

TABLE 5. Alfalfa establishment, flood-irrigated, budgeted per acre costs and returns for a 100 acre farm with above average management, Valencia and Southern Bernalillo Counties, Projected 2016
Planting dates: August 15 - September 15

ITEM	PRICE	QUANTITY	PURCHASED INPUTS					TOTAL
PURCHASED INPUTS								
SEED	\$6.00	20 LBS	\$120.00					\$120.00
PHOSPHATE (P2O5)	\$0.61	90 LBS	\$54.90					\$54.90
NITROGEN (N)	\$0.48	35 LBS	\$16.80					\$16.80
CANAL WATER		12 AC. IN.						
SUBTOTAL			\$191.70					\$191.70
PREHARVEST OPERATIONS								
	POWER UNIT	ACCOMPLISHMENT RATE	PURCHASED INPUTS	LABOR	FUEL & LUBE	REPAIRS	FIXED COST	TOTAL
DISC	96 HP	0.17 HR		\$1.28	\$2.48	\$0.63	\$6.88	\$11.27
PLOW	96 HP	0.67 HR		\$5.03	\$9.79	\$3.42	\$24.93	\$43.16
DISC	96 HP	0.17 HR		\$1.28	\$2.48	\$0.63	\$6.88	\$11.27
LASER PLANE (CUSTOM)			\$70.71					\$70.71
BORDER DISC	50 HP	0.05 HR		\$0.38	\$0.45	\$0.10	\$5.54	\$6.46
DRILL	50 HP	0.25 HR		\$1.88	\$2.24	\$0.49	\$14.99	\$19.60
IRRIGATE (2X)		1.00 HR		\$7.50				\$7.50
SUBTOTAL		2.31 HR	\$70.71	\$17.33	\$17.45	\$5.27	\$59.22	\$169.98
OVERHEAD EXPENSES								
DOWNTIME		0.33 HR		\$2.46				\$2.46
EMPLOYEE BENEFITS				\$3.12				\$3.12
INSURANCE			\$0.35					\$0.35
SUPERVISION AND MANAGEMENT				\$26.97				\$26.97
SUBTOTAL		0.33 HR	\$0.35	\$32.55				\$32.89
TOTAL OPERATING EXPENSES								
		2.64 HR	\$262.76	\$49.87	\$17.45	\$5.27	\$59.22	\$394.58

TABLE 6. Alfalfa establishment, flood-irrigated, budgeted per acre costs and returns for a 100 acre farm with above average management, Valencia and Southern Bernalillo Counties, Projected 2016
Harvesting dates: June 1 - October 15

ITEM	PRICE	YIELD	TOTAL
GROSS RETURNS			
ALFALFA HAY	\$195.00	5.00 TONS (STACKED)	\$975.00
GRAZING	\$10.00	1.00 ACRE	\$10.00
TOTAL			\$985.00

PURCHASED INPUTS	PRICE	QUANTITY	PURCHASED INPUTS	FIXED COST	TOTAL
PHOSPHATE (P2O5)	\$0.61	90 LBS	\$54.90		\$54.90
INSECTICIDE (CUSTOM)	\$21.71	1 X/ACRE	\$21.71		\$21.71
WIRE	\$0.36	43 LBS	\$15.39		\$15.39
ESTABLISHMENT: Principal		6 YEARS		\$65.76	\$65.76
: Interest				\$11.24	\$11.24
CANAL WATER		44 AC. IN.	\$28.00		\$28.00
SUBTOTAL			\$120.00	\$77.00	\$197.00

PREHARVEST OPERATIONS	POWER UNIT	ACCOMPLISHMENT RATE	PURCHASED INPUTS	LABOR	FUEL & LUBE	REPAIRS	FIXED COST	TOTAL
IRRIGATE (6X)		4.00 HR		\$30.00				\$30.00

HARVEST OPERATIONS								
SWATHER (4X)	14 FT.	0.64 HR		\$4.80	\$6.11	\$0.37	\$20.45	\$31.73
BALER, PTO (4X)	50 HP	0.84 HR		\$6.30	\$7.54	\$1.04	\$15.98	\$30.86
BALE WAGON (CUSTOM) (2X)			\$23.40					\$23.40
SUBTOTAL		1.48 HR	\$23.40	\$11.10	\$13.65	\$1.41	\$36.43	\$85.99

