

TABLE 1. Acreage Summary, Otero County,
Projected 2013.

BUDGET AREA..... TULAROSA BASIN, OTERO COUNTY			
FARM SIZE.....	50 ACRES		
IRRIGATION TYPE.....	SPRINKLER		
NUMBER OF CROPS...	3		
		WATER USE	
ACREAGE SUMMARY:	LAND USE (ACRES)	AC.IN. PER AC.	TOTAL AC.IN.
ALFALFA ESTABLISHMENT	4.00 *	8	32
ALFALFA HAY	40.00	45	1,800
OAT HAY	5.00	18	90
SORGHUM/SUDAN ROADS, DITCHES, HOMESTEAD	5.00 *	16	80
	5.00		
	TOTAL	50.00	2,002
		ACRE FEET PER ACRE OF WATER RIGHTS	3.34

* DOUBLE-CROPPED

TABLE 2. Basic cost information for Tularosa Basin, Otero County,
Projected 2013.

Item			
Labor Wage Rate:			
Equipment operators	\$/hour		\$7.50
General & Irrigators	\$/hour		\$7.50
Purchased Inputs:			
Fertilizer:			
Nitrogen (N)	\$/pound		\$0.61
Seed:			
Alfalfa	\$/pound		\$6.50
Oats for Hay	\$/pound		\$0.61
Natural Gas (Gas NM) (service charge)	\$/MCF \$/month		\$4.01 \$10.00
Diesel fuel	\$/gallon		\$3.00
Gasoline	\$/gallon		\$3.80
Electricity (Otero Coop)	cents/KwHr		7.34
Employee Liability Insurance	\$/ \$1,000 wages		\$12.00
Employee Benefits	percent/wages		12.00%
Labor Downtime	percent		25.00%
Financial Rates:			
Operating Capital Interest Rate	percent		5.00%
Land Interest Rate	percent		5.00%
Equipment Interest Rate	percent		5.00%
Expected Inflation Rate	percent		3.00%
Land Taxes	\$300.00 /acre (full value)		\$2.52
Personal Property Tax Rate	- NR - R	\$/ \$1,000 (Assessed Value)	\$25.18 \$21.39
Supervision Factors			
Field Crop-Irrigation	\$/acre		\$1.00
Field Crop-Equipment & General	\$/acre		\$0.50
Management Rate	percent		4.00%

TABLE 3. Overhead cost information for Tularosa Basin, Otero County,
Projected 2013.

Item			
Electricity (Domestic & Shop)		\$78.65 per month	\$944
Telephone		\$84.70 per month	\$1,016
Accounting & Legal			\$182
Misc. Supplies & Hand Tools			\$629
Pickup and Auto			
miles	6,232	@ \$0.500 per mile	\$3,116
Insurance			
- general liability (non-employee)			\$290
- fire/theft			\$194
Property Taxes			
- non-planted land			\$0
- other than land & machinery			\$6,010
Building repairs and maintenance			\$290
Dues, fees, publications			\$157
Farmstead Equipment			\$194
		Total	\$13,022
		Total per planted acre	\$289.38

TABLE 6. Alfalfa establishment, sprinkler-irrigated, budgeted per acre costs and returns for a 50 acre part-time farm, Tularosa Basin, Otero County, Projected 2013.
Planting dates: September 1 - November 1

ITEM	PRICE	QUANTITY	PURCHASED INPUTS					TOTAL
PURCHASED INPUTS								
ALFALFA SEED	\$6.50	30 LBS	\$195.00					\$195.00
PUMP WATER*		8 AC. IN.						
SUBTOTAL			\$195.00					\$195.00
PREHARVEST OPERATIONS								
	POWER UNIT	ACCOMPLISHMENT RATE	PURCHASED INPUTS	LABOR	FUEL & LUBE	REPAIRS	FIXED COST	TOTAL
DISC	50 HP	0.39 HR		\$2.93	\$5.54	\$0.42	\$3.16	\$12.05
PLOW	50 HP	1.05 HR		\$7.88	\$14.92	\$1.46	\$17.24	\$41.50
DISC (2X)	50 HP	0.78 HR		\$5.85	\$11.09	\$1.52	\$12.43	\$30.88
FLOAT (2X)	50 HP	0.64 HR		\$4.80	\$9.10	\$0.70	\$8.15	\$22.74
DRILL	50 HP	0.21 HR		\$1.58	\$2.98	\$0.45	\$34.42	\$39.43
IRRIGATE (4X)		2.00 HR		\$15.00	\$18.81	\$0.00	\$6.50	\$40.31
SUBTOTAL		5.07 HR		\$38.03	\$62.45	\$4.54	\$81.90	\$186.92
OVERHEAD EXPENSES								
DOWNTIME		0.77 HR		\$5.76				\$5.76
EMPLOYEE BENEFITS				\$4.56				\$4.56
FARM INSURANCE			\$0.46					\$0.46
SUPERVISION AND MANAGEMENT				\$18.81				\$18.81
SUBTOTAL		0.77 HR	\$0.46	\$29.13				\$29.59
TOTAL OPERATING EXPENSES		5.84 HR	\$195.46	\$67.16	\$62.45	\$4.54	\$81.90	\$411.50

