
2023 cropping alternatives

Crop budget planning



Alberta 

Agriculture and Irrigation
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2023 Cropping Alternatives (Crop Budget Planning) | Agriculture and Irrigation
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Cropping Alternatives Methodology

Disclaimer:

The following regional forecasts are based on the most current cost of production information from the AgriProfit\$ Business Analysis and Research Program and estimates of expected revenues and costs from various sources. Producers should use their own costs and revenue projections to make cropping decisions for farm operations. There is a risk of over or under-estimating costs and returns based on regional benchmarks and forecasts. Producers are advised not to base cropping decisions solely on information provided in the following budgets. The Alberta Agriculture, Forestry and Rural Economic Development crop budgeting software program [CropChoice\\$](#) and the [Crop Budget Calculator](#) are available to customize your own crop budgets. You can download both CropChoice\$ software and the Crop Budget Calculator free of charge.

Prices:

Expected market prices are estimates ONLY, based on forecasts for the 2023 crop year. Prices in these budgets are estimated by Agriculture and Irrigation specialists using several price outlook sources. Estimated prices are adjusted to reflect location differences and grade factors. Using one's own price estimates from knowledge of area markets and market outlook information is recommended.

Yields:

There is a wide range of yields within each soil zone region. Yield estimates by crop represent average long-term trend yields developed by Agriculture Financial Services Corporation adjusted upwards by 20 per cent for dryland soil zones and 15 per cent for irrigated zones.

Seed Costs:

Seed costs are based on data collected by the Alberta Farm Input Prices Survey and seed suppliers as well as a seed cost multiplier for a blend of certified and common seed that is cleaned and treated. Seeding rates for each soil zone are based on 1,000 kernel weight for common varieties, 90-95 per cent germination, three to five per cent emergence mortality, and 9" spacing. Seeding rates for forages are based on 1,000 kernel weight for common varieties, pure live seed and a 50-50 split of broadcasted and row seeded plantings. (see the following Seeding Rate Table.)

Fertilizer Costs:

Prices are based on a combination of the fall 2022 prices, "pre-purchase" prices and fertilizer cost indications for spring 2023. Nitrogen, Phosphorous, Potassium, and Sulphur blends are based on estimated crop requirements for nutrient deficient, stubble-seeded crops in each soil zone.

Nitrogen	\$1.05/lb actual N	(\$1065/tonne for 46-0-0)
Phosphorous	\$0.92/lb actual P	(\$1305/tonne for 11-52-0)
Potassium	\$0.79/lb actual K	(\$1040/tonne for 0-0-60)
Sulphur	\$0.42/lb actual S	(\$695/tonne for 20.5-0-0-24)

Soil testing is recommended to optimize the fertilizer budget to field production capacity and crop choice.

The Alberta Farm Fertilizer Information and Recommendation Manager (AFFIRM) is an Alberta Agriculture and Irrigation software tool that can help producers optimize fertilizer requirements for crop production. Variable rate technology is also an option being used by producers to maximize production to fertilizer and input expenses. In a mature commodity market, managing costs could mean the difference between farm profitability and farm losses.

Chemical:

The 2023 chemical costs on stubble-seeded crops include a non-selective, pre-seed burn-off, and one in-crop herbicide application for broadleaf weeds, grassy weeds or both. Feed barley acreage sprayed for broadleaf weed control and a portion sprayed for wild oat control. Fungicides, insecticides and/or pre-harvest/desiccation applications (F/I/PH/D) are indicated by an asterisk (*). (see the following Chemical Application Table.)

Hail/Crop Insurance:

Insurance is based on information from Agriculture Financial Services Corporation (AFSC), averaged for select areas in respective soil zones.

Trucking & Marketing:

For grains and oilseeds, trucking and marketing costs are averages for short-haul and long-haul rates from cost suppliers. For hay, trucking and marketing costs are estimates from suppliers, assuming bales shipped are 1500 lb and distance hauled is between 50 and 100 kms. For silage, trucking and marketing costs are last year's estimates indexed for the 2023 year.

Fuel, Oil & Lube, Machinery Repairs, Building Repairs, Pumping Costs (Irrigation only), Labour (Paid and Unpaid), Utilities & Miscellaneous, Operating Interest, and Storage and/or Levies:

These costs are based on information collected by the AgriProfit\$ program, as well as AIMS the Alberta Farm Input Prices Survey and irrigation specialists. Many of these costs are influenced significantly by differences in regional farming practices.

