TABLE 6. Alfalfa establishment, flood-irrigated, budgeted per acre costs and returns for an 80 acre part-time farm, Dry Cimarron area, Union County, Projected 2015

CANAL WATER		5 AC. IN.						
SUBTOTAL			\$108.00				-	\$108.00
PREHARVEST OPERATIONS	POWER UNIT	ACCOMPLISHMENT RATE	PURCHASED INPUTS	LABOR	FUEL & LUBE	REPAIRS	FIXED COST	TOTAL
THE BUILDING STEEL STREET	<u> </u>	10112						
CHISEL	40 HP	0.20 HR		\$1.71	\$2.62	\$0.22	\$0.60	\$5.15
DISC	40 HP	0.17 HR		\$1.45	\$2.23	\$0.18	\$0.51	\$4.37
DRILL	40 HP	0.25 HR		\$2.14	\$3.27	\$0.27	\$0.75	\$6.43
DITCH MAINTENANCE		0.50 HR		\$4.28				\$4.28
IRRIGATE (1X)		0.75 HR		\$5.63				\$5.63
SUBTOTAL		1.87 HR		\$15.20	\$8.12	\$0.67	\$1.87	\$25.85
OVERHEAD EXPENSES								
DOWNTIME		0.16 HR		\$1.33				\$1.33
EMPLOYEE BENEFITS				\$2.74				\$2.74
INSURANCE			\$0.30					\$0.30
SUPERVISION AND MANAGEMENT				\$10.43				\$10.43
SUBTOTAL		0.16 HR	\$0.30	\$14.49				\$14.80
TOTAL OPERATING EXPENSES		2.03 HR	\$108.30	\$29.69	\$8.12	\$0.67	\$1.87	\$148.65

TABLE 7. Alfalfa hay, flood-irrigated, budgeted per acre costs and returns for an 80 acre part-time farm, Dry Cimarron area, Union County, Projected 2015

Harvesting dates: May 15 - September 15 ITEM YIELD **PRICE TOTAL GROSS RETURNS** \$245.00 4.00 TONS (STACKED) ALFALF FA HAY \$980.00 GRAZING \$15.00 1.00 ACRE \$15.00 \$995.00 TOTAL **PURCHASED FIXED PRICE INPUTS** COST TOTAL PURCHASED INPUTS QUANTITY LIVESTOCK FAC & EQUIP \$4.00 \$4.00 **ESTABLISHMENT:** Principal 10.00 YEARS \$14.86 \$14.86 : Interest \$4.79 \$4.79 **BALING WIRE** 34.28 LBS \$45.25 \$1.32 \$45.25 CANAL WATER 16.00 AC. IN. \$5.00 \$5.00 PUMP WATER* 8.00 AC. IN. \$23.66 \$50.25 \$73.91 SUBTOTAL **POWER** ACCOMPLISHMENT PURCHASED FUEL & **FIXED** PREHARVEST OPERATIONS UNIT **INPUTS** LABOR LUBE **REPAIRS** COST TOTAL RATE DITCH MAINTENANCE 0.50 HR \$4.28 \$4.28 IRRIGATE (8X) 4.00 HR \$30.00 \$6.64 \$0.00 \$14.41 \$51.05 \$6.64 SUBTOTAL 4.50 HR \$34.28 \$0.00 \$14.41 \$55.33 HARVEST OPERATIONS MOWER (3X) 40 HP 1.11 HR \$9.49 \$14.53 \$1.60 \$5.44 \$31.06 40 HP 0.36 HR \$3.08 \$4.71 \$0.54 \$3.59 \$11.92 RAKE (3X) 40 HP 0.63 HR \$5.39 \$8.25 \$0.78 \$8.12 \$22.53 BALER (3X) HAUL (3X) 1 TON TRUCK 4.50 HR \$38.48 \$100.05 \$37.46 \$56.79 \$232.77 SUBTOTAL 6.60 HR \$56.43 \$127.54 \$40.38 \$73.93 \$298.29 OVERHEAD EXPENSES DOWNTIME 1.65 HR \$14.11 \$14.11 **EMPLOYEE BENEFITS** \$16.33 \$16.33 INSURANCE \$1.81 \$1.81 \$0.21 \$0.21 LAND TAXES SUPERVISION AND MANAGEMENT \$76.95 \$76.95 OTHER EXPENSES \$245.05 \$245.05 \$354.45 SUBTOTAL 1.65 HR \$246.86 \$107.38 \$0.21 TOTAL OPERATING EXPENSES \$297.11 \$198.09 \$134.18 \$40.38 \$112.21 \$781.98 12.75 HR **NET OPERATING PROFIT** \$213.02 INTEREST ON OPERATING CAPITAL \$40.78 5.50% \$2.24 INTEREST ON EQUIPMENT INVESTMENT \$2.15 RETURN TO LAND AND RISK \$208.63 * Pump water costs are shown under irrigation in the preharvest operations section.