TABLE 7. Alfalfa hay, sprinkler-irrigated, budgeted per acre costs and returns for a 50 acre part-time farm, Tularosa Basin, Otero County, Projected 2013.
Harvesting dates: May 10 - October 15

ITEM	PRICE	YIELD	TOTAL
GROSS RETURNS			
ALFALFA HAY	\$245.00	6.00 TONS (STACKED)	\$1,470.00
TOTAL			\$1,470.00

PURCHASED INPUTS	PRICE	QUANTITY	PURCHASED INPUTS	FIXED COST	TOTAL
FERT. (ALFALFA MIX)	\$0.16	250 LBS	\$40.00		\$40.00
INSECTICIDE	\$23.97	1 ACRE	\$23.97		\$23.97
WIRE	\$0.36	56 LBS	\$20.16		\$20.16
ESTABLISHMENT: Principal		10 YEARS		\$41.15	\$41.15
: Interest				\$9.72	\$9.72
PUMP WATER*		45 AC. IN.			
SUBTOTAL			\$84.13	\$50.88	\$135.01

PREHARVEST OPERATIONS	POWER UNIT	ACCOMPLISHMENT RATE	PURCHASED INPUTS	LABOR	FUEL & LUBE	REPAIRS	FIXED COST	TOTAL
IRRIGATE (11X)		5.50 HR		\$41.25	\$105.83	\$0.00	\$36.54	\$183.62
SUBTOTAL		5.50 HR		\$41.25	\$105.83	\$0.00	\$36.54	\$183.62

HARVEST OPERATIONS	POWER UNIT	ACCOMPLISHMENT RATE	PURCHASED INPUTS	LABOR	FUEL & LUBE	REPAIRS	FIXED COST	TOTAL
SWATHER (5X)	14 FT	0.80 HR		\$6.00	\$0.00	\$0.22	\$17.65	\$23.87
BALER, PTO (5X)	50 HP	1.05 HR		\$7.88	\$14.92	\$1.29	\$18.09	\$42.18
BALEWAGON, PTO (5X)	50 HP	1.00 HR		\$7.50	\$14.21	\$2.36	\$28.15	\$52.22
SUBTOTAL		2.85 HR		\$21.38	\$29.13	\$3.88	\$63.89	\$118.28

OVERHEAD EXPENSES	ACCOMPLISHMENT RATE	PURCHASED INPUTS	LABOR	FUEL & LUBE	REPAIRS	FIXED COST	TOTAL
DOWNTIME	0.71 HR		\$5.34				\$5.34
EMPLOYEE BENEFITS			\$7.52				\$7.52
FARM INSURANCE			\$0.75				\$0.75
LAND TAXES						\$2.52	\$2.52
SUPERVISION AND MANAGEMENT			\$65.73				\$65.73
OTHER EXPENSES			\$289.38				\$289.38
SUBTOTAL	0.71 HR		\$290.13	\$78.58		\$2.52	\$371.23

TOTAL OPERATING EXPENSES	9.06 HR		\$374.26	\$141.21	\$134.97	\$3.88	\$153.82	\$808.14
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NET OPERATING PROFIT								\$661.86
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INTEREST ON OPERATING CAPITAL	(\$71.28	@	5.00%)			\$3.56
INTEREST ON EQUIPMENT INVESTMENT								\$46.92

RETURN TO LAND AND RISK								\$611.38
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* Pump water costs are shown under irrigation in the preharvest operations section.

