



Box Elder County Crop Production Costs and Returns, 2011

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Introduction

Sample costs and returns to establish and produce alfalfa hay, corn (silage), corn grain or irrigated wheat under flood irrigation and dry wheat in Box Elder County, Utah are presented in this publication. This publication is intended to be a guide used to make production decisions, determine potential returns and prepare business and marketing plans. The practices described are not the recommendations of Utah State University, but rather the production practices and materials considered typical of a well-managed farm in the region, as determined by producer survey results from 2011. Costs, materials, and practices are not applicable to all situations as management and cultural practices vary among growers within the region. The “*Your Farm*” column in all tables is provided for your use.

Farm. The representative farm consists of 2100 acres of land on which 260 acres are cultivated for alfalfa production, 260 acres for corn silage production, 380 acres of corn grain or irrigated wheat production, and 1200 acres for dry wheat production. The market value in 2011 was approximately \$6,000 per acre for agricultural land in Box Elder County with water rights and \$500 per acre without.

Crop Pricing. Five-year average pricing (2006-2010) for alfalfa hay is \$125/ton, wheat \$6.90/bu, corn (silage) \$34.60/ton, and corn (grain) \$4.43/bu (UDAF, 2011).

Owner Labor. The owner provided \$90,000 annually for the 2100 acre farm or \$75/acre.

Hired Labor. Hired labor is paid \$10/hr for a total cost of \$37,800 annually for the 2100 acre farm or \$18/acre.

Irrigation System. Flood irrigation is used for all crops with the exception of irrigated wheat which has three pivots at \$100,000 each including pump (Valley Irrigation Company, November 2011).

Cash Overhead. Cash overhead consists of various cash expenses paid out during the year. These costs include property taxes, interest, office expenses, liability and property insurance, accounting/legal costs, as well as investment/machinery repairs.

Property Taxes. Property taxes in Utah differ across counties. For the purposes of this publication, property taxes on buildings are calculated at 1 percent of the average asset value of the property. Property taxes on land should be taken into consideration, but are not included here.

Insurance. Insurance on farm investments vary, depending on the assets included and the amount of coverage. Property insurance provides coverage for property loss at .666 percent of the average asset value. Liability and crop insurance covers accidents and crop loss on the 2100 acre farm at an annual cost of \$8,000.

Fuel and Lube. The fuel and lube for machinery and vehicles is calculated at 8 percent of the average asset value.

Investment Repairs. Annual repairs on all farm investments or capital recovery items that require maintenance are calculated at 2 percent of the average asset value for buildings, improvements, and equipment and 7 percent of the average asset value for machinery and vehicles.

Office & Travel. Office and travel costs are estimated at \$8,000 for an average year for the 2100 acre farm. These expenses include office supplies, telephone service, Internet service, and travel expenses to educational seminars.

Accounting & Legal. Annual accounting and legal costs are estimated at \$8,000 for an average year for the 2100 acre farm.

Capital Recovery. Capital recovery costs are the annual depreciation (opportunity cost) of all farm investments. Capital recovery costs are calculated using straight line depreciation. All equipment listed is new unless otherwise noted. For used machinery the price is calculated as one-half of the new purchase price and useful life is two-thirds that of new machinery (Painter, 2011).

Salvage Value. Salvage value is 10 percent of the purchase price, which is an estimate of the remaining

value of an investment at the end of its useful life. The salvage value for land is the purchase price, as land does not normally depreciate.

Average Asset Value Computation

$$\left(\frac{\text{Purchase Price} + \text{Salvage Value}}{2}\right)$$

Straight Line Depreciation Computation

$$\left(\frac{\text{Purchase Price} - \text{Salvage Value}}{\text{Useful Life}}\right)$$

References

- Painter, Kathleen (2011). The Costs of Owning and Operating Farm Machinery in the Pacific Northwest 2011. A Pacific Northwest Publication #346. University of Idaho, Washington State University, and Oregon State University.
- Utah Department of Agriculture and Food (2011). 2011 Utah Agriculture Statistics and Utah Department of Agriculture and Food Annual Report.

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Table 1: Box Elder County Alfalfa Hay Establishment Costs, 260 acres, 2011.