Operating Interest:

Eight (8%) per cent per annum for inputs financed (seed, fertilizer and chemical).

Contribution Margin:

Contribution margin represents the amount a particular crop contributes to fixed costs, and return to management and equity. Use the contribution margin to compare crop choices.

Capital Costs by Enterprise:

Fixed costs generally do not vary greatly from crop to crop, but can vary between enterprises and soil zone regions. Average fixed cost profiles by enterprise are included for your information. The capital costs are indexed to reflect costs for the 2022 year.

Summerfallow:

The summerfallow column included in the Brown soil zone budget is only provided to reference the expected costs incurred in a non-crop year. Fallow-seeded crops are not included in this analysis because the summerfallow practice has significantly declined. Producers wanting to evaluate fallow-seeded crops can use CropChoice\$ and the Crop Budget Calculator.

Contribution Margin Calculation: Value of Production - Total Direct Expenses

Total Cost per Unit Calculation:

(Total Direct Expenses + Adjusted Capital Costs) divided by Expected Yield per Acre

Break-Even Yield Calculation:

(Total Direct Expenses + Adjusted Capital Costs) divided by Expected Market Price


Table 1. Seeding Rate by Alberta Soil Zones

	Black			Brown			Dark Brown			Grey-Wooded			Peace Region (Grey-Wooded)			Irrigation		
	lbs/ac	bu/ac	\$/ac	lbs/ac	bu/ac	\$/ac	lbs/ac	bu/ac	\$/ac	lbs/ac	bu/ac	\$/ac	lbs/ac	bu/ac	\$/ac	lbs/ac	bu/ac	\$/ac
spring wheat		2.25	49.28		2	43.80		2	43.80		2.25	49.28		2	43.80		2.5	54.75
cps wheat		2.25	45.00		2	40.00		2	40.00		2.25	45.00		2	40.00		2.5	50.00
durum wheat					2	49.00		2	49.00								2.25	55.13
soft white wheat																	2.25	46.13
winter wheat								2	39.00									
malt barley		2.25	40.50		2	36.00		2	36.00		2.25	40.50		2	36.00		2.5	45.00
feed barley		2.25	38.14		2	33.90		2	33.90		2.25	38.14		2	33.90		2.5	42.38
milling oats		3	49.73		3	49.73		3	49.73		3	49.73		3	49.73			
argentine canola	5		80.00	5		78.40	5		80.00	5		78.40	5		80.00	5		80.00
field pea		3.25	74.75		3	69.00		3	69.00		3	69.00		2.75	63.25			
yellow mustard				10		52.50	11		55.13									
chickpeas				120		85.20												
green lentils				90		65.70	90		65.70									
red lentils				60		33.60	60		33.60									
flax							65		49.40									
dry beans																60		60.00
alfalfa hay	10		15.75							10		12.60	10		12.60	14		17.64

Table 2. Chemical Application by Alberta Soil Zones (\$/acre)

	Black			Brown			Dark Brown			Grey-Wooded			Peace Region (Grey-Wooded)			Irrigation		
	PreSeed	In Crop	F//PH/D	PreSeed	In Crop	F//PH/D	PreSeed	In Crop	F//PH/D	PreSeed	In Crop	F//PH/D	PreSeed	In Crop	F//PH/D	PreSeed	In Crop	F//PH/D
spring wheat	11.67	30.94	17.30	11.09	29.39	14.38	11.09	29.39	14.38	11.67	30.94	10.81	11.67	30.94	10.81	11.67	30.94	21.62
cps wheat	11.67	30.94		11.09	29.39		11.09	29.39		11.67	30.94		11.67	30.94		11.67	30.94	
durum wheat				11.09	29.39	14.38	11.09	29.39	14.38							11.67	30.94	21.62
soft white wheat																11.67	30.94	21.62
winter wheat							11.09	15.08										
malt barley	11.67	30.94		11.09	29.39		11.09	29.39		11.67	30.94		11.67	30.94		11.67	30.94	21.62
feed barley	11.67	18.56		11.09	17.63		11.09	17.63		11.67	18.56		11.67	18.56		11.67	18.56	11.67
milling oats	11.67	10.64		11.09	10.11		11.67	10.64		11.67	10.64		11.67	10.64				
argentine canola	11.67	12.69		11.09	12.05		11.67	12.69		11.67	12.69		11.67	12.69		11.67	12.69	22.17
field pea	11.67	16.24	23.85	11.67	16.24		11.67	16.24	23.85	11.67	16.24	23.85	11.67	16.24	23.85			
yellow mustard				11.67	21.82		11.67	21.82										
chickpeas				18.02	14.21	20.09												
green lentils				19.29	18.02	23.95	19.29	17.75	23.95									
red lentils				19.00	17.75	23.60	19.00	18.02	23.60									
flax							11.67	12.12										
dry beans																11.67	16.24	0.00
cereal silage	11.67	10.64					11.67	10.64		11.67	10.64		11.67	10.64		11.67	10.64	
mixed hay	2.33			2.33			2.33			2.33			2.33					
alfalfa hay	2.92									2.92			2.92			3.50		

