

SUMMARY REPORT
on the
COLUMBIA RIVER TREATY
AGRICULTURE DISCUSSION PAPER



PREPARED BY THE PROVINCE OF BRITISH COLUMBIA
COLUMBIA RIVER TREATY TEAM

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1.0 Introduction

Throughout the Province's public engagement on the Columbia River Treaty, Basin residents have spoken of agricultural losses sustained when valley bottoms were inundated after construction of the Treaty dams. Many people also identified several areas where support is needed to ensure sustainable agriculture in the Columbia Basin region, such as attracting new farmers, affordable land, financial aid, irrigation, and access to markets. The B.C. Columbia River Treaty Team (B.C. CRT Team) committed to exploring ways of enhancing Basin agriculture, specifically related to impacts from the Treaty.



Columbia River Treaty Community Meeting, Invermere B.C., 2018

The team conducted a review of existing agriculture supports and identified over 40 federal, provincial, and regional agriculture programs and initiatives with the potential to help address some of the interests expressed by Basin residents. The findings are presented in the discussion paper "[Overview of Agricultural Interests in the B.C. Columbia Basin and Existing Programs and Initiatives](#)".

The discussion paper was published in June 2021 and Basin residents were invited to provide feedback on whether there are remaining gaps in addressing Basin agriculture interests and concerns, given available programs and initiatives.

This report provides an overview of the history of agriculture concerns raised during the Columbia River Treaty modernization process public engagement, the development of the discussion paper and feedback process, a summary of the feedback received, and proposed next steps for the B.C. CRT Team.

2.0 History of Agriculture Concerns Raised During the Columbia River Treaty Modernization Process

The Province has been engaging with Columbia Basin Indigenous Nations, residents, and local governments since 2012 to inform potential future improvements to the Columbia River Treaty. Agriculture-related concerns have been voiced throughout this process, first at community meetings held during the [Columbia River Treaty Review period](#) (2012 – 2013) and again at community meetings held in [2018](#) and [2019](#). In addition, the Kootenay Livestock Association and Waldo Stockbreeders Association submitted reports to the B.C. CRT Team in July 2018 and in April 2019, outlining their issues and recommendations. In response, the B.C. CRT Team committed to exploring opportunities for enhancing support to the Basin agriculture sector, given historical Columbia River Treaty impacts.

3.0 Columbia River Treaty Agriculture Discussion Paper



Photo credit: Tyler Zhao/Columbia Basin Trust

Over the last decade, the Government of Canada, Province of B.C., Columbia Basin Trust and other agencies have developed and implemented initiatives to assist farmers and ranchers, support the agriculture sector economy and enhance food sustainability. In 2020, the B.C. CRT Team began a process to identify whether there are remaining gaps in addressing Basin agriculture interests, given the programs that have been offered.

The team developed a comprehensive list of Basin agriculture interests based on three sources of information: 1) Columbia Basin Rural Development Institute's April 2016 report: [Common Themes in the Three Agriculture Plans of the Columbia Basin-Boundary Region](#); 2) community interests feedback collected during B.C.'s [CRT 2018 community meetings](#); and 3) [Koocanusa Agriculture Sector recommendations](#) presented to the Columbia Basin Regional Advisory Committee in Spring 2019.

Next, the team investigated existing federal, provincial, and regional agriculture programs and initiatives with the potential to help address the interests. More than 40 programs and initiatives were identified.

A table was created, matching each issue to existing or recently closed programs and initiatives that appeared to address the interests and concerns. The table was published in June 2021 in the form of the discussion paper, "[Overview of Agricultural Interests in the B.C. Columbia Basin and Existing Programs and Initiatives](#)".

Basin residents and those connected to Basin agriculture were invited to provide feed back on whether there remained gaps in addressing agriculture interests and concerns, given the programs and initiatives listed in the discussion paper.

The call for feedback ended on September 15, 2021. Four submissions were received, three of which were linked to the same agriculture sector (ranching) and region (East Kootenay). The remaining submission did not identify specific gaps in programs and initiatives but communicated that two areas deserve more focus than existing programs provide – climate change impacts to agriculture and food sustainability in the Columbia Basin. The feedback is summarized in Section 4.0.