BUDGET SUMMARY

GROSS RETURN		\$1,470.00	
VARIABLE OPERATING EXPENSES	\$516.67		
RETURN OVER VARIABLE EXPENSES		\$953.33	(GROSS MARGINS)
FIXED EXPENSES	\$153.82		
NET FARM INCOME		\$799.51	(RETURNS TO CAPITAL, LABOR, LAND & RISK)
LABOR AND MANAGEMENT COST	\$141.21		
NET OPERATING PROFIT		\$658.30	(RETURNS TO CAPITAL, LAND & RISK)
CAPITAL COSTS	\$46.92		
RETURN TO LAND AND RISK		\$611.38	

TABLE 8. Oats for hay, sprinkler-irrigated, budgeted per acre costs and returns for a 50 acre part-time farm, Tularosa Basin, Otero County, Projected 2013.
 Planting dates: September 1 - November 1
 Harvesting dates: April 15 - May 15

ITEM	PRICE	YIELD						TOTAL
GROSS RETURNS								
OATS FOR HAY	\$195.00	3.00 TONS (STACKED)						\$585.00
TOTAL								\$585.00
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PURCHASED INPUTS	PRICE	QUANTITY	PURCHASED INPUTS				FIXED COST	TOTAL
OAT SEED	\$0.61	100 LBS	\$61.00					\$61.00
NITROGEN (N)	\$0.61	100 LBS	\$61.00					\$61.00
PUMP WATER*		18 AC. IN.						
SUBTOTAL			\$122.00					\$122.00
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PREHARVEST OPERATIONS	POWER UNIT	ACCOMPLISHMENT RATE	PURCHASED INPUTS	LABOR	FUEL & LUBE	REPAIRS	FIXED COST	TOTAL
DISC	50 HP	0.39 HR		\$2.93	\$5.54	\$0.76	\$6.21	\$15.44
PLOW	50 HP	1.05 HR		\$7.88	\$14.92	\$1.46	\$17.24	\$41.50
DISC (2X)	50 HP	0.78 HR		\$5.85	\$11.09	\$1.52	\$12.43	\$30.88
FLOAT (2X)	50 HP	0.64 HR		\$4.80	\$9.10	\$0.70	\$8.15	\$22.74
DRILL	50 HP	0.21 HR		\$1.58	\$2.98	\$0.45	\$34.42	\$39.43
IRRIGATE (4X)		2.00 HR		\$15.00	\$42.33	\$0.00	\$14.62	\$71.95
SUBTOTAL		5.07 HR		\$38.03	\$85.96	\$4.88	\$93.08	\$221.95
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HARVEST OPERATIONS								
SWATHER	14 FT	0.16 HR		\$1.20	\$0.00	\$0.04	\$3.53	\$4.77
BALER, PTO	50 HP	0.21 HR		\$1.58	\$2.98	\$0.26	\$3.62	\$8.44
BALE WAGON	50 HP	0.20 HR		\$1.50	\$2.84	\$0.47	\$5.63	\$10.44
SUBTOTAL		0.57 HR		\$4.28	\$5.83	\$0.78	\$12.78	\$23.66
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OVERHEAD EXPENSES								
DOWNTIME		0.91 HR		\$6.83				\$6.83
EMPLOYEE BENEFITS				\$5.08				\$5.08
FARM INSURANCE			\$0.51					\$0.51
LAND TAXES							\$1.26	\$1.26
SUPERVISION AND MANAGEMENT				\$27.22				\$27.22
OTHER EXPENSES			\$144.69					\$144.69
SUBTOTAL		0.91 HR	\$145.20	\$39.12			\$1.26	\$185.58
TOTAL OPERATING EXPENSES		6.55 HR	\$267.20	\$81.42	\$91.79	\$5.66	\$107.11	\$553.18
NET OPERATING PROFIT								\$31.82
INTEREST ON OPERATING CAPITAL (\$84.26 @ 5.00%)								\$4.21
INTEREST ON EQUIPMENT INVESTMENT								\$36.39
RETURN TO LAND AND RISK								(\$8.78)

* Pump water costs are shown under irrigation in the preharvest operations section.