Table 3. 2023 Estimated Production Costs and Returns (\$/acre) Black Soils

Stubble Seeded Crops												
	Spring Wheat	CPS Wheat	Feed Barley	Malt Barley	Milling Oats	Argentine HT Canola	Field Peas	Mixed Hay	Alfalfa Hay	Cereal Silage		
	2 CWRS 11.5%	1 CPSR	1 CW	Select CW 2R	2 CW	1 CAN	2 CAN					
Expected Yield per Acre	65.00 bu	72.00 bu	85.00 bu	83.00 bu	98.00 bu	46.00 bu	56.00 bu	2.25 t	2.50 t	7.50 t		
Expected Market Price	10.50 /bu	9.90 /bu	7.00 /bu	8.00 /bu	4.75 /bu	17.00 /bu	11.00 /bu	170.00 /t	200.00 /t	84.00 /t		
Crop Sales (\$/acre)	682.50	712.80	595.00	664.00	465.50	782.00	616.00	382.50	500.00	630.00		
Direct Expenses:												
Seed, Cleaning & Treatment	49.28	45.00	38.14	40.50	49.73	80.00	74.75	5.61	15.75	46.61		
Fertilizer (NPKS blend)	120.00 80-30-10-0	120.00 80-30-10-0	120.00 80-30-10-0	121.50 70-30-20-10	101.50 70-30-0-0	162.50 100-40-15-20	45.00 5-30-15-0	30.00 15-15-0-0	28.50 5-25-0-0	91.50 65-25-0-0		
Chemical	59.91	59.91	30.23	59.91	22.31	42.09	51.77	2.33	2.92	22.31		
Hail/Crop Insurance	16.83	17.99	15.63	17.07	18.25	30.09	33.12	NA	NA	NA		
Trucking & Marketing	24.51	27.15	26.22	25.60	21.27	17.34	21.11	58.68	64.32	25.71		
Fuel, Oil & Lube	35.48	32.72	30.75	35.09	35.48	34.69	45.73	12.62	7.88	49.67		
Machinery Repairs	32.49	32.02	25.43	31.55	25.43	28.72	33.43	28.25	13.19	20.72		
Building Repairs	3.03	7.58	3.03	8.34	4.17	3.41	6.82	7.58	4.55	5.31		
Custom Work	4.20	4.20	4.72	6.30	9.44	5.25	10.49	4.20	9.44	10.49		
Labour (Paid and Unpaid)	20.50	22.78	16.51	25.62	22.21	21.07	24.48	28.47	11.39	34.16		
Utilities & Miscellaneous	18.11	18.11	18.11	18.11	18.11	22.06	22.06	10.99	10.99	12.58		
Operating Interest	18.33	17.99	15.07	17.75	13.88	22.77	13.72	3.04	3.77	12.83		
Total Direct Expense	402.67	405.44	343.86	407.34	341.78	470.00	382.49	191.77	172.71	331.90		
Contribution Margin	279.83	307.36	251.14	256.66	123.72	312.00	233.51	190.73	327.29	298.10		
Total Cost per Unit	9.39	8.51	6.49	7.41	5.60	14.73	10.54	146.89	124.58	62.75		
Break-Even Yield	59.00 bu	62.00 bu	79.00 bu	77.00 bu	116.00 bu	40.00 bu	54.00 bu	1.94 t	1.56 t	5.60 t		