The B.C. CRT Team also reached out to industry experts after the public comment period concluded, to seek advice on why the response rate was low and for their opinions regarding Columbia Basin agriculture challenges. See Section 5.0 for a summary of their comments.

Feedback in Sections 4.0 and 5.0 are organized under four assessment aspects:

- **Temporary and permanent loss of agricultural land**
 - includes consideration of agricultural land use and Crown land tenures, land capability, crop suitability and agricultural utility.
- **Changes in individual farm operations**
 - includes direct loss of land and farm infrastructure, changes to access routes, soil disturbance and compaction, changes to livestock movement, livestock watering facilities, irrigation, drainage patterns, and local hydrology and groundwater. It also includes the introduction and proliferation of invasive plant species, increased biosecurity risks, and farm worker safety, as well as reservoir-induced changes to microclimate on adjacent agricultural operations.
- **Changes in agricultural economic activity**
 - includes agricultural costs and revenues at the individual farm level, as well as primary and secondary agricultural economic activity and new opportunities.
- **Changes in local and regional food production and consumption**
 - includes changes in demand for local agriculture products, producer changes in response to local needs, as well as increased concern for food security.

4.0 Summary of Feedback from Public Comment Period

The B.C. CRT Team invited public feedback between June 18, 2021 and September 15, 2021 on whether there were remaining gaps in addressing agriculture interests and concerns, given the programs and initiatives listed in the discussion paper. The following is a summary of the issues raised in the four submissions received.



Photo credit: Dennis Lit/Columbia Basin Trust

4.1 Temporary and permanent loss of agricultural land

Understanding Treaty impacts: One submission noted that a study to understand the impact of the Columbia River Treaty on Basin agriculture has never been undertaken and that “a failure to adopt an agriculture mitigation strategy [related to the Treaty] has crippled the growth of agriculture in the Kootenusa region.” A need was identified for targeted funding and support programs to build agriculture capacity in the East Kootenays, to mitigate the impacts resulting from inundation of Kootenusa Reservoir. The establishment of a Columbia Basin Agriculture Trust was suggested.

Crown land concerns: The loss of grazing licences and leases on inundated Crown land was noted, along with the lack of mitigation for this loss through alternative grazing areas. Another concern was raised regarding a lack of security and affordability associated with existing Crown grazing tenures. Also noted

was the inability to purchase Crown land in the Agricultural Land Reserve (ALR), particularly land adjacent to the reservoir, to replace land lost to inundation.

Impacts from recreation: The conflict between recreation users of Crown land, particularly around Koocanusa Reservoir, and range use was raised. Some of these concerns include issues of livestock safety and negative environmental impacts by recreationalists such as soil erosion and compaction. A study to better understand the conflict and to identify potential solutions was recommended.



Photo credit: Tyler Zhao/Columbia Basin Trust

Climate change mitigation: One submission noted that climate change will impact water levels and erosion, and ultimately affect producers and consumers. Programs and initiatives were called for that support long term agriculture growth, including no-interest loans to support agriculture diversification as an adaptation measure.

Support for wildfire impacts: Wildfires were identified as a key concern related to climate change. A request was made for innovative mitigation strategies and/or programs, community wildfire strategies, training and firefighting infrastructure for producers and for safeguarding livestock.

4.2 Changes in individual farm operations

Flooding and erosion concerns: Flooding from changes in reservoir levels results in a temporary loss or change in the utility of agricultural land, and in erosion along the banks of Koocanusa Reservoir that can prevent safe access to water for livestock. To help address these concerns, funding for flood mitigation and preventing riverbank erosion was recommended.

Invasive species management: It was noted that there is inadequate management of invasive species and vegetation growth on railway, industrial and public lands that border private and Crown range land.

Fencing: Concerns regarding adequate fencing for private land bordering Crown land or railway land were also raised. Decisive legislation and financial support were suggested to address range fencing along private land.

Limited water availability: The lack of water available to farmers and producers was noted, linked to revocation of surface water licenses on the Kootenay system, as well as to droughts. As a solution, funding for water development projects, irrigation systems on both Crown and private land, and digging of wells was recommended. The inability to move fencing to improve access to water was also noted.