	Total Units	Unit	Price/Cost Per Unit	Total Cost/Value	Total Cost/Value Per Acre	Your Farm
OPERATING COSTS						
Insecticide	260.00	Acre	\$ -	\$ -	\$ -	_____
Herbicide	260.00	Acre	\$ 15.00	\$ 3,900.00	\$ 15.00	_____
Fertilizer	260.00	Acre	\$ 80.00	\$ 20,800.00	\$ 80.00	_____
Custom Chemical Application	260.00	Acre	\$ 16.00	\$ 4,160.00	\$ 16.00	_____
Testing (Soil & Forage)	1.00	Annual	\$ 130.00	\$ 130.00	\$ 0.50	_____
Irrigation	1.00	Annual	\$ 9,360.00	\$ 9,360.00	\$ 36.00	_____
Alfalfa Seed	260.00	Acre	\$ 64.00	\$ 16,640.00	\$ 64.00	_____
Labor	260.00	Acre	\$ 18.00	\$ 4,680.00	\$ 18.00	_____
Operator Labor	260.00	Acre	\$ 75.00	\$ 19,500.00	\$ 75.00	_____
Fuel & Lube	1.00	Annual	\$ 2,228.16	\$ 2,228.16	\$ 8.57	_____
Maintenance	1.00	Annual	\$ 3,001.24	\$ 3,001.24	\$ 11.54	_____
Miscellaneous	260.00	Acre	\$ 5.00	\$ 1,300.00	\$ 5.00	_____
TOTAL OPERATING COSTS				\$ 85,699.40	\$ 329.61	
OWNERSHIP COSTS						
CASH OVERHEAD COSTS						
Liability/Crop Insurance				\$ 1,500.00	\$ 5.77	_____
Accounting & Legal				\$ 1,500.00	\$ 5.77	_____
Office & Travel				\$ 1,500.00	\$ 5.77	_____
Annual Investment Insurance				\$ 535.68	\$ 2.06	_____
Annual Investment Taxes				\$ 502.70	\$ 1.93	_____
TOTAL CASH OVERHEAD COSTS				\$ 5,538.38	\$ 21.30	
NONCASH OVERHEAD COSTS (Capital Recovery)						
Buildings, Improvements, & Equipment				\$ 2,308.50	\$ 8.88	_____
Machinery & Vehicles				\$ 5,745.60	\$ 22.10	_____
TOTAL NONCASH OVERHEAD COSTS				\$ 8,054.10	\$ 30.98	
TOTAL OWNERSHIP COSTS				\$ 13,592.48	\$ 52.28	
TOTAL COSTS				\$ 99,291.88	\$ 381.89	
YEAR ONE INCOME						
Alfalfa Hay	3.00	Tons	\$ 125.00	\$ 97,500.00	\$ 375.00	
TOTAL GROSS INCOME				\$ 97,500.00	\$ 375.00	
TOTAL ESTABLISHMENT INVESTMENT				\$ 1,791.88	\$ 6.89	

Table 2: Box Elder County Alfalfa Hay Production Costs and Returns, 260 acres, 2011.

	Total Units	Unit	Price/Cost Per Unit	Total Cost/Value	Total Cost/Value Per Acre	Your Farm
GROSS INCOME						
Alfalfa Hay	5.00	Tons	\$ 125.00	\$ 162,500.00	\$ 625.00	_____
TOTAL GROSS INCOME				\$ 162,500.00	\$ 625.00	
OPERATING COSTS						
Insecticide	260.00	Acre	\$ -	\$ -	\$ -	_____
Herbicide	260.00	Acre	\$ 15.00	\$ 3,900.00	\$ 15.00	_____
Fertilizer	260.00	Acre	\$ 80.00	\$ 20,800.00	\$ 80.00	_____
Custom Chemical Application	260.00	Acre	\$ 16.00	\$ 4,160.00	\$ 16.00	_____
Testing (Soil & Forage)	1.00	Annual	\$ 130.00	\$ 130.00	\$ 0.50	_____
Irrigation	1.00	Annual	\$ 9,360.00	\$ 9,360.00	\$ 36.00	_____
Labor	260.00	Acre	\$ 18.00	\$ 4,680.00	\$ 18.00	_____
Operator Labor	260.00	Acre	\$ 75.00	\$ 19,500.00	\$ 75.00	_____
Fuel & Lube	1.00	Annual	\$ 2,228.16	\$ 2,228.16	\$ 8.57	_____
Maintenance	1.00	Annual	\$ 3,001.24	\$ 3,001.24	\$ 11.54	_____
Miscellaneous	260.00	Acre	\$ 5.00	\$ 1,300.00	\$ 5.00	_____
TOTAL OPERATING COSTS				\$ 69,059.40	\$ 265.61	
INCOME ABOVE OPERATING COSTS				\$ 93,440.60	\$ 359.39	
OWNERSHIP COSTS						
CASH OVERHEAD COSTS						
Liability/Crop Insurance				\$ 1,500.00	\$ 5.77	_____
Accounting & Legal				\$ 1,500.00	\$ 5.77	_____
Office & Travel				\$ 1,500.00	\$ 5.77	_____
Annual Investment Insurance				\$ 535.68	\$ 2.06	_____
Annual Investment Taxes				\$ 502.70	\$ 1.93	_____
TOTAL CASH OVERHEAD COSTS				\$ 5,538.38	\$ 21.30	
NONCASH OVERHEAD COSTS (Capital Recovery)						
Buildings, Improvements, & Equipment				\$ 2,905.79	\$ 11.18	_____
Machinery & Vehicles				\$ 5,745.60	\$ 22.10	_____
TOTAL NONCASH OVERHEAD COSTS				\$ 8,651.39	\$ 33.27	
TOTAL OWNERSHIP COSTS				\$ 14,189.77	\$ 54.58	
TOTAL COSTS				\$ 83,249.17	\$ 320.19	
NET PROJECTED RETURNS				\$ 79,250.83	\$ 304.81	

Table 3: Alfalfa Production Investment Summary.

