

TABLE 1. Acreage Summary, Otero County,  
Projected 2007.

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	5.00 *	16	80
ROADS, DITCHES, HOMESTEAD	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 2007.

Item		
<b>Labor Wage Rate:</b>		
Equipment operators	\$/hour	\$6.65
General & Irrigators	\$/hour	\$6.35
<b>Purchased Inputs:</b>		
<b>Fertilizer:</b>		
Nitrogen (N)	\$/pound	\$0.52
<b>Seed:</b>		
Alfalfa	\$/pound	\$3.05
Oats for Hay	\$/pound	\$0.26
Natural Gas (Gas NM) (service charge)	\$/MCF \$/month	\$3.26 \$10.00
Diesel fuel	\$/gallon	\$2.70
Gasoline	\$/gallon	\$2.45
Electricity (Otero Coop)	cents/KwHr	9.50
Employee Liability Insurance	\$/ \$1,000 wages	\$12.00
Employee Benefits	percent/wages	12.00%
Labor Downtime	percent	25.00%
<b>Financial Rates:</b>		
Operating Capital Interest Rate	percent	8.00%
Land Interest Rate	percent	8.00%
Equipment Interest Rate	percent	8.00%
Expected Inflation Rate	percent	3.00%
Land Taxes	\$300.00 /acre (full value)	\$2.93
Personal Property Tax Rate	- NR - R	\$/ \$1,000 (Assessed Value) \$23.18
<b>Supervision Factors</b>		
Field Crop-Irrigation	\$/acre	\$1.00
Field Crop-Equipment & General	\$/acre	\$0.50
<b>Management Rate</b>	percent	4.00%

TABLE 3. Overhead cost information for Tularosa Basin, Otero County,  
Projected 2007.

Item		
Electricity (Domestic & Shop)		\$70.85 per month \$850
Telephone		\$76.30 per month \$916
Accounting & Legal		\$164
Misc. Supplies & Hand Tools		\$567
Pickup and Auto		
miles	5,614 @	\$0.415 per mile \$2,330
<b>Insurance</b>		
- general liability (non-employee)		\$262
- fire/theft		\$174
<b>Property Taxes</b>		
- non-planted land		\$0
- other than land & machinery		\$6,010
Building repairs and maintenance		\$262
Dues, fees, publications		\$142
Farmstead Equipment		\$174
Total		\$11,849
Total per planted acre		\$263.32



TABLE 6. Alfalfa establishment, sprinkler-irrigated, budgeted per acre costs and returns for a 50 acre part-time farm, Tularosa Basin, Otero County, Projected 2007.

Planting dates: September 1 - November 1

ITEM	PRICE	QUANTITY	PURCHASED INPUTS						TOTAL
<u>PURCHASED INPUTS</u>									
ALFALFA SEED PUMP WATER*	\$3.05	30 LBS 8 AC. IN.	\$91.50						\$91.50
SUBTOTAL			\$91.50						\$91.50
<u>PREHARVEST OPERATIONS</u>									
	POWER UNIT	ACCOMPLISHMENT RATE	PURCHASED INPUTS	LABOR	FUEL & LUBE	REPAIRS	FIXED COST	TOTAL	
DISC	50 HP	0.39 HR		\$2.59	\$3.57	\$0.42	\$3.20	\$9.79	
PLOW	50 HP	1.05 HR		\$6.98	\$9.62	\$1.46	\$17.44	\$35.50	
DISC (2X)	50 HP	0.78 HR		\$5.19	\$7.15	\$1.52	\$12.57	\$26.42	
FLOAT (2X)	50 HP	0.64 HR		\$4.26	\$5.86	\$0.70	\$8.24	\$19.06	
DRILL	50 HP	0.21 HR		\$1.40	\$1.92	\$0.45	\$34.66	\$38.43	
IRRIGATE (4X)		2.00 HR		\$12.70	\$15.36	\$0.00	\$6.58	\$34.65	
SUBTOTAL		5.07 HR		\$33.12	\$43.49	\$4.54	\$82.70	\$163.85	
<u>OVERHEAD EXPENSES</u>									
DOWNTIME		0.77 HR		\$5.10					\$5.10
EMPLOYEE BENEFITS				\$3.97					\$3.97
FARM INSURANCE			\$0.40					\$0.40	
SUPERVISION AND MANAGEMENT				\$13.75					\$13.75
SUBTOTAL		0.77 HR	\$0.40	\$22.83					\$23.22
TOTAL OPERATING EXPENSES		5.84 HR	\$91.90	\$55.94	\$43.49	\$4.54	\$82.70	\$278.58	

