

Irrigation Agrologists Are Here to Help

Ministry of Agriculture irrigation agrologists are available to provide technical support on the economics, agronomics, diversification, and water management of new and existing irrigation developments.

Economics

On-farm investments in irrigation are significant, it is important to understand the opportunities that irrigation will provide to your farm and have realistic expectations on yield potential and return on investment. Irrigation agrologists are available to producers for discussions regarding recommended targeted yields for irrigated crops, increased input requirements and profitability of an irrigated crop.

Potential Profitability of Select Irrigation Crops

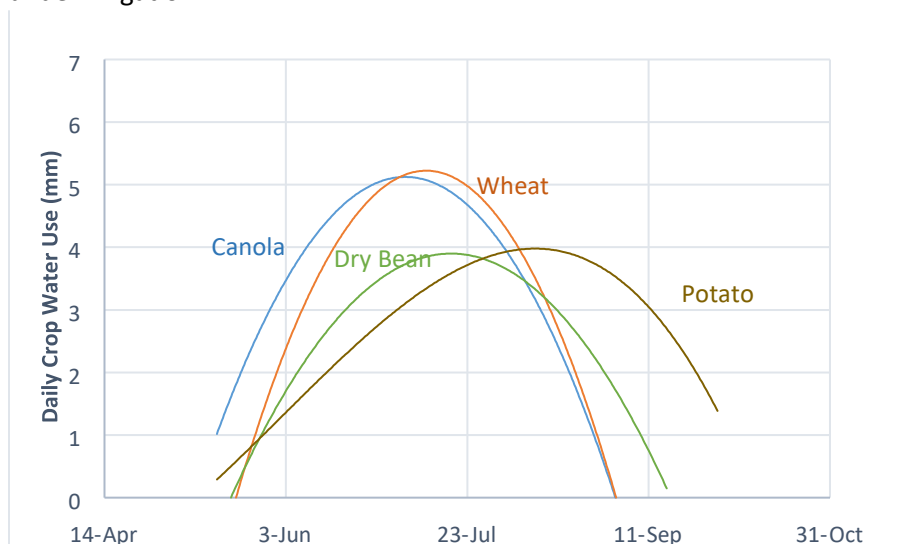
	Canola	Wheat	Dry Beans	Potato*	Carrots*
Target Yield (per acre)	70 bu	90 bu	3,000 lbs	16 t	15 t
Cost of Production	\$971.11	\$779.29	\$819.99	\$3,095.35	\$7,463.34
Gross Returns	\$1,233	\$914	\$1,440	\$8,820	\$16,535
Net Profit	\$262	\$134	\$620	\$5,725	\$9,071

Source: 2023 ICDC Irrigation Economics and Agronomics Guide

* These numbers are based on 100% marketing success; it is strongly advised for new producers to consult with an irrigation agrologist prior to proceeding.

Agronomics

Management of irrigated crops differs from dryland production. Variety selection, increased fertilizer requirements, disease and pest management and field operation timing all have specific considerations under irrigation.



Diversification

Crop diversification has many well-known benefits: extended crop rotations, ability to rotate crop protection products, reduced economic risks through multiple marketing streams and opportunities for value-added products. With the security of being able to access water when required, irrigation creates diversification opportunities. Irrigation agrologists are available to discuss opportunities, path-find relevant industry contacts and provide information on available government programming.

Water Management

Irrigation scheduling, the management of water used for irrigation, is an important consideration for new and existing irrigators. Factors such as soil type, crop type and stage, climate, and irrigation system capacity all need to be considered when determining when and how much to irrigate. Virtual and on-site consultations with ministry irrigation agrologists can assist producers with identification of these factors, as well as with measurement techniques and use of existing technology.

Crop Water Use of Irrigated Crops Grown at Outlook, Saskatchewan

	Alfalfa	Canola	Wheat	Potato	Dry Beans	Corn Silage
Average (mm)	490	390	360	390	320	365
Range (mm)	425 - 625	360 - 470	300 - 420	340 - 480	280 - 370	315 - 440
Peak Daily Use (mm)	8	7	7	6	6	6
Root Depth (m)	1.2	1.0	1.0	0.8	0.8	1.0

Evapotranspiration modelled from meteorological parameters obtained from Environment Canada weather station in Outlook, SK (2004-2020).

Ministry of Agriculture, Irrigation Agrologists

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