Description	Purchase Price	Percentage Use	Purchase Price	Useful Life (Yrs)	Salvage Value	Annual Capital Recovery	Annual Insurance	Annual Taxes	Annual Repairs	Annual Fuel & Lube
Buildings, Improvements, and Equipment										
Land	\$ 12,600,000.00	12%	\$ 1,512,000.00	150.00	\$ 1,512,000.00	\$ -	\$ -	TBD	\$ -	\$ -
Shop (50X100) & Tools	\$ 95,000.00	12%	\$ 11,400.00	40.00	\$ 1,140.00	\$ 256.50	\$ 41.76	\$ 62.70	\$ 125.40	\$ -
(2) Hay Barn (50X100)	\$ 80,000.00	100%	\$ 80,000.00	40.00	\$ 8,000.00	\$ 1,800.00	\$ 293.04	\$ 440.00	\$ 880.00	\$ -
Implements	\$ 35,000.00	12%	\$ 4,200.00	15.00	\$ 420.00	\$ 252.00	\$ 15.38	\$ -	\$ 46.20	\$ -
Alfalfa Establishment	\$ 1,791.88	100%	\$ 1,791.88	3.00	\$ -	\$ 597.29	\$ -	\$ -	\$ -	\$ -
Sub Total Pre-Establishment	\$ 12,810,000.00		\$ 1,607,600.00		\$ 1,521,560.00	\$ 2,308.50	\$ 350.18	\$ 502.70	\$ 1,051.60	\$ -
Sub Total Post-Establishment	\$ 12,811,791.88		\$ 1,609,391.88		\$ 1,521,560.00	\$ 2,905.79	\$ 350.18	\$ 502.70	\$ 1,051.60	\$ -
Machinery and Vehicles										
235 HP Tractor (used)	\$ 84,000.00	12%	\$ 10,080.00	10.00	\$ 1,008.00	\$ 907.20	\$ 36.92	\$ -	\$ 388.08	\$ 443.52
125 HP Tractor (used)	\$ 46,000.00	12%	\$ 5,520.00	10.00	\$ 552.00	\$ 496.80	\$ 20.22	\$ -	\$ 212.52	\$ 242.88
45 HP Tractor (used)	\$ 17,000.00	12%	\$ 2,040.00	10.00	\$ 204.00	\$ 183.60	\$ 7.47	\$ -	\$ 78.54	\$ 89.76
(2) 2 Ton Truck (used)	\$ 30,000.00	12%	\$ 3,600.00	10.00	\$ 360.00	\$ 324.00	\$ 13.19	\$ -	\$ 138.60	\$ 158.40
Swather (used)	\$ 35,000.00	12%	\$ 4,200.00	7.00	\$ 420.00	\$ 540.00	\$ 15.38	\$ -	\$ 161.70	\$ 184.80
Baler (32X34) (used)	\$ 35,000.00	12%	\$ 4,200.00	7.00	\$ 420.00	\$ 540.00	\$ 15.38	\$ -	\$ 161.70	\$ 184.80
(3) Dumptruck (used)	\$ 45,000.00	12%	\$ 5,400.00	10.00	\$ 540.00	\$ 486.00	\$ 19.78	\$ -	\$ 207.90	\$ 237.60
Rakes	\$ 20,000.00	12%	\$ 2,400.00	10.00	\$ 240.00	\$ 216.00	\$ 8.79	\$ -	\$ 92.40	\$ 105.60
(2) 4-Wheeler	\$ 20,000.00	12%	\$ 2,400.00	5.00	\$ 240.00	\$ 432.00	\$ 8.79	\$ -	\$ 92.40	\$ 105.60
1 Ton Pickup	\$ 50,000.00	12%	\$ 6,000.00	6.00	\$ 600.00	\$ 900.00	\$ 21.98	\$ -	\$ 231.00	\$ 264.00
3/4 Ton Pickup	\$ 40,000.00	12%	\$ 4,800.00	6.00	\$ 480.00	\$ 720.00	\$ 17.58	\$ -	\$ 184.80	\$ 211.20
Sub Total			\$ 50,640.00		\$ 5,064.00	\$ 5,745.60	\$ 185.49	\$ -	\$ 1,949.64	\$ 2,228.16
Total			\$ 1,660,031.88		\$ 1,526,624.00	\$ 8,651.39	\$ 535.68	\$ 502.70	\$ 3,001.24	\$ 2,228.16

Table 4: Box Elder County Corn (Grain) Production Costs and Returns, 380 acres, 2011.

	Total Units	Unit	Price/Cost Per Unit	Total Cost/Value	Total Cost/Value Per Acre	Your Farm
GROSS INCOME						
Corn	185.00	Bushels	\$ 4.43	\$ 311,429.00	\$ 819.55	_____
TOTAL GROSS INCOME				\$ 311,429.00	\$ 819.55	
OPERATING COSTS						
Insecticide	380.00	Acre	\$ -	\$ -	\$ -	_____
Herbicide	380.00	Acre	\$ 50.00	\$ 19,000.00	\$ 50.00	_____
Fertilizer	380.00	Acre	\$ 240.00	\$ 91,200.00	\$ 240.00	_____
Custom Chemical App	380.00	Acre	\$ 16.00	\$ 6,080.00	\$ 16.00	_____
Testing (Soil)	1.00	Annual	\$ -	\$ -	\$ -	_____
Seed	380.00	Acre	\$ 81.00	\$ 30,780.00	\$ 81.00	_____
Irrigation	1.00	Annual	\$ 13,680.00	\$ 13,680.00	\$ 36.00	_____
Labor	380.00	Acre	\$ 18.00	\$ 6,840.00	\$ 18.00	_____
Operator Labor	380.00	Acre	\$ 75.00	\$ 28,500.00	\$ 75.00	_____
Fuel & Lube	1.00	Annual	\$ 5,762.24	\$ 5,762.24	\$ 15.16	_____
Maintenance	1.00	Annual	\$ 5,739.36	\$ 5,739.36	\$ 15.10	_____
Miscellaneous	380.00	Acre	\$ 5.00	\$ 1,900.00	\$ 5.00	_____
TOTAL OPERATING COSTS				\$ 209,481.60	\$ 551.27	
INCOME ABOVE OPERATING COSTS				\$ 101,947.40	\$ 268.28	
OWNERSHIP COSTS						
CASH OVERHEAD COSTS						
Liability/Crop Insurance				\$ 2,000.00	\$ 5.26	_____
Accounting & Legal				\$ 2,000.00	\$ 5.26	_____
Office & Travel				\$ 2,000.00	\$ 5.26	_____
Annual Investment Insurance				\$ 711.94	\$ 1.87	_____
Annual Investment Taxes				\$ 94.05	\$ 0.25	_____
TOTAL CASH OVERHEAD COSTS				\$ 6,805.99	\$ 17.91	
NONCASH OVERHEAD COSTS (Capital Recovery)						
Buildings, Improvements, & Equipment				\$ 3,162.75	\$ 8.32	_____
Machinery & Vehicles				\$ 11,918.40	\$ 31.36	_____
TOTAL NONCASH OVERHEAD COSTS				\$ 15,081.15	\$ 39.69	
TOTAL OWNERSHIP COSTS				\$ 21,887.14	\$ 57.60	
TOTAL COSTS				\$ 231,368.74	\$ 608.87	
NET PROJECTED RETURNS				\$ 80,060.26	\$ 210.68	