BUDGET SUMMARY

GROSS RETURN		\$585.00	
VARIABLE OPERATING EXPENSES	\$368.86		
RETURN OVER VARIABLE EXPENSES		\$216.14	(GROSS MARGINS)
FIXED EXPENSES	\$107.11		
NET FARM INCOME		\$109.03	(RETURNS TO CAPITAL, LABOR, LAND & RISK)
LABOR AND MANAGEMENT COST	\$81.42		
NET OPERATING PROFIT		\$27.61	(RETURNS TO CAPITAL, LAND & RISK)
CAPITAL COSTS	\$36.39		
RETURN TO LAND AND RISK		(\$8.78)	

TABLE 9. Sorghum-sudan hay, sprinkler-irrigated, budgeted per acre costs and returns for a 50 acre part-time farm, Tularosa Basin, Otero County, Projected 2013.
 Planting dates: May 1 - June 1
 Harvesting dates: June 1 - August 1

ITEM	PRICE	YIELD						TOTAL
GROSS RETURNS								
SORGHUM/SUDAN HAY	\$215.00	5.00 TONS (STACKED)						\$1,075.00
TOTAL							\$1,075.00	
PURCHASED INPUTS								
	PRICE	QUANTITY	PURCHASED INPUTS				FIXED COST	TOTAL
SEED	\$1.04	50 LBS	\$52.00					\$52.00
NITROGEN (N)	\$0.61	100 LBS	\$61.00					\$61.00
PUMP WATER*		16 AC. IN.						
SUBTOTAL			\$113.00					\$113.00
PREHARVEST OPERATIONS								
	POWER UNIT	ACCOMPLISHMENT RATE	PURCHASED INPUTS	LABOR	FUEL & LUBE	REPAIRS	FIXED COST	TOTAL
DISC	50 HP	0.39 HR		\$2.93	\$5.54	\$0.76	\$6.21	\$15.44
FLOAT (2X)	50 HP	0.64 HR		\$4.80	\$9.10	\$0.70	\$8.15	\$22.74
DRILL	50 HP	0.21 HR		\$1.58	\$2.98	\$0.45	\$34.42	\$39.43
IRRIGATE (4X)		2.00 HR		\$15.00	\$37.63	\$0.00	\$12.99	\$65.62
SUBTOTAL		3.24 HR		\$24.30	\$55.25	\$1.91	\$61.78	\$143.24
HARVEST OPERATIONS								
SWATHER (2X)	14 FT	0.32 HR		\$2.40	\$0.00	\$0.09	\$7.06	\$9.55
BALER, PTO (2X)	50 HP	0.42 HR		\$3.15	\$5.97	\$0.52	\$7.24	\$16.87
BALE WAGON (2X)	50 HP	0.40 HR		\$3.00	\$5.68	\$0.94	\$11.26	\$20.89
SUBTOTAL		1.14 HR		\$8.55	\$11.65	\$1.55	\$25.56	\$47.31
OVERHEAD EXPENSES								
DOWNTIME		0.60 HR		\$4.46				\$4.46
EMPLOYEE BENEFITS				\$3.94				\$3.94
FARM INSURANCE			\$0.39					\$0.39
LAND TAXES							\$1.26	\$1.26
SUPERVISION AND MANAGEMENT				\$46.19				\$46.19
OTHER EXPENSES			\$144.69					\$144.69
SUBTOTAL		0.60 HR	\$145.08	\$54.59			\$1.26	\$200.94
TOTAL OPERATING EXPENSES		4.98 HR	\$258.08	\$87.44	\$66.91	\$3.46	\$88.59	\$504.48
NET OPERATING PROFIT							\$570.52	
INTEREST ON OPERATING CAPITAL		(\$71.89	@	5.00%)	\$3.59	
INTEREST ON EQUIPMENT INVESTMENT							\$32.58	
RETURN TO LAND AND RISK							\$534.34	

* Pump water costs are shown under irrigation in the preharvest operations section.

BUDGET SUMMARY

GROSS RETURN		\$1,075.00	
VARIABLE OPERATING EXPENSES	\$332.04		
RETURN OVER VARIABLE EXPENSES		\$742.96	(GROSS MARGINS)
FIXED EXPENSES	\$88.59		
NET FARM INCOME		\$654.37	(RETURNS TO CAPITAL, LABOR, LAND & RISK)
LABOR AND MANAGEMENT COST	\$87.44		
NET OPERATING PROFIT		\$566.92	(RETURNS TO CAPITAL, LAND & RISK)
CAPITAL COSTS	\$32.58		
RETURN TO LAND AND RISK		\$534.34	

TABLE 10. Summary of per acre costs and returns, 50-acre part-time farm, Tularosa Basin, Otero County, Projected 2013.