OVERHEAD EXPENSES								
DOWNTIME		0.37 HR		\$2.78				\$2.78
EMPLOYEE BENEFITS				\$7.40				\$7.40
INSURANCE			\$0.82					\$0.82
LAND TAXES						\$5.18		\$5.18
SUPERVISION AND MANAGEMENT				\$73.69				\$73.69
OTHER EXPENSES			\$217.62					\$217.62
SUBTOTAL		0.37 HR	\$218.45	\$83.86		\$5.18		\$307.49

TOTAL OPERATING EXPENSES		5.85 HR	\$361.85	\$124.96	\$13.65	\$1.41	\$118.61	\$620.48
NET OPERATING PROFIT								\$364.52
INTEREST ON OPERATING CAPITAL		(\$63.21	@	5.50%)		\$3.48
INTEREST ON EQUIPMENT INVESTMENT								\$18.10
RETURN TO LAND AND RISK								\$342.94

BUDGET SUMMARY			
GROSS RETURN		\$985.00	
VARIABLE OPERATING EXPENSES	\$376.90		
RETURN OVER VARIABLE EXPENSES		\$608.10	(GROSS MARGIN)
FIXED EXPENSES	\$118.61		
NET FARM INCOME		\$489.48	(RETURN TO CAPITAL, LABOR, LAND & RISK)
LABOR AND MANAGEMENT COST	\$124.96		
NET OPERATING PROFIT		\$364.52	(RETURN TO CAPITAL, LAND & RISK)
CAPITAL COSTS	\$21.57		
RETURN TO LAND AND RISK		\$342.94	

TABLE 7. Alfalfa establishment, flood-irrigated, budgeted per acre costs and returns for a 100 acre farm with above average management, Valencia and Southern Bernalillo Counties, Projected 2016
 Planting dates: March 1 - May 1
 Harvesting dates: June 15 - July 15

ITEM	PRICE	YIELD						TOTAL
GROSS RETURNS								
SMALL GRAIN HAY	\$165.00	2.50 TONS (STACKED)						\$412.50
TOTAL								\$412.50
PURCHASED INPUTS								
	PRICE	QUANTITY	PURCHASED INPUTS				FIXED COST	TOTAL
SEED	\$0.40	80 LBS	\$32.00					\$32.00
WIRE	\$0.36	26 LBS	\$9.31					\$9.31
CANAL WATER		24 AC. IN.	\$28.00					\$28.00
SUBTOTAL								\$69.31
PREHARVEST OPERATIONS								
	POWER UNIT	ACCOMPLISHMENT RATE	PURCHASED INPUTS	LABOR	FUEL & LUBE	REPAIRS	FIXED COST	TOTAL
PLOW	96 HP	0.67 HR		\$5.03	\$9.79	\$3.42	\$24.93	\$43.16
DISC (2X)	96 HP	0.34 HR		\$2.55	\$4.97	\$1.27	\$13.76	\$22.55
PLANE	96 HP	0.24 HR		\$1.80	\$3.51	\$0.25	\$21.54	\$27.09
BORDER DISC	50 HP	0.05 HR		\$0.38	\$0.45	\$0.10	\$5.54	\$6.46
DRILL	50 HP	0.25 HR		\$1.88	\$2.24	\$0.49	\$14.99	\$19.80
IRRIGATE (4X)		2.00 HR		\$15.00				\$15.00
SUBTOTAL								\$133.87
HARVEST OPERATIONS								
SWATHER	14 FT.	0.16 HR		\$1.20	\$1.53	\$0.09	\$5.11	\$7.93
BALER, PTO	50 HP	0.21 HR		\$1.58	\$1.88	\$0.26	\$3.99	\$7.71
BALEWAGON			\$27.30					\$27.30
SUBTOTAL								\$42.95
OVERHEAD EXPENSES								
DOWNTIME		0.48 HR		\$3.80				\$3.80
EMPLOYEE BENEFITS				\$5.29				\$5.29
INSURANCE			\$0.59					\$0.59
LAND TAXES							\$2.59	\$2.59
SUPERVISION AND MANAGEMENT				\$31.84				\$31.84
OTHER EXPENSES			\$108.81					\$108.81
SUBTOTAL								\$152.72
TOTAL OPERATING EXPENSES								\$398.84
NET OPERATING PROFIT								\$13.86
INTEREST ON OPERATING CAPITAL		(\$41.59 @	5.50%)				\$2.29
INTEREST ON EQUIPMENT INVESTMENT								\$17.15
RETURN TO LAND AND RISK								(\$5.78)
BUDGET SUMMARY								
GROSS RETURN		\$412.50						
VARIABLE OPERATING EXPENSES	\$208.98							
RETURN OVER VARIABLE EXPENSES		\$203.54	(GROSS MARGIN)					
FIXED EXPENSES	\$92.46							
NET FARM INCOME		\$111.09	(RETURN TO CAPITAL, LABOR, LAND & RISK)					
LABOR AND MANAGEMENT COST	\$70.13							
NET OPERATING PROFIT		\$40.96	(RETURN TO CAPITAL, LAND & RISK)					
CAPITAL COSTS	\$19.44							
RETURN TO LAND AND RISK								\$21.52