TABLE 7. Alfalfa hay, sprinkler-irrigated, budgeted per acre costs and returns for a 50 acre part-time farm, Tularosa Basin, Otero County, Projected 2007.  
Harvesting dates: May 10 - October 15

ITEM	PRICE	YIELD						TOTAL	
<b>GROSS RETURNS</b>									
ALFALFA HAY	\$140.00	6.00 TONS (STACKED)						\$840.00	
<b>TOTAL</b>							<b>\$840.00</b>		
<b>PURCHASED INPUTS</b>									
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					\$27.86	\$27.86	
: Interest							\$9.60	\$9.60	
PUMP WATER*		45 AC. IN.							
<b>SUBTOTAL</b>			<b>\$84.13</b>				<b>\$37.46</b>	<b>\$121.60</b>	
<b>PREHARVEST OPERATIONS</b>									
PREHARVEST OPERATIONS	POWER UNIT	ACCOMPLISHMENT RATE	PURCHASED INPUTS	LABOR	FUEL & LUBE	REPAIRS	FIXED COST	TOTAL	
IRRIGATE (11X)		5.50 HR		\$34.93	\$86.42	\$0.00	\$37.02	\$158.37	
<b>SUBTOTAL</b>		<b>5.50 HR</b>		<b>\$34.93</b>	<b>\$86.42</b>	<b>\$0.00</b>	<b>\$37.02</b>	<b>\$158.37</b>	
<b>HARVEST OPERATIONS</b>									
SWATHER (5X)	14 FT	0.80 HR		\$5.32	\$0.00	\$0.22	\$17.87	\$23.42	
BALER, PTO (5X)	50 HP	1.05 HR		\$6.98	\$9.62	\$1.29	\$18.32	\$36.22	
BALEWAGON, PTO (5X)	50 HP	1.00 HR		\$6.65	\$9.16	\$2.36	\$28.51	\$46.68	
<b>SUBTOTAL</b>		<b>2.85 HR</b>		<b>\$18.95</b>	<b>\$18.78</b>	<b>\$3.88</b>	<b>\$64.71</b>	<b>\$106.32</b>	
<b>OVERHEAD EXPENSES</b>									
DOWNTIME		0.71 HR		\$4.74				\$4.74	
EMPLOYEE BENEFITS				\$6.47				\$6.47	
FARM INSURANCE			\$0.65					\$0.65	
LAND TAXES							\$2.93	\$2.93	
SUPERVISION AND MANAGEMENT				\$40.53				\$40.53	
OTHER EXPENSES			\$263.32					\$263.32	
<b>SUBTOTAL</b>		<b>0.71 HR</b>	<b>\$263.97</b>	<b>\$51.73</b>				<b>\$2.93</b>	<b>\$318.63</b>
<b>TOTAL OPERATING EXPENSES</b>		<b>9.06 HR</b>	<b>\$348.10</b>	<b>\$105.61</b>	<b>\$105.20</b>	<b>\$3.88</b>	<b>\$142.13</b>	<b>\$704.91</b>	
<b>NET OPERATING PROFIT</b>									
							<b>\$135.09</b>		
INTEREST ON OPERATING CAPITAL		( \$65.56 @ 8.00%						\$5.24	
INTEREST ON EQUIPMENT INVESTMENT							\$75.07		
<b>RETURN TO LAND AND RISK</b>							<b>\$54.77</b>		

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

**BUDGET SUMMARY**

GROSS RETURN		\$840.00	
VARIABLE OPERATING EXPENSES	\$462.43		
RETURN OVER VARIABLE EXPENSES	\$377.57		(GROSS MARGINS)
FIXED EXPENSES	\$142.13		
NET FARM INCOME	\$235.45		(RETURNS TO CAPITAL, LABOR, LAND & RISK)
LABOR AND MANAGEMENT COST	\$105.61		
NET OPERATING PROFIT	\$129.84		(RETURNS TO CAPITAL, LAND & RISK)
CAPITAL COSTS	\$75.07		
RETURN TO LAND AND RISK	\$54.77		