	BUDGETS	UMMARY	
GROSS RETURN		\$995.00	
VARIABLE OPERATING EXPENSES	\$471.68		
RETURN OVER VARIABLE EXPENSES		\$523.32	(GROSS MARGIN)
FIXED EXPENSES	\$112.21		
NET FARM INCOME		\$411.11	(RETURN TO CAPITAL, LABOR, LAND & RISK)
LABOR AND MANAGEMENT COST	\$198.09		
NET OPERATING PROFIT		\$213.02	(RETURN TO CAPITAL, LAND & RISK)
CAPITAL COSTS	\$4.39		
RETURN TO LAND AND RISK		\$208.63	

TABLE 8. Native grass hay, flood-irrigated, budgeted per acre costs and returns for an 80 acre part-time farm, Dry Cimarron area, Union County, Projected 2015

Harvesting dates: July 20 - September 15

CAPITAL COSTS RETURN TO LAND AND RISK

Harvesting dates: July 20 - Septe			VIEL							TOTAL
ITEM	PRICE		YIELI	ט						TOTAI
GROSS RETURNS HAY	\$220.00		1.50	TONS (S	STACKED)					\$330.00
GRAZING	\$13.00			ACRE	5171611 <u>2</u> 5)					\$13.00
TOTAL									•	\$343.00
PURCHASED INPUTS	PRICE		QUANT	TITY	PURCHASED INPUTS				FIXED COST	TOTA
LIVESTOCK FAC & EQUIP									\$4.00	\$4.00
BALING WIRE	\$1.32			LBS	\$16.97					\$16.97
CANAL WATER PUMP WATER*				AC. IN. AC. IN.	\$5.00					\$5.00
FUNIF WATER			0	AC. IIV.						
SUBTOTAL					\$21.97				\$4.00	\$25.97
	POWER		ACCOMPLIS		PURCHASED		FUEL &		FIXED	
PREHARVEST OPERATIONS	UNIT		RATE		INPUTS	LABOR	LUBE	REPAIRS	COST	TOTA
DITCH MAINTENANCE			0.50	HR		\$4.28				\$4.28
IRRIGATE (5X)			2.50	HR		\$21.38	\$4.98	\$0.00	\$10.81	\$37.17
SUBTOTAL		-	3.00	HR		\$25.65	\$4.98	\$0.00	\$10.81	\$41.44
HARVEST OPERATIONS										
MOWER (2X)	40 HP		0.74	HR		\$6.33	\$9.69	\$1.07	\$3.63	\$20.71
RAKE (2X)	40 HP		0.24			\$2.05	\$3.14	\$0.36	\$2.39	\$7.95
BALER, 1-TON (2X)	40 HP		0.42			\$3.59	\$5.50	\$0.52	\$5.41	\$15.02
HAUL (2X)	TRUCK		1.60	HR		\$13.68	\$35.57	\$13.32	\$20.19	\$82.76
SUBTOTAL		-	3.00	HR	\$0.00	\$25.65	\$53.90	\$15.27	\$31.62	\$126.44
OVERHEAD EXPENSES										
DOWNTIME			0.75	HR		\$6.41				\$6.41
EMPLOYEE BENEFITS						\$9.23				\$9.23
INSURANCE					\$1.03					\$1.03
LAND TAXES						ФОГ Г 4			\$0.21	\$0.21
SUPERVISION AND MANAGEMENT OTHER EXPENSES					\$245.05	\$25.51				\$25.51 \$245.05
		-								
SUBTOTAL		_	0.75		\$246.07	\$41.16			\$0.21	\$287.44
TOTAL OPERATING EXPENSES			3.75	HR	\$268.04	\$92.46	\$58.88	\$15.27	\$46.64	\$481.29
NET OPERATING PROFIT										(\$138.29
INTEREST ON OPERATING CAPITAL		(\$17.99	@	5.50%)				\$0.99
INTEREST ON EQUIPMENT INVESTMENT	-									\$21.11
RETURN TO LAND AND RISK										(\$160.38
* Pump water costs are shown under irrigati	on in the pre		ations sectior SUMMARY	٦.						
GROSS RETURN			\$343.00							
VARIABLE OPERATING EXPENSES		\$342.19								
RETURN OVER VARIABLE EXPENSES		\$0.81 (GROSS MARGIN)								
FIXED EXPENSES NET FARM INCOME		\$46.64	(\$45.83)	(RFTI	JRN TO CAPITAL,	I ABOR I A	ND & RISK)			
LABOR AND MANAGEMENT COST		\$92.46	(ψ το.οο)	(/ J/II II / L,	, <i>_</i>				
NET OPERATING PROFIT			(\$138.29)	(RETU	JRN TO CAPITAL,	, LAND & RIS	SK)			
CAPITAL COSTS		\$22.10								