Table 5: Corn (Grain) Production Investment Summary.

Description	Purchase Price	Percentage Use	Purchase Price	Useful Life (Yrs)	Salvage Value	Annual Capital Recovery	Annual Insurance	Annual Taxes	Annual Repairs	Annual Fuel & Lube
Buildings, Improvements, and Equipment										
Land	\$ 12,600,000.00	18%	\$ 2,268,000.00	150.00	\$ 2,268,000.00	\$ -	\$ -	TBD	\$ -	\$ -
Shop (50X100) & Tools	\$ 95,000.00	18%	\$ 17,100.00	40.00	\$ 1,710.00	\$ 384.75	\$ 62.64	\$ 94.05	\$ 188.10	\$ -
Grain Bin	\$ 40,000.00	100%	\$ 40,000.00	15.00	\$ 4,000.00	\$ 2,400.00	\$ 146.52	\$ -	\$ 440.00	\$ -
Implements	\$ 35,000.00	18%	\$ 6,300.00	15.00	\$ 630.00	\$ 378.00	\$ 23.08	\$ -	\$ 69.30	\$ -
Sub Total			\$ 2,331,400.00	NA	\$ 2,274,340.00	\$ 3,162.75	\$ 232.23	\$ 94.05	\$ 697.40	\$ -
Machinery and Vehicles										
235 HP Tractor (used)	\$ 84,000.00	18%	\$ 15,120.00	10.00	\$ 1,512.00	\$ 1,360.80	\$ 55.38	\$ -	\$ 582.12	\$ 665.28
125 HP Tractor (used)	\$ 46,000.00	18%	\$ 8,280.00	10.00	\$ 828.00	\$ 745.20	\$ 30.33	\$ -	\$ 318.78	\$ 364.32
45 HP Tractor (used)	\$ 17,000.00	18%	\$ 3,060.00	10.00	\$ 306.00	\$ 275.40	\$ 11.21	\$ -	\$ 117.81	\$ 134.64
(2) 2 Ton Truck (used)	\$ 30,000.00	18%	\$ 5,400.00	10.00	\$ 540.00	\$ 486.00	\$ 19.78	\$ -	\$ 207.90	\$ 237.60
Combine	\$ 250,000.00	22%	\$ 55,000.00	15.00	\$ 5,500.00	\$ 3,300.00	\$ 201.47	\$ -	\$ 2,117.50	\$ 2,420.00
Swather (used)	\$ 35,000.00	18%	\$ 6,300.00	7.00	\$ 630.00	\$ 810.00	\$ 23.08	\$ -	\$ 242.55	\$ 277.20
Baler (32X34) (used)	\$ 35,000.00	18%	\$ 6,300.00	7.00	\$ 630.00	\$ 810.00	\$ 23.08	\$ -	\$ 242.55	\$ 277.20
(3) Dumptruck (used)	\$ 45,000.00	18%	\$ 8,100.00	10.00	\$ 810.00	\$ 729.00	\$ 29.67	\$ -	\$ 311.85	\$ 356.40
Rakes	\$ 20,000.00	18%	\$ 3,600.00	10.00	\$ 360.00	\$ 324.00	\$ 13.19	\$ -	\$ 138.60	\$ 158.40
(2) 4-Wheeler	\$ 20,000.00	18%	\$ 3,600.00	5.00	\$ 360.00	\$ 648.00	\$ 13.19	\$ -	\$ 138.60	\$ 158.40
1 Ton Pickup	\$ 50,000.00	18%	\$ 9,000.00	6.00	\$ 900.00	\$ 1,350.00	\$ 32.97	\$ -	\$ 346.50	\$ 396.00
3/4 Ton Pickup	\$ 40,000.00	18%	\$ 7,200.00	6.00	\$ 720.00	\$ 1,080.00	\$ 26.37	\$ -	\$ 277.20	\$ 316.80
Sub Total			\$ 130,960.00	NA	\$ 13,096.00	\$ 11,918.40	\$ 479.71	\$ -	\$ 5,041.96	\$ 5,762.24
Total			\$ 2,462,360.00	NA	\$ 2,287,436.00	\$ 15,081.15	\$ 711.94	\$ 94.05	\$ 5,739.36	\$ 5,762.24

Table 6: Box Elder County Corn (Silage) Production Costs and Returns, 260 acres, 2011.

