

TABLE 6. Alfalfa establishment, sprinkler-irrigated, budgeted per acre costs and returns for an 80 acre farm, San Juan County,
 Projected 2015
 Planting dates: April 15 - June 1
 Harvesting dates: June 15 - July 1

ITEM	PRICE	YIELD						TOTAL
GROSS RETURNS								
OAT HAY	\$225.00	2.25 TONS (STACKED)						\$506.25
GRAZING	\$10.00	1.00 AUM						\$10.00
TOTAL								\$516.25

PURCHASED INPUTS	PRICE	QUANTITY	PURCHASED INPUTS				FIXED COST	TOTAL
ALFALFA SEED	\$6.00	20 LBS	\$120.00					\$120.00
OAT SEED	\$0.64	45 LBS	\$28.80					\$28.80
PHOSPHATE (P2O5)	\$0.40	45 LBS	\$18.00					\$18.00
WIRE	\$1.32	19 LBS	\$25.45					\$25.45
CANAL WATER		39 AC. IN.					\$99.13	\$99.13
CANAL WATER (MAINTENANCE)		1 ACRE					\$8.00	\$8.00
SUBTOTAL			\$192.25				\$107.13	\$299.38

PREHARVEST OPERATIONS	POWER UNIT	ACCOMPLISHMENT RATE	PURCHASED INPUTS	LABOR	FUEL & LUBE	REPAIRS	FIXED COST	TOTAL
PLOW	96 HP	0.67 HR		\$5.23	\$14.28	\$3.42	\$49.70	\$72.62
DISC (2X)	96 HP	0.34 HR		\$2.65	\$7.25	\$1.27	\$32.37	\$43.54
HARROW	96 HP	0.19 HR		\$1.48	\$4.05	\$0.18	\$5.64	\$11.36
FERTILIZE	96 HP	0.05 HR		\$0.39	\$1.07	\$0.05	\$0.46	\$1.96
DRILL	96 HP	0.21 HR		\$1.64	\$4.48	\$0.42	\$43.86	\$50.40
DITCHER (2X)	40 HP	0.10 HR		\$0.78	\$0.94	\$0.11	\$3.10	\$4.93
IRRIGATE (9X)		2.25 HR		\$16.88	\$39.83	\$0.00	\$9.04	\$65.75
SUBTOTAL		3.81 HR		\$29.04	\$71.89	\$5.45	\$144.18	\$250.55

HARVEST OPERATIONS								
SWATHER	14 FT	0.16 HR		\$1.25	\$2.10	\$0.09	\$7.29	\$10.73
BALER	96 HP	0.21 HR		\$1.64	\$4.48	\$0.23	\$3.86	\$10.21
BALE WAGON	96 HP	0.20 HR		\$1.56	\$4.26	\$0.44	\$5.86	\$12.13
SUBTOTAL		0.57 HR		\$4.45	\$10.84	\$0.77	\$17.02	\$33.07

OVERHEAD EXPENSES									
DOWNTIME		1.74 HR		\$13.53				\$13.53	
EMPLOYEE BENEFITS				\$6.03				\$6.03	
INSURANCE			\$0.67					\$0.67	
LAND TAXES							\$2.45	\$2.45	
SUPERVISION AND MANAGEMENT				\$41.81				\$41.81	
SUBTOTAL		1.74 HR	\$0.67	\$61.37				\$2.45	\$64.49

TOTAL OPERATING EXPENSES		6.12 HR	\$192.92	\$94.86	\$82.72	\$6.22	\$270.77	\$647.49	
NET OPERATING PROFIT								(\$131.24)	
INTEREST ON OPERATING CAPITAL	(\$116.43	@	5.50%)				\$6.40
INTEREST ON EQUIPMENT INVESTMENT								\$64.31	
RETURN TO LAND AND RISK								(\$201.95)	

TABLE 7. Alfalfa hay, sprinkler-irrigated, budgeted per acre costs and returns for an 80 acre farm, San Juan County,
 Projected 2015
 Harvesting dates: June 1 - October 15

