

PEACE REGION LIVING LAB: A MULTI-STAKEHOLDERS INITIATIVE FOR AGRICULTURAL CLIMATE SOLUTIONS

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ABSTRACT TEXT

Producer participation in agricultural innovation is an important approach to sustainable agriculture in the context of global climate change, food security and consumer choices in domestic and international markets. Recognizing the strength of collaborative research, Agriculture and Agri-Food Canada (AAFC) has started the living laboratory Initiatives since April 2019. In 2021, AAFC renamed the program as Agricultural Climate Solutions (ACS). The priority of ACS program is to contribute to Canada's plan to reduce greenhouse gas (GHG) emissions by 30% below 2005 levels by 2030 and net-zero by 2050. Its objective is to find farm-level climate solutions that will contribute to reducing GHG emissions, mitigating effects of climate change, and supporting environmental benefits while increasing sectoral resilience. It has started Canada-wide Agroecosystem Living Lab (ALL) projects. The ALL is an integrative approach to agricultural innovation through collaboration with farmers, scientists, socio-economic experts and other partners to co-develop, test, and monitor new practices and technologies in a real-life context. It has envisioned that this approach will result in more rapid adoption of practical technologies, and sustainable farming practices by the Canadian farmers.

The Peace Region Living Lab (PRL) is one of the cohort of ALL. The PRL is a region-wide collaboration led by the Peace Region Forage Seed Association (PRFSA). Seven other producer groups have joined the PRFSA to bring together a project that will serve agricultural producers and land stewards of the region. The overarching goal of the project is to enhance agroecosystem services in the Peace River Region of Canada. The project focuses on four BMP categories including cover cropping, tillage management, nitrogen fertilizer management, and livestock integration in cropping systems. The PRL is looking at agricultural operations as whole systems, considering land management, economic analysis and the social aspect of implementing innovative practices. Adoption of Beneficial Management Practices (BMPs) is expected to improve productivity, profitability and environmental resiliency.