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 2007.  
Planting dates: September 1 - November 1  
Harvesting dates: April 15 - May 15

ITEM	PRICE	YIELD						TOTAL
<b>GROSS RETURNS</b>								
OATS FOR HAY	\$100.00	3.00 TONS (STACKED)						\$300.00
<b>TOTAL</b>								\$300.00
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PURCHASED INPUTS	PRICE	QUANTITY	PURCHASED INPUTS				FIXED COST	TOTAL
OAT SEED	\$0.26	100 LBS	\$26.00					\$26.00
NITROGEN (N)	\$0.52	100 LBS	\$52.00					\$52.00
PUMP WATER*		18 AC. IN.						
<b>SUBTOTAL</b>			\$78.00					\$78.00
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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		\$2.59	\$3.57	\$0.76	\$6.29	\$13.21
PLOW	50 HP	1.05 HR		\$6.98	\$9.62	\$1.46	\$17.44	\$35.50
DISC (2X)	50 HP	0.78 HR		\$5.19	\$7.15	\$1.52	\$12.57	\$26.42
FLOAT (2X)	50 HP	0.64 HR		\$4.26	\$5.86	\$0.70	\$8.24	\$19.06
DRILL	50 HP	0.21 HR		\$1.40	\$1.92	\$0.45	\$34.66	\$38.43
IRRIGATE (4X)		2.00 HR		\$12.70	\$34.57	\$0.00	\$14.81	\$62.08
<b>SUBTOTAL</b>		5.07 HR		\$33.12	\$62.70	\$4.88	\$94.01	\$194.71
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<b>HARVEST OPERATIONS</b>								
SWATHER	14 FT	0.16 HR		\$1.06	\$0.00	\$0.04	\$3.57	\$4.68
BALER, PTO	50 HP	0.21 HR		\$1.40	\$1.92	\$0.26	\$3.66	\$7.24
BALE WAGON	50 HP	0.20 HR		\$1.33	\$1.83	\$0.47	\$5.70	\$9.34
<b>SUBTOTAL</b>		0.57 HR		\$3.79	\$3.76	\$0.78	\$12.94	\$21.26
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<b>OVERHEAD EXPENSES</b>								
DOWNTIME		0.91 HR		\$6.05				\$6.05
EMPLOYEE BENEFITS				\$4.43				\$4.43
FARM INSURANCE			\$0.44					\$0.44
LAND TAXES							\$1.47	\$1.47
SUPERVISION AND MANAGEMENT				\$15.82				\$15.82
OTHER EXPENSES			\$131.66					\$131.66
<b>SUBTOTAL</b>		0.91 HR	\$132.10	\$26.30			\$1.47	\$159.87
<b>TOTAL OPERATING EXPENSES</b>		6.55 HR	\$210.10	\$63.21	\$66.46	\$5.66	\$108.42	\$453.84
<b>NET OPERATING PROFIT</b>								(\$153.84)
INTEREST ON OPERATING CAPITAL								\$4.50
INTEREST ON EQUIPMENT INVESTMENT								\$58.23
<b>RETURN TO LAND AND RISK</b>								(\$216.57)

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

**BUDGET SUMMARY**

GROSS RETURN		\$300.00	
VARIABLE OPERATING EXPENSES	\$286.72		
RETURN OVER VARIABLE EXPENSES	\$13.28	(GROSS MARGINS)	
FIXED EXPENSES	\$108.42		
NET FARM INCOME	(\$95.14)	(RETURNS TO CAPITAL, LABOR, LAND & RISK)	
LABOR AND MANAGEMENT COST	\$63.21		
NET OPERATING PROFIT	(\$158.34)	(RETURNS TO CAPITAL, LAND & RISK)	
CAPITAL COSTS	\$58.23		
RETURN TO LAND AND RISK	(\$216.57)		

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 2007.  
 Planting dates: May 1 - June 1  
 Harvesting dates: June 1 - August 1