4.3 Changes to agricultural economic activity

Longer term, affordable financing: Climate change and weather disasters, as well as impacts of disease, were identified as agricultural challenges that take significant time to recover from. It was suggested that agriculture producers would benefit from access to mortgages with interest rates beyond five-year terms. The need for affordable farm insurance was also noted.

Reduce financial barriers for new farmers: High land prices and operation costs increase risk for newcomers to the agriculture sector. Financing is often difficult to access. A suggestion was made to combine a lending program with a team of experienced mentors, to ensure that anyone obtaining a loan has assistance in developing and implementing a successful farm business plan.

Electricity costs: Concerns about the cost of electricity for farms, for irrigation in particular, were raised.

Losses due to wildlife: Costs associated with crop and livestock losses due to damage caused by wildlife, in particular from elk, are a concern. There is a need for targeted payments to recoup these losses, as well as input from agriculture producers into hunting regulations to control the elk population.

Building agriculture sector capacity: It was suggested that the existing Environmental Farm Plan could be expanded to include funding for implementation of Environmental Farm Plan recommendations. Offering agriculture-focused educational programs at the College of the Rockies was also suggested.

4.4 Changes in local and regional food production and consumption

Food security: One submission noted a concern for food security and the need for an increased focus on producing affordable food for local consumption. Programs enabling this were called for.

5.0 Summary of Feedback from British Columbia Agriculture Industry Experts



Photo credit: Dennis Lit/Columbia Basin Trust

After the initial feedback period for the discussion paper closed, the B.C. CRT team reached out to B.C. agriculture industry experts to understand potential reasons for the low response rate and to get a broad overview of agriculture issues in the Columbia Basin. Their feedback is outlined below, organized under the same assessment aspects as the submissions from Basin individuals and organizations.

5.1 Low number of feedback responses

Possible reasons for the low number of responses to the discussion paper were that farmers and ranchers in the southern interior of British Columbia dealt with many challenges during the summer of

2021, such as crop damage due to the heat dome, wildfires, pests, higher than normal costs, new water licence requirements, and managing temporary foreign workers during a pandemic. It was also noted that many people are not aware of the programs and initiatives listed in the discussion paper, which made it difficult to provide comments. A recommendation was made to send personalized invitations for feedback to key organizations.

5.2 Temporary and permanent loss of agricultural land

High cost for farmland: Faced with high cost per acre for farmland, some Columbia Basin farmers, as well as many fruit growers in other areas of the province, are looking at switching from food production to vineyards. Many Basin farmers have hoped for the development of a Farmland Trust—land bought by an organization and leased to farmers. It was suggested that this could help bring production costs closer to those faced by competitors, such as those in the United States, and discourage a shift away from using land for food production.

Soil health and productivity, particularly on range land, was noted as a concern by an expert. Tension between ranchers and wildlife advocates regarding range land was also noted.

5.3 Changes in individual farm operations

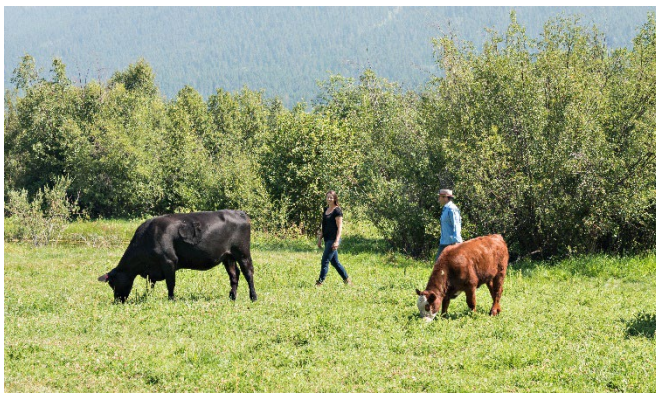


Photo credit: Zoe Ferguson/Columbia Basin Trust

Advisory support for farmers: Experts said more support is needed to help people in the agriculture sector access programs. Most farmers and ranchers are not aware of programs available to them, such as those listed in the discussion paper, and many find navigating online guides and applications challenging. There is a need for knowledgeable and friendly farm advisors to visit farms and suggest programs and processes. Initiatives such as the Environmental Farm Advisors and

Kootenay Boundary Farm Advisors are extremely helpful and could provide a greater benefit if their services were expanded or duplicated across the Basin. A second expert also noted a gap in agriculture extension, the process of facilitating access to – and transfer of – knowledge and innovation among agricultural producers in a manner that enables them to prosper and adapt to changing conditions.

