

Table 5A. Income and Cash Operating Summary; Barley, 1998

COUNTY: Graham FARM: Graham County 98 WATER SOURCE: Surface/Pump TILLAGE: Conventional
 CROP: Barley ACRES: 1.0 IRRIGATION SYSTEM: Flood Furrow SOIL: Sandy-Loam
 AREA: Safford Valley YIELD: 5,500.0 Lb / Acre PREVIOUS CROP: Cotton, Upland DATE: 2/4/99

Item	Unit	Quantity	Price/ Unit	Budgeted /Acre	Total /Acre	Your Farm Budget	
INCOME	Grain	Pound	5,500.00	\$0.06	\$346.50	\$346.50	_____
CASH LAND PREPARATION AND GROWING EXPENSES (including sales tax)							
Paid Labor (including benefits)					36.71	_____	
Tractor/Self Propelled				8.45		_____	
Irrigation				25.76		_____	
Other/ Contract				2.50		_____	
Chemicals and Custom Applications					58.49	_____	
Fertilizer				58.49		_____	
Farm Machinery and Vehicles					15.40	_____	
Diesel Fuel				5.49		_____	
Repairs and Maintenance				9.91		_____	
Irrigation Water (excluding labor)					13.35	_____	
Pump Energy - Electric				12.34		_____	
Repairs and Maintenance				1.01		_____	
Water Assessment (See Note Below) **						_____	
Other Purchased Inputs & Seed/Transplants				44.31	44.31	_____	
TOTAL CASH LAND PREPARATION AND GROWING EXPENSES					168.25	_____	
CASH HARVEST AND POST HARVEST EXPENSES							
Paid Labor (including benefits)					0.41	_____	
Tractor/Self Propelled				0.41		_____	
Farm Machinery and Vehicles					0.67	_____	
Diesel Fuel				0.23		_____	
Repairs and Maintenance				0.44		_____	
Custom Harvest/Post Harvest					69.90	_____	
TOTAL HARVEST AND POST HARVEST EXPENSE					70.98	_____	
OPERATING OVERHEAD PICKUP USE					7.57	_____	
OPERATING INTEREST AT 10.0%					6.47	_____	
TOTAL CASH OPERATING EXPENSES					\$253.27	_____	
RETURNS OVER CASH OPERATING EXPENSES					\$93.23	_____	

Notes: The above figures do not include ownership costs, see table B for detailed cost allocation.
 ** A water assessment charge of \$25.00 per Acre is included as an ownership cost in Table B.

Table 5B. Allocations of Ownership Costs; Barley, 1998

COUNTY:Graham FARM: Graham County 98 WATER SOURCE: Surface/Pump TILLAGE: Conventional
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 AREA: Safford Valley YIELD: 5,500.0 Lb / Acre PREVIOUS CROP: Cotton, Upland DATE: 2/4/99

Item	-- CASH COST BASIS (\$/ACRE) --		-- TOTAL COST BASIS (\$/ACRE) --	
	Income and Costs	Net Returns	Income and Costs	Net Returns
TOTAL INCOME at \$0.06 / Lb	\$346.50		\$346.50	
TOTAL OPERATING EXPENSES	\$253.27		\$253.27	
RETURN OVER CASH OPERATING EXPENSES		\$93.23		\$93.23
CASH OVERHEAD EXPENSES				
Taxes, Housing and Insurance, Farm Machinery	1.90		1.90	
Wells and Irrigation System	4.81		4.81	
General and Office Overhead (5.0% of Total Operating Exp.)	12.66		12.66	
General Farm Maintenance (3.0% of Total Operating Exp.)	7.60		7.60	
Total Cash Overhead Expenses	26.97		26.97	
Total Cash Operating and Overhead Cost	280.24		280.24	
RETURNS OVER CASH OPER. AND OVER. EXPENSES		\$66.26		\$66.26
CAPITAL ALLOCATIONS (100% Equity)				
Capital Replacement, Machinery and Vehicles			10.77	
Wells and Irrigation System			9.06	
Interest on Equity, Machinery and Vehicles			5.70	
Wells and Irrigation System			3.28	
Total Capital Allocations			28.82	
RETURNS TO LAND, CAPITAL, MANAGEMENT AND RISK ----->		\$66.26		
RETURNS TO LAND, MANAGEMENT AND RISK ----->				\$37.44
Land Cost / Ownership (100% Equity)				
Property Taxes (\$600.00 X 16.0% X 0.093)	8.93		8.93	
Opportunity Interest on Land (100% X 6.0 X \$600.00)			36.00	
Water Assessment	25.00		25.00	
Total Land Costs	33.93		69.93	
RETURNS TO CAPITAL, MANAGEMENT AND RISK ----->		\$32.33		
RETURNS TO MANAGEMENT AND RISK ----->				(\$32.49)
Management Services (8% of Total Operation Expenses)			20.26	
TOTAL OWNERSHIP COST	60.90		145.98	
TOTAL COST	\$314.17		\$399.25	
RETURNS TO CAPITAL, MANAGEMENT AND RISK ----->		\$32.33		
RETURNS TO RISK (PROFITS) ----->				(\$52.75)
BREAK-EVEN PRICE TO COVER OPERATING COST (PER Lb)		\$0.05		\$0.05
BREAK-EVEN PRICE TO COVER OWNERSHIP COST		\$0.01		\$0.03
BREAK-EVEN PRICE TO COVER TOTAL COST		\$0.06		\$0.07