	Total Units	Unit	Price/Cost Per Unit	Total Cost/Value	Total Cost/Value Per Acre	Your Farm
GROSS INCOME						
Corn Silage	26.00	Tons	\$ 34.60	\$ 233,896.00	\$ 899.60	_____
TOTAL GROSS INCOME				\$ 233,896.00	\$ 899.60	
OPERATING COSTS						
Insecticide	260.00	Acre	\$ -	\$ -	\$ -	_____
Herbicide	260.00	Acre	\$ 37.00	\$ 9,620.00	\$ 37.00	_____
Fertilizer	260.00	Acre	\$ 34.00	\$ 8,840.00	\$ 34.00	_____
Custom Chemical App	260.00	Acre	\$ 11.00	\$ 2,860.00	\$ 11.00	_____
Testing (Soil)	1.00	Annual	\$ -	\$ -	\$ -	_____
Seed	260.00	Acre	\$ 72.00	\$ 18,720.00	\$ 72.00	_____
Irrigation	1.00	Annual	\$ 9,360.00	\$ 9,360.00	\$ 36.00	_____
Labor	260.00	Acre	\$ 18.00	\$ 4,680.00	\$ 18.00	_____
Operator Labor	260.00	Acre	\$ 75.00	\$ 19,500.00	\$ 75.00	_____
Fuel & Lube	1.00	Annual	\$ 3,878.16	\$ 3,878.16	\$ 14.92	_____
Maintenance	1.00	Annual	\$ 5,864.99	\$ 5,864.99	\$ 22.56	_____
Miscellaneous	260.00	Acre	\$ 5.00	\$ 1,300.00	\$ 5.00	_____
TOTAL OPERATING COSTS				\$ 84,623.15	\$ 325.47	
INCOME ABOVE OPERATING COSTS				\$ 149,272.85	\$ 574.13	
OWNERSHIP COSTS						
CASH OVERHEAD COSTS						
Liability/Crop Insurance				\$ 1,500.00	\$ 5.77	_____
Accounting & Legal				\$ 1,500.00	\$ 5.77	_____
Office & Travel				\$ 1,500.00	\$ 5.77	_____
Annual Investment Insurance				\$ 1,145.90	\$ 4.41	_____
Annual Investment Taxes				\$ 1,212.70	\$ 4.66	_____
TOTAL CASH OVERHEAD COSTS				\$ 6,858.60	\$ 26.38	
NONCASH OVERHEAD COSTS (Capital Recovery)						
Buildings, Improvements, & Equipment				\$ 5,108.50	\$ 19.65	_____
Machinery & Vehicles				\$ 7,995.60	\$ 30.75	_____
TOTAL NONCASH OVERHEAD COSTS				\$ 13,104.10	\$ 50.40	
TOTAL OWNERSHIP COSTS				\$ 19,962.70	\$ 76.78	
TOTAL COSTS				\$ 104,585.85	\$ 402.25	
NET PROJECTED RETURNS				\$ 129,310.15	\$ 497.35	

Table 7: Corn (Silage) Production Investment Summary.

Description	Purchase Price	Percentage Use	Purchase Price	Useful Life (Yrs)	Salvage Value	Annual Capital Recovery	Annual Insurance	Annual Taxes	Annual Repairs	Annual Fuel & Lube
Buildings, Improvements, and Equipment										
Land	\$ 12,600,000.00	12%	\$ 1,512,000.00	150.00	\$ 1,512,000.00	\$ -	\$ -	TBD	\$ -	\$ -
Shop (50X100) & Tools	\$ 95,000.00	12%	\$ 11,400.00	40.00	\$ 1,140.00	\$ 256.50	\$ 41.76	\$ 62.70	\$ 125.40	\$ -
(2) Silage Pit (60X200X12)	\$ 230,000.00	100%	\$ 230,000.00	50.00	\$ -	\$ 4,600.00	\$ 765.90	\$ 1,150.00	\$ 2,300.00	\$ -
Implements	\$ 35,000.00	12%	\$ 4,200.00	15.00	\$ 420.00	\$ 252.00	\$ 15.38	\$ -	\$ 46.20	\$ -
Sub Total			\$ 1,757,600.00	NA	\$ 1,513,560.00	\$ 5,108.50	\$ 823.04	\$ 1,212.70	\$ 2,471.60	\$ -
Machinery and Vehicles										
235 HP Tractor (used)	\$ 84,000.00	12%	\$ 10,080.00	10.00	\$ 1,008.00	\$ 907.20	\$ 36.92	\$ -	\$ 388.08	\$ 443.52
125 HP Tractor (used)	\$ 46,000.00	12%	\$ 5,520.00	10.00	\$ 552.00	\$ 496.80	\$ 20.22	\$ -	\$ 212.52	\$ 242.88
45 HP Tractor (used)	\$ 17,000.00	12%	\$ 2,040.00	10.00	\$ 204.00	\$ 183.60	\$ 7.47	\$ -	\$ 78.54	\$ 89.76
(2) 2 Ton Truck (used)	\$ 30,000.00	12%	\$ 3,600.00	10.00	\$ 360.00	\$ 324.00	\$ 13.19	\$ -	\$ 138.60	\$ 158.40
Combine	\$ 250,000.00	15%	\$ 37,500.00	15.00	\$ 3,750.00	\$ 2,250.00	\$ 137.36	\$ -	\$ 1,443.75	\$ 1,650.00
Swather (used)	\$ 35,000.00	12%	\$ 4,200.00	7.00	\$ 420.00	\$ 540.00	\$ 15.38	\$ -	\$ 161.70	\$ 184.80
Baler (32X34) (used)	\$ 35,000.00	12%	\$ 4,200.00	7.00	\$ 420.00	\$ 540.00	\$ 15.38	\$ -	\$ 161.70	\$ 184.80
(3) Dumptruck (used)	\$ 45,000.00	12%	\$ 5,400.00	10.00	\$ 540.00	\$ 486.00	\$ 19.78	\$ -	\$ 207.90	\$ 237.60
Rakes	\$ 20,000.00	12%	\$ 2,400.00	10.00	\$ 240.00	\$ 216.00	\$ 8.79	\$ -	\$ 92.40	\$ 105.60
(2) 4-Wheeler	\$ 20,000.00	12%	\$ 2,400.00	5.00	\$ 240.00	\$ 432.00	\$ 8.79	\$ -	\$ 92.40	\$ 105.60
1 Ton Pickup	\$ 50,000.00	12%	\$ 6,000.00	6.00	\$ 600.00	\$ 900.00	\$ 21.98	\$ -	\$ 231.00	\$ 264.00
3/4 Ton Pickup	\$ 40,000.00	12%	\$ 4,800.00	6.00	\$ 480.00	\$ 720.00	\$ 17.58	\$ -	\$ 184.80	\$ 211.20
Sub Total			\$ 88,140.00	NA	\$ 8,814.00	\$ 7,995.60	\$ 322.86	\$ -	\$ 3,393.39	\$ 3,878.16
Total			\$ 1,845,740.00	NA	\$ 1,522,374.00	\$ 13,104.10	\$ 1,145.90	\$ 1,212.70	\$ 5,864.99	\$ 3,878.16