Capital Costs by Enterprise	Crops	Forages
Crop Share/Cash Rent	125.15	63.78
Licenses and Insurance	18.30	9.15
Depreciation	58.40	62.05
Paid Capital Interest	7.74	5.16
Total Capital Costs	209.59	140.14
Adjusted Capital Costs	207.50	138.74

Questions?
 Call 780-422-4056
 Economics Section
 Alberta Agriculture and Irrigation

Prepared Feb 25, 2023

Table 4. 2023 Estimated Production Costs and Returns (\$/acre)

Brown Soils

Stubble Seeded Crops													
	Spring Wheat	CPS Wheat	Durum Wheat	Feed Barley	Malt Barley	Milling Oats	Argentine HT Canola	Field Peas	Red Lentil	Kabuli Chickpea	Yellow Mustard	Mixed Hay	Summer Fallow
	1 CWRS 13.5%	1 CPSR	1 CWAD 13%	1 CW	Select CW 2R	2 CW	1 CAN	2 CAN	2 CAN	2 CW 8mm	1 CAN		
Expected Yield per Acre	40.00 bu	42.00 bu	42.00 bu	52.00 bu	53.00 bu	58.00 bu	30.00 bu	45.00 bu	1525.00 lbs	1463.00 lbs	661.00 lbs	1.50 t	0.00
Expected Market Price	10.75 /bu	10.20 /bu	11.50 /bu	7.25 /bu	8.20 /bu	4.75 /bu	17.00 /bu	11.00 /bu	0.28 /lb	0.45 /lb	0.60 /lb	180.00 /t	0.00
Crop Sales (\$/acre)	430.00	428.40	483.00	377.00	434.60	275.50	510.00	495.00	427.00	658.35	396.60	270.00	0.00
Direct Expenses:													
Seed, Cleaning & Treatment	43.80	40.00	49.00	33.90	36.00	49.73	78.40	69.00	65.70	85.20	52.50	5.15	0.00
Fertilizer (NPKS blend)	75.00 50-20-5-0	75.00 50-20-5-0	75.00 50-20-5-0	90.50 60-25-5-0	92.50 50-30-10-10	71.00 50-20-0-0	103.50 65-25-10-10	32.00 5-20-10-0	24.00 5-20-0-0	33.50 5-30-0-0	65.00 40-20-0-10	20.00 10-10-0-0	0.00
Chemical	57.74	57.74	57.74	30.23	57.74	22.31	39.88	51.77	90.35	52.31	33.50	2.33	11.50
Hail/Crop Insurance	17.15	18.02	17.35	15.26	18.72	17.36	32.95	30.89	32.19	35.28	20.60	NA	NA
Trucking & Marketing	15.08	15.84	15.84	16.04	16.35	12.59	9.60	16.97	9.76	9.36	4.23	39.01	0.00
Fuel, Oil & Lube	27.12	26.03	26.29	26.81	26.68	27.58	29.96	26.83	21.29	23.26	23.65	10.64	11.43
Machinery Repairs	22.13	19.31	20.72	16.01	15.07	18.84	15.07	20.25	15.07	16.95	16.01	18.84	16.95
Building Repairs	2.27	3.03	1.89	1.52	1.52	3.79	2.27	3.41	4.17	3.03	1.52	4.55	1.52
Custom Work	6.30	3.78	7.35	8.40	5.25	5.25	10.49	4.20	4.20	8.40	6.30	4.20	0.00
Labour (Paid and Unpaid)	20.50	19.93	19.93	18.22	19.36	15.94	21.07	15.09	14.80	17.08	15.37	18.22	10.25
Utilities & Miscellaneous	18.11	18.11	15.69	15.69	15.69	10.99	15.69	15.69	11.75	13.42	12.58	9.47	4.55
Operating Interest	14.12	13.82	14.54	12.37	14.90	11.44	17.74	12.22	14.40	13.68	12.08	2.20	0.92
Total Direct Expense	319.33	310.61	321.33	284.94	319.77	266.81	376.62	298.30	307.68	311.47	263.34	134.60	57.12
Contribution Margin	110.67	117.79	161.67	92.06	114.83	8.69	133.38	196.70	119.32	346.88	133.26	135.40	(57.12)
Total Cost per Unit	11.00	10.27	10.53	7.80	8.31	6.68	16.58	9.31	0.28	0.30	0.58	160.44	N/A
Break-Even Yield	41.00 bu	43.00 bu	39.00 bu	56.00 bu	54.00 bu	82.00 bu	30.00 bu	39.00 bu	1531.00 lbs	961.00 lbs	641.00 lbs	1.34 t	N/A