ITEM	PRICE	YIELD						TOTAL
GROSS RETURNS								
ALFALFA HAY	\$245.00	5.00 TONS (STACKED)						\$1,225.00
GRAZING	\$10.00	2.00 AUM						\$20.00
TOTAL								\$1,245.00
PURCHASED INPUTS								
PURCHASED INPUTS	PRICE	QUANTITY	PURCHASED INPUTS				FIXED COST	TOTAL
PHOSPHATE (P2O5)	\$0.40	40.00 LBS	\$16.00					\$16.00
INSECTICIDE (AERIAL)	\$19.20	1.00 ACRE	\$19.20					\$19.20
WIRE	\$1.32	43.00 LBS	\$56.76					\$56.76
LIVESTOCK FAC & EQUIP ESTABLISHMENT: Principal		6.00 YEARS					\$5.00	\$5.00
: Interest							\$33.66	\$33.66
							\$15.84	\$15.84
CANAL WATER		46.00 AC. IN.					\$116.92	\$116.92
CANAL WATER (MAINTENANCE)		1 ACRE					\$8.00	\$8.00
SUBTOTAL			\$91.96				\$179.42	\$271.38
PREHARVEST OPERATIONS								
	POWER UNIT	ACCOMPLISHMENT RATE	PURCHASED INPUTS	LABOR	FUEL & LUBE	REPAIRS	FIXED COST	TOTAL
FERTILIZE	96 HP	0.05 HR		\$0.39	\$1.07	\$0.05	\$0.46	\$1.96
DITCHER (2X)	40 HP	0.10 HR		\$0.78	\$0.94	\$0.11	\$3.10	\$4.93
IRRIGATE (13X)		3.25 HR		\$24.38	\$46.98	\$0.00	\$10.66	\$82.02
SUBTOTAL		3.40 HR		\$25.55	\$48.98	\$0.16	\$14.22	\$88.91
HARVEST OPERATIONS								
SWATHER (3X)	14 FT	0.48 HR		\$3.74	\$6.29	\$0.28	\$21.88	\$32.20
BALER (3X)	40 HP	0.63 HR		\$4.91	\$5.89	\$0.78	\$11.27	\$22.86
BALE WAGON (3X)	96 HP	0.60 HR		\$4.68	\$12.79	\$1.33	\$17.58	\$36.38
SUBTOTAL		1.71 HR		\$13.34	\$24.97	\$2.39	\$50.74	\$91.43
OVERHEAD EXPENSES								
DOWNTIME		0.44 HR		\$3.43				\$3.43
EMPLOYEE BENEFITS				\$7.00				\$7.00
INSURANCE			\$0.78					\$0.78
LAND TAXES							\$2.45	\$2.45
SUPERVISION AND MANAGEMENT				\$91.28				\$91.28
OTHER EXPENSES			\$284.29					\$284.29
SUBTOTAL		0.44 HR		\$285.07	\$101.71		\$2.45	\$389.23
TOTAL OPERATING EXPENSES		5.55 HR		\$377.03	\$140.59	\$73.95	\$246.82	\$840.95
NET OPERATING PROFIT								\$404.05
INTEREST ON OPERATING CAPITAL		(\$60.55	@	5.50%)		\$3.33
INTEREST ON EQUIPMENT INVESTMENT								\$35.62
RETURN TO LAND AND RISK								\$365.10

BUDGET SUMMARY		
GROSS RETURN		\$1,245.00
VARIABLE OPERATING EXPENSES	\$453.53	
RETURN OVER VARIABLE EXPENSES	\$791.47	(GROSS MARGIN)
FIXED EXPENSES	\$246.82	
NET FARM INCOME	\$544.64	(RETURN TO CAPITAL, LABOR, LAND & RISK)
LABOR AND MANAGEMENT COST	\$140.59	
NET OPERATING PROFIT	\$404.05	(RETURN TO CAPITAL, LAND & RISK)
CAPITAL COSTS	\$38.95	
RETURN TO LAND AND RISK	\$365.10	