\$22.10

(\$160.38)

TABLE 9. Summary of per acre costs and returns for an 80 acre part-time farm, Dry Cimarron area, Union County, Projected 2015

	ALFALFA ESTABLISHMENT	ALFALFA HAY	NATIVE GRASS HAY
		TONS	TONS
PRIMARY YIELD		4.00	1.50
PRIMARY PRICE		\$245.00	\$220.00
GOVERNMENT PAYMENTS		\$0.00	\$0.00
SECOND INCOME		\$15.00	\$13.00
GROSS RETURN		\$995.00	\$343.00
CASH OPERATING EXPENSES			
SEED FERTILIZER CHEMICALS CROP INSURANCE	\$108.00		
OTHER PURCHASED INPUTS		\$45.25	\$16.97
CANAL WATER		\$5.00	\$5.00
FUEL, OIL & LUBRICANTS-EQUIPMENT	\$8.12	\$127.54	\$53.90
FUEL-IRRIGATION		\$6.64	\$4.98
REPAIRS CUSTOM CHARGES	\$0.67	\$40.38	\$15.27
LAND TAXES		\$0.21	\$0.21
OTHER EXPENSES	\$0.30	\$246.86	\$246.07
TOTAL CASH EXPENSES	\$117.09	\$471.89	\$342.40
RETURN OVER CASH EXPENSES	(\$117.09)	\$523.11	\$0.60
FIXED EXPENSES	\$1.87	\$112.00	\$46.43
TOTAL EXPENSES	\$118.96	\$583.89	\$388.83
NET FARM INCOME	(\$118.96)	\$411.11	(\$45.83)
LABOR AND MANAGEMENT COSTS	\$29.69	\$198.09	\$92.46
NET OPERATING PROFIT	(\$148.65)	\$213.02	(\$138.29)
CAPITAL COSTS INTEREST ON OPERATING CAPITAL INTEREST ON EQUIPMENT INVESTMENT		\$2.24 \$2.15	\$0.99 \$21.11
TOTAL CAPITAL COSTS	\$0.00	\$4.39	\$22.10
RETURN TO LAND AND RISK	(\$148.65)	\$208.63	(\$160.38)