Capital Costs by Enterprise	Crops	Forages
Crop Share/Cash Rent	64.58	50.23
Licenses and Insurance	9.15	13.31
Depreciation	35.04	40.15
Paid Capital Interest	13.19	3.44
Total Capital Costs	121.96	107.13
Adjusted Capital Costs	120.74	106.05

Questions?
 Call 780-422-4056
 Economics Section
 Alberta Agriculture and Irrigation

Prepared Feb 25, 2023

Table 5. 2023 Estimated Production Costs and Returns (\$/acre)

Dark Brown Soils

Stubble Seeded Crops														
	Spring Wheat	CPS Wheat	Durum Wheat	Winter Wheat	Feed Barley	Malt Barley	Milling Oats	Argentine HT Canola	Field Peas	Flax	Yellow Mustard	Red Lentil	Mixed Hay	Cereal Silage
	1 CWRS 13.5%	1 CPSR	1 CWAD 13%	Select CWRW	1 CW	Select CW 2R	2 CW	1 CAN	2 CAN	1 CW	1 CAN			
Expected Yield per Acre	44.00 bu	49.00 bu	41.00 bu	46.00 bu	63.00 bu	63.00 bu	75.00 bu	35.00 bu	48.00 bu	21.00 bu	706.00 lbs	1500.00 lbs	1.75 t	5.73 t
Expected Market Price	10.40 /bu	9.80 /bu	11.00 /bu	9.50 /bu	7.00 /bu	8.00 /bu	4.70 /bu	17.00 /bu	11.00 /bu	17.00 /bu	0.62 /lb	0.28 /lb	170.00 /t	84.00 /t
Crop Sales (\$/acre)	457.60	480.20	451.00	437.00	441.00	504.00	352.50	595.00	528.00	357.00	437.72	420.00	297.50	481.32
Direct Expenses:														
Seed. Cleaning & Treatment	43.80	40.00	49.00	39.00	33.90	36.00	49.73	80.00	69.00	49.40	55.13	65.70	5.15	38.14
Fertilizer (NPKS blend)	90.50 60-25-5-0	90.50 60-25-5-0	90.50 60-25-5-0	90.50 60-25-5-0	101.00 70-25-5-0	107.00 60-30-15-10	76.50 55-20-0-0	121.00 75-30-10-15	32.00 5-20-10-0	71.00 50-20-0-0	80.00 50-25-0-10	28.50 5-25-0-0	24.50 10-15-0-0	81.50 60-20-0-0
Chemical	57.74	57.74	57.74	27.55	30.23	57.74	22.31	39.88	51.77	23.79	33.50	85.35 *	2.33	22.31
Hail/Crop Insurance	17.23	17.20	17.36	17.18	15.75	17.21	16.79	33.10	32.99	21.41	21.36	30.10	NA	NA
Trucking & Marketing	16.59	18.47	15.46	17.34	19.43	19.43	16.28	11.20	18.10	7.44	4.52	9.60	45.55	19.64
Fuel, Oil & Lube	28.87	32.96	33.95	35.90	28.38	31.22	30.65	37.09	36.90	28.38	25.23	24.44	17.03	20.50
Machinery Repairs	23.07	23.55	20.72	22.60	22.60	23.55	20.72	28.25	25.43	20.72	20.72	15.07	17.89	13.19
Building Repairs	1.52	2.27	1.52	1.52	3.03	3.79	1.52	2.27	2.65	2.27	2.27	4.17	3.79	1.89
Custom Work	4.20	6.30	6.30	6.30	12.59	12.59	4.20	10.49	6.30	16.79	9.44	4.20	19.94	83.95
Labour (Paid and Unpaid)	14.23	14.80	13.10	14.23	13.95	14.80	14.80	15.94	13.95	16.51	15.37	14.80	11.39	11.39
Utilities & Miscellaneous	18.11	18.11	15.69	15.69	15.69	15.69	10.99	15.69	15.69	15.69	15.69	11.75	10.99	12.58
Operating Interest	15.36	15.06	15.78	12.56	13.21	16.06	11.88	19.27	12.22	11.54	13.49	14.36	2.56	11.36
Total Direct Expense	331.23	336.97	337.10	300.37	309.78	355.09	276.37	414.18	316.99	284.94	296.71	308.04	161.12	316.44
Contribution Margin	126.37	143.23	113.90	136.63	131.22	148.91	76.13	180.82	211.01	72.06	141.01	111.96	136.38	164.88
Total Cost per Unit	9.93	9.03	10.80	8.83	6.60	7.31	5.09	14.85	8.81	18.60	0.57	0.26	137.85	69.21
Break-Even Yield	43.00 bu	46.00 bu	41.00 bu	43.00 bu	60.00 bu	58.00 bu	82.00 bu	31.00 bu	39.00 bu	23.00 bu	650.00 lbs	1386.31 lbs	1.42 t	4.72 t


