

ALBERTA

Natural Infrastructure and Prairie Prosperity

There is growing momentum across the Canadian Prairies (Alberta, Saskatchewan, and Manitoba) to implement natural infrastructure to address water infrastructure gaps.¹ Natural infrastructure is a way to plan and work with nature to help meet infrastructure needs—for example, wastewater treatment, flood protection, and drinking water supply—while providing a range of social, economic, and environmental benefits.

The broad scope of the natural infrastructure sector involves activities to conserve and restore ecosystems and to actively build with nature in urban and rural areas. The sector spans those involved with the planning, design, implementation, administration, and oversight of natural infrastructure projects and policies—for example, landscape architects, technical and environmental consultants, nurseries, government and non-government personnel, watershed groups, non-profits, local and Indigenous governments, researchers, and more.

Natural Infrastructure and Prairie Prosperity by the Numbers

- In 2022, it is estimated that the Prairies' natural infrastructure sector directly employed over 33,000 people and contributed over CAD 4.1 billion to Prairie-wide GDP.
- Including direct, indirect, and induced effects, the GDP contribution rises to CAD 7 billion, and the sector supplies over 58,000 diverse jobs in urban and rural areas in 2022.
- Models show that greater investment in the natural infrastructure sector could boost direct sector jobs by between 18% and 26% and sector GDP by between 10% and 16% by 2030.
- Investing in natural infrastructure can help meet the many infrastructure needs of Prairie communities—e.g., for stormwater, wastewater, flood protection, and more. These investments also support greater resiliency in the face of floods, droughts, fires, and other severe weather impacts. Natural infrastructure investment can also be coupled with investment in greywater infrastructure.

¹ Méthot, J., Rawluk, A., Roy, D., Saleh, T., & Kroft, E. (2023). *The state of play report for natural infrastructure on the Canadian Prairies*. International Institute for Sustainable Development. <https://www.iisd.org/publications/report/state-of-play-natural-infrastructure-canadian-prairies>



Natural Infrastructure and Prairie Prosperity in Alberta

Alberta’s natural infrastructure sector contributes billions to the economy, boosts jobs, and increases resilience in the face of climate impacts like floods, droughts, and wildfires.

Alberta’s natural infrastructure sector **directly employed over 21,000 Albertans and contributed CAD 2.9 billion directly to the provincial economy in 2022**. Estimates indicate that the sector more broadly employed over 39,000 people and generated over CAD 5.1 billion in GDP when considering direct, indirect, and induced economic impacts. This compares favourably with recent estimates of the economic impact of the irrigation sector in Alberta² and highlights how natural infrastructure can be a part of both infrastructure service delivery and job creation in urban and rural areas.

The Growth Potential of Natural Infrastructure in Alberta Is Significant and Provides Many Benefits

Investment scenarios in Alberta show that annual investments of CAD 20 million or CAD 50 million would both be powerful drivers for jobs and GDP and help meet the water infrastructure needs of Albertans. It would also align with provincial priorities linked to infrastructure, water, and economic development.

CAD 20 million/year investment	CAD 50 million/year investment
↑3% direct jobs	↑8% direct jobs
↑8% direct GDP	↑7% direct GDP

Strengthening existing programs with clear track records of on-the-ground outcomes—e.g., the Watershed Resiliency and Restoration Program, Water for Life partnerships, and the Wetland Replacement Program—is a promising avenue to build on strengths. Investing in watershed health and functioning is also a physical buffer against the impacts and costs of weather extremes and disasters (e.g., floods, droughts, and wildfires).

² Acera Consult Inc. (2021). *Economic value of Alberta’s irrigation districts. Study found that irrigated land in Alberta provides 46,000 jobs and contributes 5.4 billion to Alberta’s total GDP annually.* https://www.albertairrigation.ca/?page_id=148



The Growth Potential of Natural Infrastructure in Other Prairie Provinces

Looking at **Saskatchewan's** natural infrastructure sector, it directly employed over 5,800 people in the province and contributed CAD 640 million directly to the provincial economy in 2022. In the investment scenarios, the CAD 10 million per year investment could boost direct jobs by 6% and GDP by 6%. With the CAD 25 million per year investment, those numbers rise to 16% for direct jobs and 14% for GDP.

Manitoba's natural infrastructure sector directly employed over 5,700 people in the province and contributed CAD 540 million directly to the provincial economy in 2022. The investment scenarios estimate a CAD 10 million per year investment could see a boost of 8% in direct jobs and 7% in the GDP. With the CAD 25 million investment scenario, that potential boost increases to 21% in direct jobs and 17% in GDP.

Scaling Natural Infrastructure Investment Has Benefits

In **British Columbia**, the BC *Working for Watersheds* study (2021) showed how an annual investment of CAD 100 million in a Watershed Security Fund over 10 years (a total contribution of CAD 1 billion) could generate 13,000 jobs and an additional CAD 1.3 billion to the provincial economy by 2030. Since then, BC's provincial government has made an initial CAD 100 million investment in healthy watersheds and announced the joint development of a Watershed Security Strategy with First Nations.

We Need to Bring the Benefits to the Prairies

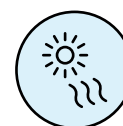
Figure 1. Three wins when investing in natural infrastructure



Drives Prairie economic growth and jobs



Bridges the water infrastructure gap



Boosts resiliency against severe weather events

Source: Authors' diagram.

The *Natural Infrastructure and Prairie Prosperity* study is a collaboration between the International Institute for Sustainable Development and the Delphi Group to identify the scope of the natural infrastructure sector across the Canadian Prairies; quantify the economic impact and employment contribution of the Prairies' natural infrastructure sector, in terms of GDP and jobs; and estimate the growth potential of the sector to 2030.

To learn more, please see our full report: [Natural Infrastructure and Prairie Prosperity](#)