ITEM	PRICE	YIELD						TOTAL
<b>GROSS RETURNS</b>								
SORGHUM/SUDAN HAY	\$120.00	5.00 TONS (STACKED)						\$600.00
<b>TOTAL</b>							<b>\$600.00</b>	
<b>PURCHASED INPUTS</b>								
PURCHASED INPUTS	PRICE	QUANTITY	PURCHASED INPUTS		FIXED COST		TOTAL	
SEED	\$1.04	50 LBS	\$52.00				\$52.00	
NITROGEN (N)	\$0.52	100 LBS	\$52.00				\$52.00	
PUMP WATER*		16 AC. IN.						
<b>SUBTOTAL</b>			<b>\$104.00</b>				<b>\$104.00</b>	
<b>PREHARVEST OPERATIONS</b>								
PREHARVEST OPERATIONS	POWER UNIT	ACCOMPLISHMENT RATE	PURCHASED INPUTS	LABOR	FUEL & LUBE	REPAIRS	FIXED COST	TOTAL
DISC	50 HP	0.39 HR		\$2.59	\$3.57	\$0.76	\$6.29	\$13.21
FLOAT (2X)	50 HP	0.64 HR		\$4.26	\$5.86	\$0.70	\$8.24	\$19.06
DRILL	50 HP	0.21 HR		\$1.40	\$1.92	\$0.45	\$3.66	\$8.43
IRRIGATE (4X)		2.00 HR		\$12.70	\$30.73	\$0.00	\$13.16	\$56.59
<b>SUBTOTAL</b>		<b>3.24 HR</b>		<b>\$20.95</b>	<b>\$42.09</b>	<b>\$1.91</b>	<b>\$62.36</b>	<b>\$127.30</b>
<b>HARVEST OPERATIONS</b>								
SWATHER (2X)	14 FT	0.32 HR		\$2.13	\$0.00	\$0.09	\$7.15	\$9.37
BALER, PTO (2X)	50 HP	0.42 HR		\$2.79	\$3.85	\$0.52	\$7.33	\$14.49
BALE WAGON (2X)	50 HP	0.40 HR		\$2.66	\$3.67	\$0.94	\$11.41	\$18.67
<b>SUBTOTAL</b>		<b>1.14 HR</b>		<b>\$7.58</b>	<b>\$7.51</b>	<b>\$1.55</b>	<b>\$25.88</b>	<b>\$42.53</b>
<b>OVERHEAD EXPENSES</b>								
DOWNTIME		0.60 HR		\$3.96				\$3.96
EMPLOYEE BENEFITS				\$3.42				\$3.42
FARM INSURANCE			\$0.34					\$0.34
LAND TAXES						\$1.47		\$1.47
SUPERVISION AND MANAGEMENT				\$27.19				\$27.19
OTHER EXPENSES			\$131.66					\$131.66
<b>SUBTOTAL</b>		<b>0.60 HR</b>	<b>\$132.00</b>	<b>\$34.57</b>			<b>\$1.47</b>	<b>\$168.04</b>
<b>TOTAL OPERATING EXPENSES</b>		<b>4.98 HR</b>	<b>\$236.00</b>	<b>\$63.10</b>	<b>\$49.60</b>	<b>\$3.46</b>	<b>\$89.71</b>	<b>\$441.87</b>
<b>NET OPERATING PROFIT</b>							<b>\$158.13</b>	
INTEREST ON OPERATING CAPITAL		( \$63.75 @ 8.00% )					\$5.10	
INTEREST ON EQUIPMENT INVESTMENT							\$52.13	
<b>RETURN TO LAND AND RISK</b>							<b>\$100.90</b>	

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

**BUDGET SUMMARY**

GROSS RETURN		\$600.00	
VARIABLE OPERATING EXPENSES	\$294.16		
RETURN OVER VARIABLE EXPENSES		\$305.84	(GROSS MARGINS)
FIXED EXPENSES	\$89.71		
NET FARM INCOME		\$216.13	(RETURNS TO CAPITAL, LABOR, LAND & RISK)
LABOR AND MANAGEMENT COST	\$63.10		
NET OPERATING PROFIT		\$153.03	(RETURNS TO CAPITAL, LAND & RISK)
CAPITAL COSTS	\$52.13		
RETURN TO LAND AND RISK		\$100.90	

TABLE 10. Summary of per acre costs and returns, 50-acre part-time farm, Tularosa Basin, Otero County, Projected 2007.