Table 5C. Variable Operating Costs; Barley, 1998

COUNTY:Graham FARM: Graham County 98 WATER SOURCE: Surface/Pump TILLAGE: Conventional
 CROP: Barley ACRES: 1.0 IRRIGATION SYSTEM: Flood Furrow SOIL: Sandy-Loam
 AREA: Safford Valley YIELD: 5,500.0 Lb / Acre PREVIOUS CROP: Cotton, Upland DATE: 2/4/99

No.	First Month	Operation	---- Hours * ----		---- Operating Costs (\$/ACRE *) Per Operation ----					Tot. Cash Expenses	Class	
			Machine	Labor	Fuel/Rps.	Labor	Cust/Serv.	Materials	Total			Times
1	Dec	Disk	0.300	0.333	4.47	2.73			7.19	1.0	7.19	L
2	Dec	Landplane	0.273	0.300	2.32	2.46			4.78	1.0	4.78	L
3	Dec	Plant	0.300	0.666	3.47	5.00		82.40	90.87	1.0	90.87	L
4	Dec	Disk Ends	0.030	0.033	0.45	0.27			0.72	1.0	0.72	G
5	Dec	Buck Rows	0.030	0.066	0.22	0.50			0.71	1.0	0.71	G
6	Dec	Irrigate		0.403		2.75			2.75	4.0	11.00	G
7	Dec	Irrigate		0.606	5.56	4.14			9.70	2.0	19.39	G
8	Mar	Irrigate/Run Fertilizer		0.538		3.67		20.40	24.07	0.7	16.85	G
9	Mar	Irrigate/Run Fertilizer		0.806	7.42	5.50		20.40	33.32	0.3	9.99	G
10	Jun	Prepare Ends	0.045	0.050	0.67	0.41			1.08	1.0	1.08	H
11	Jun	Combine Harvest					56.40	56.40		1.0	56.40	H
12	Jun	Haul, Custom 54 CW					13.50	13.50		1.0	13.50	H
13	Jul	Disk Residue 54 CW	0.300	0.333	4.47	2.27			6.74	1.0	6.74	L
		Pickup Use30 Mi/Acre	1.000		7.57						7.57	
		Operating Interest at 10.0					6.47				6.47	
TOTAL CASH OPERATING EXPENSES (includes all times over):											253.27	T

*NOTES: Machine and labor hours and operating cost are for one time over the designated acreage. The "Tot. Cash Expense" column and the "TOTAL CASH OPERATING EXPENSES" row include all operations, all times over. Classes are defined below.
 A water assessment charge of \$25.00 per Acre is included as an ownership cost in Table B.

OPERATING COST SUMMARY BY CLASS		SENSITIVITY OF THE NET REVENUES OVER TOTAL CASH EXPENSES (\$/ACRE)							
		Prices	- 25%	- 10%	Budgeted	+ 10%	+ 25%		
Land Preparation (L)	109.58	Yields	\$0.05	\$0.06	\$0.06	\$0.07	\$0.08	Break-even Price	
Growing (G)	58.67	- 25%	4,125.0	-40.79	-1.81	24.18	50.17	89.15	0.06
Harvest (H)	70.98	- 10%	4,950.0	-12.45	34.32	65.51	96.69	143.47	0.05
Post Harvest (P)	0.00	Budgeted	5,500.0	6.43	58.41	93.06	127.71	179.68	0.05
Marketing (M)	0.00	+ 10%	6,050.0	25.32	82.50	120.61	158.73	215.90	0.04
Operating Overhead (O)	14.04	+ 25%	6,875.0	53.66	118.63	161.94	205.25	270.22	0.04
Total (T)	\$253.27	Break-even Yield		5,312.64	4,166.28	3,642.32	3,235.42	2,771.08	

Table 5D. Resource and Cash Flow Requirements; Barley, 1998

COUNTY:Graham FARM: Graham County 98 WATER SOURCE: Surface/Pump TILLAGE: Conventional
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 AREA: Safford Valley YIELD: 5,500.0 Lb / Acre PREVIOUS CROP: Cotton, Upland DATE: 2/4/99