TABLE 8. Alfalfa establishment, flood-irrigated, budgeted per acre costs and returns for a 100 acre farm with above average management, Valencia and Southern Bernalillo Counties, Projected 2016
 Planting dates: July 1 - July 31
 Harvesting dates: August 10 - September 30

ITEM	PRICE	YIELD						TOTAL
GROSS RETURNS								
SORGHUM HAY	\$170.00	2.00 TONS (STACKED)						\$340.00
GRAZING	\$5.00	1.00 ACRE						\$5.00
TOTAL								\$345.00
PURCHASED INPUTS								
	PRICE	QUANTITY	PURCHASED INPUTS				FIXED COST	TOTAL
SEED	\$1.70	35 LBS	\$59.50					\$59.50
WIRE	\$0.36	17 LBS	\$6.09					\$6.09
CANAL WATER		24 AC. IN.	\$28.00					\$28.00
SUBTOTAL			\$93.59					\$93.59
PREHARVEST OPERATIONS								
	POWER UNIT	ACCOMPLISHMENT RATE	PURCHASED INPUTS	LABOR	FUEL & LUBE	REPAIRS	FIXED COST	TOTAL
DISC	96 HP	0.17 HR		\$1.28	\$2.48	\$0.63	\$6.88	\$11.27
DRILL	50 HP	0.25 HR		\$1.88	\$2.24	\$0.49	\$14.99	\$19.60
IRRIGATE (4X)		2.00 HR		\$15.00				\$15.00
SUBTOTAL		2.42 HR		\$18.15	\$4.73	\$1.12	\$21.87	\$45.87
HARVEST OPERATIONS								
SWATHER (2X)	14 FT.	0.32 HR		\$2.40	\$3.06	\$0.19	\$10.23	\$15.87
BALER, PTO (2X)	50 HP	0.42 HR		\$3.15	\$3.77	\$0.52	\$7.99	\$15.43
BALEWAGON			\$23.40					\$23.40
SUBTOTAL		0.74 HR		\$5.55	\$6.83	\$0.70	\$18.22	\$54.69
OVERHEAD EXPENSES								
DOWNTIME		0.29 HR		\$2.18				\$2.18
EMPLOYEE BENEFITS				\$4.27				\$4.27
INSURANCE			\$0.47					\$0.47
LAND TAXES							\$2.59	\$2.59
SUPERVISION AND MANAGEMENT				\$26.73				\$26.73
OTHER EXPENSES			\$108.81					\$108.81
SUBTOTAL		0.29 HR	\$108.29	\$33.17			\$2.59	\$145.05
TOTAL OPERATING EXPENSES		3.45 HR	\$202.87	\$56.87	\$11.55	\$1.82	\$42.68	\$339.20
NET OPERATING PROFIT								\$5.80
INTEREST ON OPERATING CAPITAL		(\$48.88 @	5.50%)				\$2.69
INTEREST ON EQUIPMENT INVESTMENT								\$17.15
RETURN TO LAND AND RISK								(\$14.04)

BUDGET SUMMARY			
GROSS RETURN		\$345.00	
VARIABLE OPERATING EXPENSES	\$216.25		
RETURN OVER VARIABLE EXPENSES		\$128.75	(GROSS MARGIN)
FIXED EXPENSES	\$42.68		
NET FARM INCOME		\$86.07	(RETURN TO CAPITAL, LABOR, LAND & RISK)
LABOR AND MANAGEMENT COST	\$56.87		
NET OPERATING PROFIT		\$29.20	(RETURN TO CAPITAL, LAND & RISK)
CAPITAL COSTS	\$19.84		
RETURN TO LAND AND RISK		\$9.36	

TABLE 9. Alfalfa establishment, flood-irrigated, budgeted per acre costs and returns for a 100 acre farm with above average management, Valencia and Southern Bernalillo Counties, Projected 2016
 Planting dates: May 1 - June 15
 Harvesting dates: August 15 - September 30