	ALFALFA ESTABLISHMENT	ALFALFA HAY	OATS FOR HAY	SORGHUM SUDAY HAY
		TONS	TONS	TONS
PRIMARY YIELD		6.00	3.00	5.00
PRIMARY PRICE		\$140.00	\$100.00	\$120.00
GOVERNMENT PAYMENTS		\$0.00	\$0.00	\$0.00
SECOND INCOME		\$0.00	\$0.00	\$0.00
GROSS RETURN		\$840.00	\$300.00	\$600.00
CASH OPERATING EXPENSES				
SEED	\$91.50		\$26.00	\$52.00
FERTILIZER		\$40.00	\$52.00	\$52.00
CHEMICALS		\$23.97		
CROP INSURANCE				
OTHER PURCHASED INPUTS		\$20.16		
CANAL WATER				
FUEL, OIL & LUBRICANTS-EQUIPMENT	\$28.13	\$18.78	\$31.89	\$18.88
FUEL-IRRIGATION	\$15.36	\$86.42	\$34.57	\$30.73
REPAIRS	\$4.54	\$3.88	\$5.66	\$3.46
CUSTOM CHARGES				
LAND TAXES		\$2.93	\$1.47	\$1.47
OTHER EXPENSES	\$0.40	\$263.97	\$132.10	\$132.00
TOTAL CASH EXPENSES	\$139.93	\$460.12	\$283.68	\$290.53
RETURN OVER CASH EXPENSES	(\$139.93)	\$379.88	\$16.32	\$309.47
FIXED EXPENSES	\$82.70	\$139.19	\$106.95	\$88.24
TOTAL EXPENSES	\$222.63	\$599.31	\$390.63	\$378.77
NET FARM INCOME	(\$222.63)	\$240.69	(\$90.63)	\$221.23
LABOR AND MANAGEMENT COSTS	\$55.94	\$105.61	\$63.21	\$63.10
NET OPERATING PROFIT	(\$278.58)	\$135.09	(\$153.84)	\$158.13
CAPITAL COSTS				
INTEREST ON OPERATING CAPITAL		\$5.24	\$4.50	\$5.10
INTEREST ON EQUIPMENT INVESTMENT		\$75.07	\$58.23	\$52.13
TOTAL CAPITAL COSTS	\$0.00	\$80.31	\$62.73	\$57.23
RETURN TO LAND AND RISK	(\$278.58)	\$54.77	(\$216.57)	\$100.90

TABLE 11. Whole farm summary, Tularosa Basin, Otero County,  
Projected 2007.

GROSS RETURNS		
ALFALFA HAY	40.00 ACRES	
CROP		\$33,600
OATS FOR HAY	5.00 ACRES	
CROP		\$1,500
SORGHUM/SUDAN	5.00 ACRES	
CROP		\$3,000
GROSS RETURN		<u>\$38,100</u>
CASH OPERATING EXPENSES		
SEED		\$756
FERTILIZER		\$2,120
CHEMICALS		\$959
CROP INSURANCE		\$0
OTHER PURCHASED INPUTS		\$806
CANAL WATER		\$0
FUEL, OIL & LUBRICANTS-EQUIPMENT		\$1,118
FUEL-IRRIGATION		\$3,845
REPAIRS		\$219
CUSTOM CHARGES		\$0
LAND TAXES		\$132
OTHER EXPENSES		\$11,881
TOTAL CASH EXPENSES		<u>\$21,835</u>
RETURN OVER CASH EXPENSES		\$16,265
FIXED EXPENSES		\$5,319
TOTAL EXPENSES		\$27,154
NET FARM INCOME		\$10,946
LABOR AND MANAGEMENT COSTS		\$5,080
NET OPERATING PROFIT		\$5,866
CAPITAL COSTS		
INTEREST ON OPERATING CAPITAL		\$258
INTEREST ON EQUIPMENT INVESTMENT		\$3,555
TOTAL CAPITAL COSTS		<u>\$3,812</u>
RETURN TO LAND AND RISK		<u>\$2,054</u>

LAND VALUE	RETURNS TO RISK*	RETURN ON INVESTMENT**
\$700 /ACRE	\$1,004	8.84%
\$900 /ACRE	\$704	7.68%
\$1,100 /ACRE	\$404	6.79%
\$1,300 /ACRE	\$104	6.09%
\$1,500 /ACRE	(\$196)	5.52%
\$1,700 /ACRE	(\$496)	5.04%
\$1,900 /ACRE	(\$796)	4.64%
\$2,100 /ACRE	(\$1,096)	4.30%

\* 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)