



REGIONAL ADAPTATION ENHANCEMENT PROGRAM | PROJECT SUMMARY

Evaluating Irrigation Potential in the Peace Region

PRODUCERS IN THE BC PEACE REGION are no strangers to drought conditions. However, the vast majority of the region’s crops (primarily grains, oilseeds, forage seed and forage) are produced without irrigation. With climate change projections pointing to hotter and drier summers in the future, producers are looking ahead and evaluating the potential for irrigation in the Peace.

“The irrigation potential study was identified as a priority because we need to know if irrigation might be a feasible option for our farms,” says Irmie Critcher, a grain producer who farms near Dawson Creek. The project was one of the actions prioritized in the 2013 *Peace Adaptation Strategies*, the result of a planning process that brought producers, government representatives and sector specialists together to consider options for adapting to changing conditions.

Completed in 2016, the irrigation study assesses the potential for future feasibility of various irrigation

PROJECT	<i>Evaluation of Irrigation Potential in the BC Peace Region</i>
LOCATION	<i>Peace region</i>
COMPLETION	<i>2016</i>
PROJECT LEAD	<i>BC Grain Producers’ Association</i>
FUNDING PARTNERS	<i>Agriculture and Agri-Food Canada, BC Ministry of Agriculture</i>

scenarios in the BC Peace region. The study uses a set of six irrigation case studies, including single farm systems, small community systems, and large irrigation systems with different water sources and water storage capacity.

Based on water demand models for three reference crops, projected water supply, and detailed economic analysis, the study results indicate that, under current market conditions, irrigated agriculture in the Peace is only feasible under very specific conditions. While climate change will increase the feasibility of irrigation in the region, changing economics

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and/or cropping systems will also be important factors influencing broader future feasibility.

“Agriculture constantly has to adapt to a changing environment. We need to look ahead, have a plan and share the responsibility to execute the plan,” says Irmie Critcher. “There is a lot of demand by different industries and stakeholders on current water sources, and agriculture needs to ensure that future water needs are considered for our future food supply and production capacity for agriculture.”

While the study identifies a number of limitations and barriers to developing irrigation in the region, it also found that there may be opportunities to use existing infrastructure developed for other purposes, such as for the oil and gas sector, to support small to medium scale irrigation projects in the future. In the meantime, the study offers suggestions and considerations that may help producers and local governments to assess these opportunities and improve planning and coordination.

“Agriculture is the bread and butter of the Peace region when the oil and gas sector slows down. As things warm up in the Peace, we will need to look at the options for irrigation and access to water,” says Bruce Simard, general manager of development services with the Peace River Regional

District. “Climate adaptation is important, and work like this helps the Regional District to assist the sector by knowing where to focus our efforts.”

Projects like this are part of the work being delivered by the BC Agriculture & Food Climate Action Initiative (CAI). CAI develops tools and resources to assist BC farmers and ranchers with adapting to impacts of climate change. CAI’s Regional Adaptation Enhancement Program provides up to \$300,000 to implement priority projects identified in each regional adaptation strategy.

www.BCAGClimateAction.ca

The BC Agriculture & Food Climate Action Initiative (CAI) was launched in 2008 by the BC Agriculture Council to enable a proactive and pan-agriculture approach to climate change issues. CAI is currently supported by the BC Agricultural Research & Development Corporation and the Investment Agriculture Foundation of BC, with funding provided by the Governments of Canada and British Columbia through Growing Forward 2, a federal-provincial-territorial initiative.

Photos in this handout are by Trevor Reeves (page 1) and Mariska Richters (page 2).