ITEM	PRICE	YIELD						TOTAL
GROSS RETURNS								
CORN SILAGE	\$40.00	20.00 TONS (STANDING)						\$800.00
TOTAL								\$800.00
PURCHASED INPUTS								
PURCHASED INPUTS	PRICE	QUANTITY	PURCHASED INPUTS	FIXED COST				TOTAL
SEED	\$3.75	30 000	\$112.50					\$112.50
ANHYDROUS AMMONIA (NH3)	\$0.34	125 LBS	\$42.38					\$42.38
HERBICIDE (GRANULAR)	\$6.85	1 ACRE	\$6.85					\$6.85
INSECTICIDE (GRANULAR)	\$34.24	1 ACRE	\$34.24					\$34.24
CANAL WATER		42 AC. IN.	\$28.00					\$28.00
SUBTOTAL			\$223.96					\$223.96
PREHARVEST OPERATIONS								
	POWER UNIT	ACCOMPLISHMENT RATE	PURCHASED INPUTS	LABOR	FUEL & LUBE	REPAIRS	FIXED COST	TOTAL
PLOW	96 HP	0.67 HR		\$5.03	\$9.79	\$3.42	\$24.93	\$43.16
DISC (2X)	96 HP	0.34 HR		\$2.55	\$4.97	\$1.27	\$13.76	\$22.55
LAND PLANE	96 HP	0.24 HR		\$1.80	\$3.51	\$0.25	\$21.54	\$27.09
LISTER/PLANTER	96 HP	0.26 HR		\$1.95	\$3.80	\$0.87	\$109.19	\$115.80
CULTIVATOR (2X)	50 HP	0.42 HR		\$3.15	\$3.77	\$1.23	\$28.88	\$35.04
IRRIGATE (8X)		4.00 HR		\$30.00				\$30.00
SUBTOTAL		5.93 HR		\$44.48	\$25.84	\$7.04	\$196.29	\$273.65
OVERHEAD EXPENSES								
DOWNTIME		0.48 HR		\$3.62				\$3.62
EMPLOYEE BENEFITS				\$8.01				\$8.01
INSURANCE			\$0.89					\$0.89
LAND TAXES							\$5.18	\$5.18
SUPERVISION AND MANAGEMENT				\$60.97				\$60.97
OTHER EXPENSES			\$217.62					\$217.62
SUBTOTAL		0.48 HR		\$218.51	\$72.59		\$5.18	\$296.28
TOTAL OPERATING EXPENSES		6.41 HR		\$442.48	\$117.06	\$25.84	\$7.04	\$793.89
NET OPERATING PROFIT								\$6.11
INTEREST ON OPERATING CAPITAL		(\$120.20	@	5.50%)		\$6.61
INTEREST ON EQUIPMENT INVESTMENT								\$70.12
RETURN TO LAND AND RISK								(\$70.63)
BUDGET SUMMARY								
GROSS RETURN		\$800.00						
VARIABLE OPERATING EXPENSES	\$475.35							
RETURN OVER VARIABLE EXPENSES		\$324.65	(GROSS MARGIN)					
FIXED EXPENSES	\$201.47							
NET FARM INCOME		\$123.17	(RETURN TO CAPITAL, LABOR, LAND & RISK)					
LABOR AND MANAGEMENT COST	\$117.06							
NET OPERATING PROFIT		\$6.11	(RETURN TO CAPITAL, LAND & RISK)					
CAPITAL COSTS	\$76.73							
RETURN TO LAND AND RISK		(\$70.63)						

TABLE 10. Alfalfa establishment, flood-irrigated, budgeted per acre costs and returns for a 100 acre farm with above average management, Valencia and Southern Bernalillo Counties, Projected 2016