Month *	Number Irrigations	Water Applied (inches)	Total Labor (Hrs)	Operating Costs (\$/ACRE *)						
				Purchased Water	Fuel, Oil and Repairs	Labor	Chemicals	Other Purchases	Services	Total
DEC P	1.0	6.0	1.18		7.69	8.78	19.04	22.15		57.67
JAN C	1.0	6.0	1.18		7.69	8.78	19.04	22.15		57.67
MAR C	2.0	14.0	1.08		3.89	7.39	20.40			31.68
APR C	2.0	12.0	0.93		3.34	6.33				9.67
MAY C	1.0	6.0	0.46		1.67	3.17				4.83
JUN C			0.05		0.67	0.41			60.79	61.87
JUL C			0.33		4.47	2.27			9.11	15.85
Pickup Use30 Mi/Acre					7.57					7.57
Operating Interest at 10.0									6.47	6.47
Water Assessment				**						
Total	7.0	44.0	5.22		36.98	37.12	58.49	44.31	76.37	232.27
%					14.60	14.66	23.09	17.50	30.15	100.00

TOTAL RESOURCE REQUIREMENTS (per Acre)		TOTAL ENERGY REQUIREMENTS (per Acre)	
Total N	148.0	Diesel Fuel	7.5 Gal
Total P	60.0	Unleaded Gas	3.0 Gal
Total K	0.0	Electric / Pumping	159.3 KWH
Total Labor	5.2	All Direct Energy	2.0 M BTU
Total Water	44.0		

EQUIPMENT REQUIREMENTS (per Acre)			
Grain Drill 12' W/Fert Box	0.30 Hr	Landplane 12'X 45'	0.27 Hr
Pickup Truck, 1/2 Ton	1.00 Hr	Rowbuck, 10'	0.03 Hr
Tractor, 125 PTO HP	0.68 Hr	Offset Disk, 13.5'	0.68 Hr
		Tractor, 100 PTO HP,	0.60 Hr

MATERIALS REQUIREMENT (per Acre)			
16-20-00, Dry	300.00 Lb	82-00-00, Anhyd.	122.00 Lb
Water, District	29.60 AI	Water, Pump	14.40 AI
		Barley Sd, Cert	175.00 Lb

LABOR REQUIREMENT (per Acre)			
Irrigators	3.78 Hr	Other	0.37 Hr
		Tractor	1.08 Hr

*NOTE: P = Previous Year C = Current Year N = Next Year
 ** A water assessment charge of \$25.00 per Acre is included as an ownership cost in Table B.

Table 5E. Schedule of Operations; Barley, 1998

COUNTY:Graham FARM: Graham County 98 WATER SOURCE: Surface/Pump TILLAGE: Conventional
 CROP: Barley ACRES: 1.0 IRRIGATION SYSTEM: Flood Furrow SOIL: Sandy-Loam
 AREA: Safford Valley YIELD: 5,500.0 Lb / Acre PREVIOUS CROP: Cotton, Upland DATE: 2/4/99

First No.	Month	Times	Operation	Equipment/ Custom Oper		Job Rate Acres/Hr	----- Material Use and Cost ----- Name	----- Service Cost -----			Labor Type
				HP	Self-Prop./ Implement			Appl. Rate	\$ / Unit	\$ / Unit	
1	Dec	1.0	Disk	125	Offset Disk, 13.5'	3.00					Tractor
2	Dec	1.0	Landplane	100	Landplane 12'X 45'	3.30					Tractor
3	Dec	1.0	Plant	100	Grain Drill 12' W/Fert Box	3.00	Barley Sd, Cert 16-20-00, Dry	175.00 Lb 300.00 Lb	24.00 CW 240.67 Tn		Tractor Other
4	Dec	1.0	Disk Ends	125	Offset Disk, 13.5'	30.00					Tractor
5	Dec	1.0	Buck Rows	100	Rowbuck, 10'	30.00					Tractor Other
6	Dec	4.0	Irrigate			2.48	Water, District	6.00 AI	0.00 AF		Irrigators
7	Dec	2.0	Irrigate			1.65	Water, Pump	6.00 AI	11.12 AF		Irrigators
8	Mar	0.7	Irrigate/Run Fertilizer			1.86	Water, District 82-00-00, Anhyd.	8.00 AI 122.00 Lb	0.00 AF 317.00 Tn		Irrigators
9	Mar	0.3	Irrigate/Run Fertilizer			1.24	Water, Pump 82-00-00, Anhyd.	8.00 AI 122.00 Lb	11.12 AF 317.00 Tn		Irrigators
10	Jun	1.0	Prepare Ends	125	Offset Disk, 13.5'	20.00					Tractor
11	Jun	1.0	Combine Harvest		CST Combine Barley					37.50 Ac	
12	Jun	1.0	Haul, Custom		CST Haul Grain					0.25 C	
13	Jul	1.0	Disk Residue	125	Offset Disk, 13.5'	3.00					Irrigators
			Pickup use 30 Mi/Ac		Pickup Truck, 1/2 Ton	1.00					

*NOTES: Machine times, labor times, and material rates are for one time over the designated acreage.