Table 8: Box Elder County Irrigated Wheat Production Costs and Returns, 380 acres, 2011.

	Total Units	Unit	Price/Cost Per Unit	Total Cost/Value	Total Cost/Value Per Acre	Your Farm
GROSS INCOME						
Wheat	92.00	Bushels	\$ 6.90	\$ 241,224.00	\$ 634.80	_____
TOTAL GROSS INCOME				\$ 241,224.00	\$ 634.80	
OPERATING COSTS						
Insecticide	380.00	Acre	\$ -	\$ -	\$ -	_____
Herbicide	380.00	Acre	\$ 6.50	\$ 2,470.00	\$ 6.50	_____
Fertilizer	380.00	Acre	\$ 156.00	\$ 59,280.00	\$ 156.00	_____
Custom Chemical App	380.00	Acre	\$ 16.00	\$ 6,080.00	\$ 16.00	_____
Testing (Soil)	1.00	Annual	\$ -	\$ -	\$ -	_____
Seed	380.00	Acre	\$ 18.50	\$ 7,030.00	\$ 18.50	_____
Irrigation	1.00	Annual	\$ 13,680.00	\$ 13,680.00	\$ 36.00	_____
Labor	380.00	Acre	\$ 18.00	\$ 6,840.00	\$ 18.00	_____
Operator Labor	380.00	Acre	\$ 75.00	\$ 28,500.00	\$ 75.00	_____
Fuel & Lube	1.00	Annual	\$ 5,762.24	\$ 5,762.24	\$ 15.16	_____
Maintenance	1.00	Annual	\$ 8,599.36	\$ 8,599.36	\$ 22.63	_____
Miscellaneous	380.00	Acre	\$ 5.00	\$ 1,900.00	\$ 5.00	_____
TOTAL OPERATING COSTS				\$ 140,141.60	\$ 368.79	
INCOME ABOVE OPERATING COSTS				\$ 101,082.40	\$ 266.01	
OWNERSHIP COSTS						
CASH OVERHEAD COSTS						
Liability/Crop Insurance				\$ 2,000.00	\$ 5.26	_____
Accounting & Legal				\$ 2,000.00	\$ 5.26	_____
Office & Travel				\$ 2,000.00	\$ 5.26	_____
Annual Investment Insurance				\$ 1,664.32	\$ 4.38	_____
Annual Investment Taxes				\$ 94.05	\$ 0.25	_____
TOTAL CASH OVERHEAD COSTS				\$ 7,758.37	\$ 20.42	
NONCASH OVERHEAD COSTS (Capital Recovery)						
Buildings, Improvements, & Equipment				\$ 11,562.75	\$ 30.43	_____
Machinery & Vehicles				\$ 11,918.40	\$ 31.36	_____
TOTAL NONCASH OVERHEAD COSTS				\$ 23,481.15	\$ 61.79	
TOTAL OWNERSHIP COSTS				\$ 31,239.52	\$ 82.21	
TOTAL COSTS				\$ 171,381.12	\$ 451.00	
NET PROJECTED RETURNS				\$ 69,842.88	\$ 183.80	

Table 9: Irrigated Wheat Production Investment Summary.