TABLE 8. Summary of per acre costs and returns for an 80 acre farm, San Juan County,
Projected 2015

	ALFALFA ESTABLISHMENT	ALFALFA HAY
	TONS	TONS
PRIMARY YIELD	2.25	5.00
PRIMARY PRICE	\$225.00	\$245.00
GOVERNMENT PAYMENTS	\$0.00	\$0.00
SECOND INCOME	\$10.00	\$20.00
GROSS RETURN	\$516.25	\$1,245.00
CASH OPERATING EXPENSES		
SEED	\$148.80	
FERTILIZER	\$18.00	\$16.00
CHEMICALS		\$19.20
CROP INSURANCE		
OTHER PURCHASED INPUTS	\$25.45	\$56.76
CANAL WATER		
FUEL, OIL & LUBRICANTS-EQUIPMENT	\$42.89	\$26.97
FUEL-IRRIGATION	\$39.83	\$46.98
REPAIRS	\$6.22	\$2.55
CUSTOM CHARGES		
LAND TAXES	\$2.45	\$2.45
OTHER EXPENSES	\$0.67	\$285.07
TOTAL CASH EXPENSES	\$284.31	\$455.98
RETURN OVER CASH EXPENSES	\$231.94	\$789.02
FIXED EXPENSES	\$268.32	\$244.38
TOTAL EXPENSES	\$552.63	\$700.36
NET FARM INCOME	(\$36.38)	\$544.64
LABOR AND MANAGEMENT COSTS	\$94.86	\$140.59
NET OPERATING PROFIT	(\$131.24)	\$404.05
CAPITAL COSTS		
INTEREST ON OPERATING CAPITAL	\$6.40	\$3.33
INTEREST ON EQUIPMENT INVESTMENT	\$64.31	\$35.62
TOTAL CAPITAL COSTS	\$70.72	\$38.95
RETURN TO LAND AND RISK	(\$201.95)	\$365.10

TABLE 9. Whole farm summary, San Juan County,
Projected 2015

GROSS RETURNS		
OAT HAY	11.00 ACRES	
CROP		\$5,679
ALFALFA HAY	69.00 ACRES	
CROP		\$84,525
GRAZING		\$1,380
GROSS RETURN		<u>\$91,584</u>
CASH OPERATING EXPENSES		
SEED		\$1,637
FERTILIZER		\$1,302
CHEMICALS		\$1,325
CROP INSURANCE		\$0
OTHER PURCHASED INPUTS		\$4,196
CANAL WATER		\$0
FUEL, OIL & LUBRICANTS-EQUIPMENT		\$2,333
FUEL-IRRIGATION		\$3,680
REPAIRS		\$244
CUSTOM CHARGES		\$0
LAND TAXES		\$196
OTHER EXPENSES		\$19,677
TOTAL CASH EXPENSES		<u>\$34,590</u>
RETURN OVER CASH EXPENSES		\$56,994
FIXED EXPENSES		\$17,491
TOTAL EXPENSES		\$52,081
NET FARM INCOME		\$39,503
LABOR AND MANAGEMENT COSTS		\$10,744
NET OPERATING PROFIT		\$28,758
CAPITAL COSTS		
INTEREST ON OPERATING CAPITAL		\$300
INTEREST ON EQUIPMENT INVESTMENT		\$3,166
TOTAL CAPITAL COSTS		<u>\$3,466</u>
RETURN TO LAND AND RISK		<u>\$25,293</u>

LAND VALUE	RETURN TO RISK*	RETURN ON INVESTMENT**
\$1,000 /ACRE	\$22,893	22.47%
\$2,500 /ACRE	\$19,293	11.60%
\$4,000 /ACRE	\$15,693	7.82%
\$5,500 /ACRE	\$12,093	5.89%
\$7,000 /ACRE	\$8,493	4.73%
\$8,500 /ACRE	\$4,893	3.95%

* 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)