	ALFALFA ESTABLISHMENT	ALFALFA HAY	OATS FOR HAY	SORGHUM SUDAY HAY
		TONS	TONS	TONS
PRIMARY YIELD		6.00	3.00	5.00
PRIMARY PRICE		\$245.00	\$195.00	\$215.00
GOVERNMENT PAYMENTS		\$0.00	\$0.00	\$0.00
SECOND INCOME		\$0.00	\$0.00	\$0.00
GROSS RETURN		\$1,470.00	\$585.00	\$1,075.00
CASH OPERATING EXPENSES				
SEED	\$195.00		\$61.00	\$52.00
FERTILIZER		\$40.00	\$61.00	\$61.00
CHEMICALS		\$23.97		
CROP INSURANCE				
OTHER PURCHASED INPUTS		\$20.16		
CANAL WATER				
FUEL, OIL & LUBRICANTS-EQUIPMENT	\$43.63	\$29.13	\$49.46	\$29.28
FUEL-IRRIGATION	\$18.81	\$105.83	\$42.33	\$37.63
REPAIRS	\$4.54	\$3.88	\$5.66	\$3.46
CUSTOM CHARGES				
LAND TAXES		\$2.52	\$1.26	\$1.26
OTHER EXPENSES	\$0.46	\$290.13	\$145.20	\$145.08
TOTAL CASH EXPENSES	\$262.44	\$515.63	\$365.90	\$329.70
RETURN OVER CASH EXPENSES	(\$262.44)	\$954.37	\$219.10	\$745.30
FIXED EXPENSES	\$81.90	\$151.30	\$105.85	\$87.33
TOTAL EXPENSES	\$344.35	\$666.93	\$471.76	\$417.04
NET FARM INCOME	(\$344.35)	\$803.07	\$113.24	\$657.96
LABOR AND MANAGEMENT COSTS	\$67.16	\$141.21	\$81.42	\$87.44
NET OPERATING PROFIT	(\$411.50)	\$661.86	\$31.82	\$570.52
CAPITAL COSTS				
INTEREST ON OPERATING CAPITAL		\$3.56	\$4.21	\$3.59
INTEREST ON EQUIPMENT INVESTMENT		\$46.92	\$36.39	\$32.58
TOTAL CAPITAL COSTS	\$0.00	\$50.48	\$40.61	\$36.18
RETURN TO LAND AND RISK	(\$411.50)	\$611.38	(\$8.78)	\$534.34

TABLE 11. Whole farm summary, Tularosa Basin, Otero County,
Projected 2013.

GROSS RETURNS		
ALFALFA HAY CROP	40.00 ACRES	\$58,800
OATS FOR HAY CROP	5.00 ACRES	\$2,925
SORGHUM/SUDAN CROP	5.00 ACRES	\$5,375
GROSS RETURN		<u>\$67,100</u>
CASH OPERATING EXPENSES		
SEED		\$1,345
FERTILIZER		\$2,210
CHEMICALS		\$959
CROP INSURANCE		\$0
OTHER PURCHASED INPUTS		\$806
CANAL WATER		\$0
FUEL, OIL & LUBRICANTS-EQUIPMENT		\$1,734
FUEL-IRRIGATION		\$4,708
REPAIRS		\$219
CUSTOM CHARGES		\$0
LAND TAXES		\$113
OTHER EXPENSES		\$13,058
TOTAL CASH EXPENSES		<u>\$25,153</u>
RETURN OVER CASH EXPENSES		\$41,947
FIXED EXPENSES		\$5,263
TOTAL EXPENSES		\$30,416
NET FARM INCOME		\$36,684
LABOR AND MANAGEMENT COSTS		\$6,761
NET OPERATING PROFIT		\$29,923
CAPITAL COSTS		
INTEREST ON OPERATING CAPITAL		\$182
INTEREST ON EQUIPMENT INVESTMENT		\$2,222
TOTAL CAPITAL COSTS		<u>\$2,403</u>
RETURN TO LAND AND RISK		<u>\$27,520</u>

LAND VALUE	RETURNS TO RISK*	RETURN ON INVESTMENT**
\$700 /ACRE	\$26,470	45.15%
\$900 /ACRE	\$26,170	39.23%
\$1,100 /ACRE	\$25,870	34.68%
\$1,300 /ACRE	\$25,570	31.08%
\$1,500 /ACRE	\$25,270	28.16%
\$1,700 /ACRE	\$24,970	25.73%
\$1,900 /ACRE	\$24,670	23.70%
\$2,100 /ACRE	\$24,370	21.96%

* 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)