	ALFALFA ESTABLISHMENT	ALFALFA HAY	SMALL GRAIN HAY	SORGHUM HAY	CORN FOR SILAGE
		TONS	TONS	TONS	TONS
PRIMARY YIELD		5.00	2.50	2.00	20.00
PRIMARY PRICE		\$195.00	\$165.00	\$170.00	\$40.00
GOVERNMENT PAYMENTS		\$0.00	\$0.00	\$0.00	\$0.00
SECOND INCOME		\$10.00	\$0.00	\$5.00	\$0.00
GROSS RETURN		\$985.00	\$412.50	\$345.00	\$800.00
CASH OPERATING EXPENSES					
SEED	\$120.00		\$32.00	\$59.50	\$112.50
FERTILIZER	\$71.70	\$54.90			\$42.38
CHEMICALS		\$21.71			\$41.09
CROP INSURANCE					
OTHER PURCHASED INPUTS		\$15.39	\$9.31	\$6.09	
CANAL WATER		\$28.00	\$28.00	\$28.00	\$28.00
FUEL, OIL & LUBRICANTS-EQUIPMENT	\$17.45	\$13.65	\$24.37	\$11.55	\$25.84
FUEL-IRRIGATION					
REPAIRS	\$5.27	\$1.41	\$5.87	\$1.82	\$7.04
CUSTOM CHARGES	\$70.71	\$23.40			
LAND TAXES		\$5.18	\$2.59	\$2.59	\$5.18
OTHER EXPENSES	\$0.35	\$218.45	\$109.40	\$109.29	\$218.51
TOTAL CASH EXPENSES	\$285.48	\$382.09	\$211.55	\$218.84	\$480.54
RETURN OVER CASH EXPENSES	(\$285.48)	\$602.91	\$200.95	\$126.16	\$319.46
FIXED EXPENSES	\$59.22	\$113.43	\$89.87	\$40.09	\$196.29
TOTAL EXPENSES	\$344.70	\$495.52	\$301.41	\$258.93	\$676.83
NET FARM INCOME	(\$344.70)	\$489.48	\$111.09	\$86.07	\$123.17
LABOR AND MANAGEMENT COSTS	\$49.87	\$124.96	\$70.13	\$56.87	\$117.06
NET OPERATING PROFIT	(\$394.58)	\$364.52	\$40.96	\$29.20	\$6.11
CAPITAL COSTS					
INTEREST ON OPERATING CAPITAL		\$3.48	\$2.29	\$2.69	\$6.61
INTEREST ON EQUIPMENT INVESTMENT		\$18.10	\$17.15	\$17.15	\$70.12
TOTAL CAPITAL COSTS	\$0.00	\$21.57	\$19.44	\$19.84	\$76.73
RETURN TO LAND AND RISK	(\$394.58)	\$342.94	\$21.52	\$9.36	(\$70.63)

TABLE 11. Alfalfa establishment, flood-irrigated, budgeted per acre costs and returns for a 100 acre farm with above average management, Valencia and Southern Bernalillo Counties, Projected 2016

GROSS RETURNS		
ALFALFA HAY	71.00 ACRES	
CROP		\$69,225
GRAZING		\$710
SMALL GRAIN HAY	10.00 ACRES	
CROP		\$4,125
SORGHUM HAY	10.00 ACRES	
CROP		\$3,400
GRAZING		\$50
CORN FOR SILAGE	10.00 ACRES	
CROP		\$8,000
GROSS RETURN		\$85,510
CASH OPERATING EXPENSES		
SEED		\$3,480
FERTILIZER		\$5,182
CHEMICALS		\$1,952
CROP INSURANCE		\$0
OTHER PURCHASED INPUTS		\$1,247
CANAL WATER		\$2,828
FUEL, OIL & LUBRICANTS-EQUIPMENT		\$1,796
FUEL-IRRIGATION		\$0
REPAIRS		\$310
CUSTOM CHARGES		\$2,510
LAND TAXES		\$471
OTHER EXPENSES		\$19,886
TOTAL CASH EXPENSES		\$39,663
RETURN OVER CASH EXPENSES		\$45,847
FIXED EXPENSES		\$7,358
TOTAL EXPENSES		\$47,021
NET FARM INCOME		\$38,489
LABOR AND MANAGEMENT COSTS		\$11,911
NET OPERATING PROFIT		\$26,578
CAPITAL COSTS		
INTEREST ON OPERATING CAPITAL		\$363
INTEREST ON EQUIPMENT INVESTMENT		\$2,329
TOTAL CAPITAL COSTS		\$2,692
RETURN TO LAND AND RISK		\$23,886

LAND VALUE	RETURN TO RISK*	RETURN ON INVESTMENT**
\$5,000 /ACRE	\$8,886	4.84%
\$6,500 /ACRE	\$4,386	3.80%
\$8,000 /ACRE	(\$114)	3.13%
\$9,500 /ACRE	(\$4,614)	2.66%
\$11,000 /ACRE	(\$9,114)	2.31%
\$12,500 /ACRE	(\$13,614)	2.05%

* RETURN TO LAND AND RISK MINUS (INTEREST RATE TIMES LAND VALUE TIMES ACREAGE)

** NET OPERATING PROFIT DIVIDED BY (MACHINERY AND EQUIPMENT VALUE PLUS LAND VALUE)