Adapting programs for small-scale farmers: One expert noted that many agriculture programs do not fit the small-scale specialty farms typical of the Basin, with the exception of Creston Valley tree fruit growers. Instead, programs target large, commodity-producing enterprises. Basin farmers often do not generate enough income to fit program eligibility requirements, and grants requiring farmers to invest their own money are not accessible to many small-scale farmers.

Regional approach to irrigation: Most irrigation water used for agriculture in the Basin is based on individual water licenses, either surface or groundwater. Experts suggested a broader, possibly regional, approach to irrigation is needed. The lack of funding for irrigation systems to meet summer moisture deficits in the East Kootenays, Creston Valley and around Arrow Lakes was noted as an issue by more than one expert. Funding is also needed for floodplain mapping and mitigation in the Columbia Basin and elsewhere in British Columbia.

5.4 Changes to agricultural economic activity

Greater market access: Farm Hubs, such as the one recently opened in Creston, can help address marketing challenges for farmers and increase [value-added production](#); however, an expert noted the Creston Hub lacks some production infrastructure, such as processing equipment and cold storage, and a delivery system. It was also noted that regulatory certifications are required for farmers to supply to public institutions like hospitals; a process that adds another level of bureaucracy farmers do not have the capacity or resources to resolve. As a solution, it was suggested that the Creston Food Hub could assist farmers with the certification process.



Photo credit: B.C. Columbia River Treaty Team

Reaching high-end buyers outside the Basin: Getting products to high-end buyers at markets in Calgary and the Lower Mainland was noted as a challenge for producers in the Columbia Basin. A need for a Columbia Basin marketing strategy was also noted.

Supporting access to start-up financing: Agriculture producers need support accessing loans and start-up funding for value-added food initiatives, such as cideries.

Increasing profitability: There is a need for programs that lower costs and support farmers' profitability, such as mitigating the impact of rising labour costs. Programs that enable small farms to access special infrastructure are also required.

5.5 Changes in local and regional food production and consumption

Amplifying local producers: Experts highlighted the lack of infrastructure in place to help farmers aggregate products and deliver to local restaurants, stores and institutional buyers. While there is a groundswell of interconnectedness in the Kootenays, it was suggested that helping develop a robust culture of supporting local producers could counter competition from farmers in other jurisdictions, such as Alberta, who sell meat and other products at lower prices.

Direct sales support: The need for direct-sales marketing support was noted by another expert. Getting products directly to consumers through farm stands and community-supported agriculture¹ deliveries was noted as essential for farmers because they cannot survive on wholesale prices.

6.0 Conclusion

While there are many programs and initiatives available to the Columbia Basin agriculture sector, farmers and producers face challenges accessing those supports. The feedback received as part of this process signals where some gaps exist and where potential improvements could be made.

The B.C. CRT Team will share what was heard through this process with provincial ministries and agencies responsible for specific areas of concern, and together, will explore opportunities for enhancing agriculture support. The B.C. CRT Team will also continue working with industry experts and federal, provincial, and regional agencies to better understand Basin agriculture issues, in particular those resulting from Columbia River Treaty impacts, and potential courses of action.

We appreciate those who have taken time to provide us with their feedback. If you have further comments or would like to provide comments for the first time, please send them to us:

1. by email to: columbiarivertreaty@gov.bc.ca
2. by mail to: Ministry of Energy, Mines and Low Carbon Innovation
Columbia River Treaty
PO Box 9314 Stn Prov Govt
Victoria BC V8W 9N1



Photo credit: Tracy Connery/Columbia Basin Trust



Photo credit: Zoe Ferguson/Columbia Basin Trust

¹ Community Supported Agriculture (CSA) is a production and marketing model whereby consumers buy shares of a farm's harvest in advance. Read more at: <https://growingsmallfarms.ces.ncsu.edu/growingsmallfarms-csaguide/>