, to worker rights. This infographic is scaled to be printed on a ledger size paper and posted on the wall in a classroom or other public venue to spark conversations and thought.

The tomato plant and colour scheme are referenced in the second infographic which is a landscape with a person in the front and a series of questions that all relate to food policy. The goal of the food policy infographic is to help people to make the link between their personal food choices and policy. The infographic is accompanied by explanatory text on the back. The food policy infographic is scaled for standard letter size paper, to be printed double sided. Both infographics have been printed locally and will be disseminated through our Council members, partners and contacts in environmental education and the schools. They can also both be downloaded as a pdf from our website and are contained in Appendix F.

With the pandemic, many of the teachers and schools with which we had established contact early in the year were no longer available or able to engage with the project. Nevertheless, we were able to develop a small cohort of teachers and students who provided feedback or indicated an interest in using the materials in their learning / teaching. One outcome of our new outreach that we had not anticipated but were happy to accommodate was a request to make the materials available in french. The services of a professional translator were engaged to translate the text of the two infographics into french. The french language versions will be circulated to the various french immersion classes and teachers in the schools districts within the RDCK, as well as to the Association des francophones des Kootenay Ouest (AFKO).

Communications & Outreach

The pandemic disrupted our communications implementation. We had recently received most of the products of our academic partners. We finally had some content that, under normal circumstances, we would use to catch the attention of the general public. However, by March, both conventional and alternative news streams were pretty much exclusively devoted to the ongoing impacts, evolving science, and health crises related to the pandemic. We were not, therefore, confident that we could and would be heard. So we delayed our outreach and also put our educational materials development on hold while we waited to see what the options might be, in particular for the in-person engagement planned. Over time it became clear that in-person engagement was no longer an option for at least the remainder of the project term.

In September we engaged a communications professional at the Food Policy Council as our Engagement Coordinator and she immediately set about enhancing and improving the quality of our content and visuals across all our media. She expanded our social media presence by adding Facebook and Instagram to our existing website and Twitter account. She also improved our website, the Council's overall branding, and supported the development of a blog series and more readable e-newsletters, which included pieces on the Evidence Project. Over the course of three months, our new Engagement Coordinator's efforts resulted in a steady increase in our newsletter sign-ups, "click throughs", and social media presence. She has also created a dedicated web page on our website on which all the materials are collected and organized.

Because of all the disruptions to the project and our communications strategy as a result of the pandemic, we will be rolling out a follow-up communications plan for the project throughout 2021. Our Engagement Coordinator is particularly skilled at identifying content suitable for a range of media and that should and can be amplified through new and creative media channels. With all the materials created over the course of the project, there will be an abundance of content to draw on and use to help deepen the impact of the project.

Policy Development

Policy recommendations were captured in document entitled “Policy Brief” (found in Appendix D). The recommendations were formulated based on a combination of the original research questions and scope and then grounded in the results of the data access and analysis.

The Policy Brief itself is structured to align with those found in the RDCK land use documents, such as the consolidated land use bylaws and official community plans, namely Objectives followed by Policies. 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 ALR; and Climate Change impacts.

The Policy Brief was submitted to the RDCK at the end of December. The delayed submission reflected both the ongoing challenges posed by the pandemic to the project timelines over the course of 2020, as well as the pre-occupation of the RDCK with the pandemic and remote work constraints. Nevertheless, the collaboration between the Food Policy Council and the RDCK over the 2 years of the project has prepared the ground well for due consideration of the proposals contained in the Policy Brief. Moreover, additional collaborations in 2020 between the two agencies demonstrates that the RDCK is increasingly seeing the Food Policy Council as content experts on both food systems and food policy: the RDCK has engaged the Council for guidance in responding to the threat that the pandemic poses to area residents’ food security; and relied heavily on the expertise of the Council in developing a submission on increased rural access to legal slaughter for a meeting with Ministry of Agriculture senior staff at the annual Union of BC Municipalities conference in September.

The policies formulated also all apply to Official Community Plans at the level of Objectives and Policies, rather than the specifics of Zoning. This was a deliberate choice as only the prescriptions found in zoning are enforceable. While we certainly seek to have our recommendations enforced eventually, by keeping them at the level of objectives and policies, they provide direction and aspiration. They also allow 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.

Lastly, some of our proposals are operational. These include the recommendation to revisit and update the Floodplain Management Bylaw on a more frequently schedule than has been done in the past. 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. Continued funding by the RDCK as a partner in the Kootenay Boundary Farm Advisors program is therefore recommended, at least in the absence of a provincially run and funded agricultural extension service. And the multi-layered map created by the Geographical Information Systems faculty and staff at Selkirk College’s Applied Research & Innovation Centre 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.

Next Steps

The Food Policy Council will continue to work closely with the RDCK and will work with both staff and elected officials to test the proposals in the Policy Brief. The various reports, the mapping platform created by the project and controlled by the RDCK, and the expertise of the Food Policy Council will support the eventual creation of enforceable zoning bylaws and other measures to implement the recommendations, over time. The Food Policy Database hosted by the Institute for Sustainable Food Systems at Kwantlen Polytechnic University will assist in the work of translating the policy recommendations to zoning language.

All the materials created over the course of the project will be housed on our website and will be widely shared with other food policy councils and food policy practitioners through outreach provincially and nationally through the Canadian Association of Food Studies, the Canadian Association of Food Law & Policy, the new Food Communities Network, and the BC Community of Practice of food policy practitioners, among others.

The RDCK has updates scheduled in 2021 for several official community plans. The tools generated by the project shall be used to support the public engagement for the consultations on the OCP updates. The various products of the project also provide a rich source of material for our communications. Throughout 2021, we will regularly promote and amplify lessons learned and tools created through the project using our various social media and other communications channels.

Lastly, we will create our own and watch for suitable events and avenues for promoting and making best use of the educational materials created during the project. With the planned COVID-19 vaccination roll out in 2021, we are hopeful that classrooms and public life shall return to something resembling normal. We shall then be able to convene groups of adolescents and of adults to explore together the ways in which we can all deepen our understanding of and agency in shaping food systems that will best serve our communities and environment now and in the future.