Description	Purchase Price	Percentage Use	Purchase Price	Useful Life (Yrs)	Salvage Value	Annual Capital Recovery	Annual Insurance	Annual Taxes	Annual Repairs	Annual Fuel & Lube
Buildings, Improvements, and Equipment										
Land	\$ 12,600,000.00	18%	\$ 2,268,000.00	150.00	\$ 2,268,000.00	\$ -	\$ -	TBD	\$ -	\$ -
Shop (50X100) & Tools	\$ 95,000.00	18%	\$ 17,100.00	40.00	\$ 1,710.00	\$ 384.75	\$ 62.64	\$ 94.05	\$ 188.10	\$ -
Implements	\$ 35,000.00	18%	\$ 6,300.00	15.00	\$ 630.00	\$ 378.00	\$ 23.08	\$ -	\$ 69.30	\$ -
Irrigation System (Pivot)	\$ 300,000.00	100%	\$ 300,000.00	25.00	\$ 30,000.00	\$ 10,800.00	\$ 1,098.90	\$ -	\$ 3,300.00	\$ -
Sub Total			\$ 2,591,400.00	NA	\$ 2,300,340.00	\$ 11,562.75	\$ 1,184.61	\$ 94.05	\$ 3,557.40	\$ -
Machinery and Vehicles										
235 HP Tractor (used)	\$ 84,000.00	18%	\$ 15,120.00	10.00	\$ 1,512.00	\$ 1,360.80	\$ 55.38	\$ -	\$ 582.12	\$ 665.28
125 HP Tractor (used)	\$ 46,000.00	18%	\$ 8,280.00	10.00	\$ 828.00	\$ 745.20	\$ 30.33	\$ -	\$ 318.78	\$ 364.32
45 HP Tractor (used)	\$ 17,000.00	18%	\$ 3,060.00	10.00	\$ 306.00	\$ 275.40	\$ 11.21	\$ -	\$ 117.81	\$ 134.64
(2) 2 Ton Truck (used)	\$ 30,000.00	18%	\$ 5,400.00	10.00	\$ 540.00	\$ 486.00	\$ 19.78	\$ -	\$ 207.90	\$ 237.60
Combine	\$ 250,000.00	22%	\$ 55,000.00	15.00	\$ 5,500.00	\$ 3,300.00	\$ 201.47	\$ -	\$ 2,117.50	\$ 2,420.00
Swather (used)	\$ 35,000.00	18%	\$ 6,300.00	7.00	\$ 630.00	\$ 810.00	\$ 23.08	\$ -	\$ 242.55	\$ 277.20
Baler (32X34) (used)	\$ 35,000.00	18%	\$ 6,300.00	7.00	\$ 630.00	\$ 810.00	\$ 23.08	\$ -	\$ 242.55	\$ 277.20
(3) Dumptruck (used)	\$ 45,000.00	18%	\$ 8,100.00	10.00	\$ 810.00	\$ 729.00	\$ 29.67	\$ -	\$ 311.85	\$ 356.40
Rakes	\$ 20,000.00	18%	\$ 3,600.00	10.00	\$ 360.00	\$ 324.00	\$ 13.19	\$ -	\$ 138.60	\$ 158.40
(2) 4-Wheeler	\$ 20,000.00	18%	\$ 3,600.00	5.00	\$ 360.00	\$ 648.00	\$ 13.19	\$ -	\$ 138.60	\$ 158.40
1 Ton Pickup	\$ 50,000.00	18%	\$ 9,000.00	6.00	\$ 900.00	\$ 1,350.00	\$ 32.97	\$ -	\$ 346.50	\$ 396.00
3/4 Ton Pickup	\$ 40,000.00	18%	\$ 7,200.00	6.00	\$ 720.00	\$ 1,080.00	\$ 26.37	\$ -	\$ 277.20	\$ 316.80
Sub Total			\$ 130,960.00	NA	\$ 13,096.00	\$ 11,918.40	\$ 479.71	\$ -	\$ 5,041.96	\$ 5,762.24
Total			\$ 2,722,360.00	NA	\$ 2,313,436.00	\$ 23,481.15	\$ 1,664.32	\$ 94.05	\$ 8,599.36	\$ 5,762.24

Table 10: Box Elder County Dry Wheat Production Costs and Returns, 1200 acres, 2011.

	Total Units	Unit	Price/Cost Per Unit	Total Cost/Value	Total Cost/Value Per Acre	Your Farm
GROSS INCOME						
Wheat	40.00	Bushels	\$ 6.90	\$ 331,200.00	\$ 276.00	_____
TOTAL GROSS INCOME				\$ 331,200.00	\$ 276.00	
OPERATING COSTS						
Insecticide	1200.00	Acre	\$ -	\$ -	\$ -	_____
Herbicide	1200.00	Acre	\$ 12.00	\$ 14,400.00	\$ 12.00	_____
Fertilizer	1200.00	Acre	\$ 8.00	\$ 9,600.00	\$ 8.00	_____
Testing (Soil)	1.00	Annual	\$ -	\$ -	\$ -	_____
Seed	1200.00	Acre	\$ 18.50	\$ 22,200.00	\$ 18.50	_____
Labor	1200.00	Acre	\$ 18.00	\$ 21,600.00	\$ 18.00	_____
Operator Labor	1200.00	Acre	\$ 75.00	\$ 90,000.00	\$ 75.00	_____
Fuel & Lube	1.00	Annual	\$ 17,699.44	\$ 17,699.44	\$ 14.75	_____
Maintenance	1.00	Annual	\$ 16,316.41	\$ 16,316.41	\$ 13.60	_____
Miscellaneous	1200.00	Acre	\$ 5.00	\$ 6,000.00	\$ 5.00	_____
TOTAL OPERATING COSTS				\$ 197,815.85	\$ 164.85	
INCOME ABOVE OPERATING COSTS				\$ 133,384.15	\$ 111.15	
OWNERSHIP COSTS						
CASH OVERHEAD COSTS						
Liability/Crop Insurance				\$ 3,000.00	\$ 2.50	_____
Accounting & Legal				\$ 3,000.00	\$ 2.50	_____
Office & Travel				\$ 3,000.00	\$ 2.50	_____
Annual Investment Insurance				\$ 1,749.67	\$ 1.46	_____
Annual Investment Taxes				\$ 303.05	\$ 0.25	_____
TOTAL CASH OVERHEAD COSTS				\$ 11,052.72	\$ 9.21	
NONCASH OVERHEAD COSTS (Capital Recovery)						
Buildings, Improvements, & Equipment				\$ 2,457.75	\$ 2.05	_____
Machinery & Vehicles				\$ 37,220.40	\$ 31.02	_____
TOTAL NONCASH OVERHEAD COSTS				\$ 39,678.15	\$ 33.07	
TOTAL OWNERSHIP COSTS				\$ 50,730.87	\$ 42.28	
TOTAL COSTS				\$ 248,546.72	\$ 207.12	
NET PROJECTED RETURNS				\$ 82,653.28	\$ 68.88	