Capital Costs by Enterprise	Crops	Forages
Crop Share/Cash Rent	55.50	34.50
Licenses and Insurance	7.90	8.32
Depreciation	36.50	22.63
Paid Capital Interest	6.88	15.48
Total Capital Costs	106.78	80.93
Adjusted Capital Costs	105.71	80.12

Questions?
 Call 780-422-4056
 Economics Section
 Alberta Agriculture and Irrigation

Prepared Feb 25, 2023

Table 6. 2023 Estimated Production Costs and Returns (\$/acre) Grey-Wooded Soils

Stubble Seeded Crops

	Spring Wheat	CPS Wheat	Feed Barley	Malt Barley	Milling Oats	Argentine HT Canola	Field Peas	Alfalfa Hay	Mixed Hay	Cereal Silage
	2 CWRS 11.5%	1 CPSR	1 CW	Select CW 2R	2 CW	1 CAN	2 CAN			
Expected Yield per Acre	58.00 bu	70.00 bu	78.00 bu	78.00 bu	94.00 bu	44.00 bu	50.00 bu	2.25 t	2.50 t	7.08 t
Expected Market Price	10.30 /bu	9.80 /bu	6.90 /bu	7.90 /bu	4.70 /bu	17.00 /bu	11.00 /bu	200.00 /t	170.00 /t	84.00 /t
Crop Sales (\$/acre)	597.40	686.00	538.20	616.20	441.80	748.00	550.00	450.00	425.00	594.72
Direct Expenses:										
Seed, Cleaning & Treatment	49.28	45.00	38.14	40.50	49.73	78.40	69.00	12.60	5.61	38.14
Fertilizer (NPKS blend)	115.50 80-25-10-0	115.50 80-25-10-0	120.00 80-30-10-0	118.50 70-25-25-5	102.00 75-25-0-0	170.50 100-40-25-20	40.50 5-25-15-0	28.50 5-25-0-0	35.00 20-15-0-0	97.00 70-25-0-0
Chemical	53.42	53.42	30.23	53.42	22.31	35.44	51.77	2.92	2.33	22.31
Hail/Crop Insurance	19.68	21.47	18.88	21.12	18.68	33.14	32.82	NA	NA	NA
Trucking & Marketing	21.87	26.39	24.06	24.06	20.41	14.08	18.85	58.68	64.32	24.27
Fuel, Oil & Lube	34.23	31.34	26.81	32.17	33.11	43.97	44.39	15.77	18.92	33.11
Machinery Repairs	32.02	27.78	26.37	32.02	24.49	42.38	38.14	14.13	21.66	28.72
Building Repairs	1.52	3.79	3.79	3.03	5.31	3.03	5.31	2.27	1.52	1.52
Custom Work	10.49	11.02	11.54	11.54	14.69	11.54	10.49	35.68	11.54	73.46
Labour (Paid and Unpaid)	24.48	23.34	23.91	22.49	23.91	27.33	25.91	19.93	21.07	23.91
Utilities & Miscellaneous	18.11	18.11	18.11	18.11	18.11	22.06	22.06	10.99	10.23	12.58
Operating Interest	17.46	17.11	15.07	16.99	13.92	22.75	12.90	3.52	3.44	12.60
Total Direct Expense	398.05	394.29	356.92	393.96	346.67	504.61	372.13	204.99	195.65	367.62
Contribution Margin	199.35	291.71	181.28	222.24	95.13	243.39	177.87	245.01	229.35	227.10