TABLE 10. Whole farm summary, Union County, Projected 2015

GROSS RETURNS ALFALFA HAY	\$53,520
ALFALFA HAY 40 ACRES CROP \$39,200 GRAZING \$600 NATIVE GRASS HAY 40 ACRES CROP \$13,200 GRAZING \$520 GRAZING \$520 GROSS RETURN CASH OPERATING EXPENSES SEED \$432 FERTILIZER \$0 CHEMICALS \$0 CROP INSURANCE \$0 OTHER PURCHASED INPUTS \$2,489 CANAL WATER \$400 FUEL, OIL & LUBRICANTS-EQUIPMENT \$7,290 FUEL-IRRIGATION \$465 REPAIRS \$2,229	\$53,520
CROP GRAZING SADO GRAZING NATIVE GRASS HAY 40 ACRES CROP GRAZING GRAZING GRAZING GROSS RETURN CASH OPERATING EXPENSES SEED FERTILIZER SOCHEMICALS CROP INSURANCE OTHER PURCHASED INPUTS CANAL WATER FUEL-IRRIGATION FUEL-IRRIGATION FUEL-IRRIGATION SADO SADO SADO SADO SADO SADO SADO SADO	\$53,520
GRAZING \$600 NATIVE GRASS HAY 40 ACRES CROP \$13,200 GRAZING \$520 GROSS RETURN \$520 CASH OPERATING EXPENSES SEED \$432 FERTILIZER \$0 CHEMICALS \$0 CROP INSURANCE \$0 OTHER PURCHASED INPUTS \$2,489 CANAL WATER \$400 FUEL, OIL & LUBRICANTS-EQUIPMENT \$7,290 FUEL-IRRIGATION \$465 REPAIRS \$2,229	\$53,520
NATIVE GRASS HAY 40 ACRES CROP \$13,200 GRAZING \$520 GROSS RETURN CASH OPERATING EXPENSES SEED \$432 FERTILIZER \$0 CHEMICALS \$0 CHEMICALS \$0 CROP INSURANCE \$0 OTHER PURCHASED INPUTS \$2,489 CANAL WATER \$400 FUEL, OIL & LUBRICANTS-EQUIPMENT \$7,290 FUEL-IRRIGATION \$465 REPAIRS \$2,229	\$53,520
CROP \$13,200 GRAZING \$520 GROSS RETURN CASH OPERATING EXPENSES SEED \$432 FERTILIZER \$0 CHEMICALS \$0 CROP INSURANCE \$0 OTHER PURCHASED INPUTS \$2,489 CANAL WATER \$400 FUEL, OIL & LUBRICANTS-EQUIPMENT \$7,290 FUEL-IRRIGATION \$465 REPAIRS \$2,229	\$53,520
GRAZING \$520 GROSS RETURN CASH OPERATING EXPENSES SEED \$432 FERTILIZER \$0 CHEMICALS \$0 CROP INSURANCE \$0 OTHER PURCHASED INPUTS \$2,489 CANAL WATER \$400 FUEL, OIL & LUBRICANTS-EQUIPMENT \$7,290 FUEL-IRRIGATION \$465 REPAIRS \$2,229	\$53,520
CASH OPERATING EXPENSES SEED \$432 FERTILIZER \$0 CHEMICALS \$0 CROP INSURANCE \$0 OTHER PURCHASED INPUTS \$2,489 CANAL WATER \$400 FUEL, OIL & LUBRICANTS-EQUIPMENT \$7,290 FUEL-IRRIGATION \$465 REPAIRS \$2,229	\$53,520
CASH OPERATING EXPENSES SEED \$432 FERTILIZER \$0 CHEMICALS \$0 CROP INSURANCE \$0 OTHER PURCHASED INPUTS \$2,489 CANAL WATER \$400 FUEL, OIL & LUBRICANTS-EQUIPMENT \$7,290 FUEL-IRRIGATION \$465 REPAIRS \$2,229	\$53,520
SEED \$432 FERTILIZER \$0 CHEMICALS \$0 CROP INSURANCE \$0 OTHER PURCHASED INPUTS \$2,489 CANAL WATER \$400 FUEL, OIL & LUBRICANTS-EQUIPMENT \$7,290 FUEL-IRRIGATION \$465 REPAIRS \$2,229	
SEED \$432 FERTILIZER \$0 CHEMICALS \$0 CROP INSURANCE \$0 OTHER PURCHASED INPUTS \$2,489 CANAL WATER \$400 FUEL, OIL & LUBRICANTS-EQUIPMENT \$7,290 FUEL-IRRIGATION \$465 REPAIRS \$2,229	
SEED \$432 FERTILIZER \$0 CHEMICALS \$0 CROP INSURANCE \$0 OTHER PURCHASED INPUTS \$2,489 CANAL WATER \$400 FUEL, OIL & LUBRICANTS-EQUIPMENT \$7,290 FUEL-IRRIGATION \$465 REPAIRS \$2,229	
FERTILIZER \$0 CHEMICALS \$0 CROP INSURANCE \$0 OTHER PURCHASED INPUTS \$2,489 CANAL WATER \$400 FUEL, OIL & LUBRICANTS-EQUIPMENT \$7,290 FUEL-IRRIGATION \$465 REPAIRS \$2,229	
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FUEL-IRRIGATION \$465 REPAIRS \$2,229	
REPAIRS \$2,229	
· ,	
LAND TAXES \$17	
OTHER EXPENSES \$19,719	
TOTAL CACH EVPENCES	
TOTAL CASH EXPENSES \$33,040	
RETURN OVER CASH EXPENSES	\$20,480
	•
FIXED EXPENSES \$5,750	
TOTAL EXPENSES \$38,790	
NET FARM INCOME	\$14,730
NETTAKWINOOME	ψ14,730
LABOR AND MANAGEMENT COSTS \$11,741	
NET OPERATING PROFIT	\$2,989
CAPITAL COSTS	
INTEREST ON OPERATING CAPITAL \$129	
INTEREST ON EQUIPMENT INVESTMENT \$930	
TOTAL CAPITAL COSTS \$1,060	
101AL 0AF11AL 00010 \$1,000	
RETURN TO LAND AND RISK	\$1,930
	÷ .,555

	RETURN	RETURN ON
LAND VALUE	TO RISK*	INVESTMENT**
\$200 /ACRE	\$1,450	5.19%
\$350 /ACRE	\$1,090	4.30%
\$500 /ACRE	\$730	3.67%

^{*} 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)