Table 11: Dry Wheat Production Investment Summary.

Description	Purchase Price	Percentage Use	Purchase Price	Useful Life (Yrs)	Salvage Value	Annual Capital Recovery	Annual Insurance	Annual Taxes	Annual Repairs	Annual Fuel & Lube
Buildings, Improvements, and Equipment										
Land	\$ 12,600,000.00	58%	\$ 7,308,000.00	150.00	\$ 7,308,000.00	\$ -	\$ -	TBD	\$ -	\$ -
Shop (50X100) & Tools	\$ 95,000.00	58%	\$ 55,100.00	40.00	\$ 5,510.00	\$ 1,239.75	\$ 201.83	\$ 303.05	\$ 606.10	\$ -
Implements	\$ 35,000.00	58%	\$ 20,300.00	15.00	\$ 2,030.00	\$ 1,218.00	\$ 74.36	\$ -	\$ 223.30	\$ -
Sub Total			\$ 7,383,400.00	NA	\$ 7,315,540.00	\$ 2,457.75	\$ 276.19	\$ 303.05	\$ 829.40	\$ -
Machinery and Vehicles										
235 HP Tractor (used)	\$ 84,000.00	58%	\$ 48,720.00	10.00	\$ 4,872.00	\$ 4,384.80	\$ 178.46	\$ -	\$ 1,875.72	\$ 2,143.68
125 HP Tractor (used)	\$ 46,000.00	58%	\$ 26,680.00	10.00	\$ 2,668.00	\$ 2,401.20	\$ 97.73	\$ -	\$ 1,027.18	\$ 1,173.92
45 HP Tractor (used)	\$ 17,000.00	58%	\$ 9,860.00	10.00	\$ 986.00	\$ 887.40	\$ 36.12	\$ -	\$ 379.61	\$ 433.84
(2) 2 Ton Truck (used)	\$ 30,000.00	58%	\$ 17,400.00	10.00	\$ 1,740.00	\$ 1,566.00	\$ 63.74	\$ -	\$ 669.90	\$ 765.60
Combine	\$ 250,000.00	63%	\$ 157,500.00	15.00	\$ 15,750.00	\$ 9,450.00	\$ 576.92	\$ -	\$ 6,063.75	\$ 6,930.00
Swather (used)	\$ 35,000.00	58%	\$ 20,300.00	7.00	\$ 2,030.00	\$ 2,610.00	\$ 74.36	\$ -	\$ 781.55	\$ 893.20
Baler (32X34) (used)	\$ 35,000.00	58%	\$ 20,300.00	7.00	\$ 2,030.00	\$ 2,610.00	\$ 74.36	\$ -	\$ 781.55	\$ 893.20
(3) Dumptruck (used)	\$ 45,000.00	58%	\$ 26,100.00	10.00	\$ 2,610.00	\$ 2,349.00	\$ 95.60	\$ -	\$ 1,004.85	\$ 1,148.40
Rakes	\$ 20,000.00	58%	\$ 11,600.00	10.00	\$ 1,160.00	\$ 1,044.00	\$ 42.49	\$ -	\$ 446.60	\$ 510.40
(2) 4-Wheeler	\$ 20,000.00	58%	\$ 11,600.00	5.00	\$ 1,160.00	\$ 2,088.00	\$ 42.49	\$ -	\$ 446.60	\$ 510.40
1 Ton Pickup	\$ 50,000.00	58%	\$ 29,000.00	6.00	\$ 2,900.00	\$ 4,350.00	\$ 106.23	\$ -	\$ 1,116.50	\$ 1,276.00
3/4 Ton Pickup	\$ 40,000.00	58%	\$ 23,200.00	6.00	\$ 2,320.00	\$ 3,480.00	\$ 84.98	\$ -	\$ 893.20	\$ 1,020.80
Sub Total			\$ 402,260.00	NA	\$ 40,226.00	\$ 37,220.40	\$ 1,473.48	\$ -	\$ 15,487.01	\$ 17,699.44
Total			\$ 7,785,660.00	NA	\$ 7,355,766.00	\$ 39,678.15	\$ 1,749.67	\$ 303.05	\$ 16,316.41	\$ 17,699.44