Total Cost per Unit	9.84	8.10	6.79	7.26	5.52	15.39	10.89	126.47	110.09	63.16
Break-Even Yield	56.00 bu	58.00 bu	77.00 bu	72.00 bu	111.00 bu	40.00 bu	50.00 bu	1.42 t	1.62 t	5.32 t

Capital Costs by Enterprise	Crops	Forages
Crop Share/Cash Rent	65.50	30.50
Licenses and Insurance	17.47	7.49
Depreciation	67.16	37.23
Paid Capital Interest	24.08	5.16
Total Capital Costs	174.21	80.38
Adjusted Capital Costs	172.47	79.57


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Prepared Feb 25, 2023

Table 7. 2023 Estimated Production Costs and Returns (\$/acre)

Grey-Wooded (Peace Region)

Stubble Seeded Crops


	Spring Wheat	CPS Wheat	Feed Barley	Malt Barley	Milling Oats	Argentine HT Canola	Field Peas	Mixed Hay	Alfalfa Hay	Cereal Silage
	2 CWRS 11.5%	1 CPSR	1 CW	Select CW 2R	2 CW	1 CAN	2 CAN			
Expected Yield per Acre	56.00 bu	65.00 bu	76.00 bu	76.00 bu	99.00 bu	40.00 bu	50.00 bu	1.75 t	2.00 t	6.87 t
Expected Market Price	10.20 /bu	9.70 /bu	6.75 /bu	7.75 /bu	4.50 /bu	16.80 /bu	10.80 /bu	160.00 /t	190.00 /t	82.00 /t
Crop Sales (\$/acre)	571.20	630.50	513.00	589.00	445.50	672.00	540.00	280.00	380.00	563.34
Direct Expenses										
Seed, Cleaning & Treatment	43.80	40.00	33.90	36.00	49.73	80.00	63.25	5.61	12.60	33.90
Fertilizer (NPKS blend)	101.00 70-25-5-0	101.00 70-25-5-0	101.00 70-25-5-0	100.00 60-25-15-5	87.00 65-20-0-0	139.00 85-30-20-15	35.50 5-20-15-0	30.00 20-15-0-0	24.00 5-20-0-0	97.00 70-25-0-0
Chemical	54.75 *	54.75 *	30.99	54.75 *	22.87	36.33 *	53.06 *	2.39	2.99	22.87
Hail/Crop Insurance	17.91	19.58	16.81	19.70	19.58	34.08	34.39	NA	NA	NA
Trucking & Marketing	21.11	24.51	23.44	23.44	21.49	12.80	18.85	45.55	52.12	23.55
Fuel, Oil & Lube	30.36	31.14	32.08	36.83	28.38	38.12	38.28	36.13	23.65	34.69
Machinery Repairs	22.60	22.60	20.72	22.60	23.55	23.55	24.49	18.84	15.07	18.84
Building Repairs	5.68	4.55	3.03	3.03	3.79	6.44	4.55	2.27	1.52	2.27
Custom Work	6.30	6.30	11.54	13.12	9.44	7.35	10.49	0.00	0.00	80.80
Labour (Paid and Unpaid)	20.50	20.50	19.36	21.07	19.36	21.64	17.08	11.96	11.39	12.53
Utilities & Miscellaneous	18.11	18.11	18.11	18.11	18.11	22.06	15.69	10.23	10.23	10.23
Operating Interest	15.96	15.66	13.27	15.26	12.77	20.43	12.14	3.04	3.17	12.30
Total Direct Expense	358.10	358.70	324.27	363.93	316.07	441.78	327.77	166.03	156.74	348.98
Contribution Margin	213.10	271.80	188.73	225.07	129.43	230.22	212.23	113.97	223.26	214.36
Total Cost per Unit	9.24	7.97	6.37	6.89	4.80	15.03	9.75	135.63	114.03	61.18
Break-Even Yield	51.00 bu	54.00 bu	72.00 bu	68.00 bu	106.00 bu	36.00 bu	46.00 bu	1.48 t	1.20 t	5.13 t

Capital Costs by Enterprise	Crops	Forages
Crop Share/Cash Rent	71.97	34.11
Licenses and Insurance	14.98	6.66
Depreciation	59.86	25.55
Paid Capital Interest	14.34	5.73
Total Capital Costs	161.14	72.05
Adjusted Capital Costs	159.53	71.33

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Table 8. 2023 Estimated Production Costs and Returns (\$/acre) Irrigated Soils

Stubble Seeded Crops										
	Spring Wheat	CPS Wheat	Durum Wheat	Soft Wheat	Feed Barley	Malt Barley	Argentine HT Canola	Dry Beans	Alfalfa Hay	Cereal Silage
	<small>1 CWRS 13.5%</small>	<small>1 CPSR</small>	<small>1 CWAD 13%</small>	<small>1 CWSWS</small>	<small>1 CW</small>	<small>Select CW 2R</small>	<small>1 CAN</small>	<small>1 CAN</small>		
Expected Yield per Acre	96.00 bu	105.00 bu	103.00 bu	111.00 bu	125.00 bu	125.00 bu	58.00 bu	2459.00 lbs	4.00 t	11.00 t
Expected Market Price	10.75 /bu	10.20 /bu	11.50 /bu	9.75 /bu	7.25 /bu	8.20 /bu	17.00 /bu	0.50 /lb	210.00 /t	86.00 /t
Crop Sales (\$/acre)	1032.00	1071.00	1184.50	1082.25	906.25	1025.00	986.00	1229.50	840.00	946.00
Direct Expenses										
Seed, Cleaning & Treatment	54.75	50.00	55.13	46.13	42.38	45.00	80.00	60.00	17.64	42.38
Fertilizer (NPKS blend)	146.50 100-40-5-0	146.50 100-40-5-0	146.50 100-40-5-0	157.00 110-40-5-0	146.50 100-40-5-0	126.50 90-30-5-0	174.50 110-50-5-20	135.00 80-50-0-10	42.50 5-40-0-0	142.50 100-40-0-0
Chemical	64.23	64.23	64.23	64.23	41.91	64.23	46.53	44.66	3.50	22.31
Hail/Crop Insurance	20.27	22.34	23.60	21.13	17.94	20.04	31.98	32.76	NA	NA
Trucking & Marketing	36.20	39.59	38.83	41.85	38.56	38.56	18.55	28.04	103.10	37.70
Fuel, Oil & Lube	44.54	48.19	51.82	41.39	40.21	60.32	58.70	66.23	63.86	49.67
Machinery Repairs	30.88	28.44	31.42	28.72	30.07	32.58	31.42	46.05	36.84	20.05
Building Repairs	3.03	3.03	3.03	3.03	3.03	3.03	3.03	6.44	1.52	1.52
Irrigation: Pumping Costs	34.30	35.06	34.68	35.06	28.53	28.53	29.53	28.18	46.08	30.06
Custom Work	16.79	16.79	18.89	18.89	25.19	26.23	14.69	43.03	16.79	69.26
Labour (Paid and Unpaid)	34.16	35.30	35.59	35.30	38.72	38.72	35.30	43.84	38.72	39.86
Utilities & Miscellaneous	23.57	23.57	23.57	23.57	23.57	23.57	23.57	31.38	50.33	31.38
Operating Interest	21.24	20.86	21.27	21.39	18.46	18.86	24.08	19.17	5.09	16.57
Storage and/or Levies	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total Direct Expense	530.46	533.91	548.57	537.69	495.07	526.18	571.90	584.79	425.98	503.25
Contribution Margin	501.54	537.09	635.93	544.56	411.18	498.82	414.10	644.71	414.02	442.75
Total Cost per Unit	9.70	8.90	9.22	8.45	7.17	7.42	16.77	0.41	198.16	79.08
Break-Even Yield	87.00 bu	92.00 bu	83.00 bu	97.00 bu	124.00 bu	114.00 bu	58.00 bu	2031.00 lbs	3.77 t	10.12 t
Capital Costs by Enterprise	Crops	Forages	Specialty							
Crop Share/Cash Rent	191.35	183.03	201.87							
Licenses and Insurance	66.56	41.60	70.22							
Depreciation	126.28	131.39	135.04							
Paid Capital Interest	20.64	14.34	28.04							
Total Capital Costs	404.83	370.36	435.17							
Adjusted Capital Costs	400.79	366.65	430.81							

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