

TABLE 1. Acreage Summary, Otero County,  
Projected 2017

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 2017

Item		
<b>Labor Wage Rate:</b>		
Equipment operators	\$/hour	\$7.50
General & Irrigators	\$/hour	\$7.50
<b>Purchased Inputs:</b>		
<b>Fertilizer:</b>		
Nitrogen (N)	\$/pound	\$0.22
<b>Seed:</b>		
Alfalfa	\$/pound	\$3.05
Oats for Hay	\$/pound	\$0.34
<b>Natural Gas (Gas NM) (service charge)</b>		
	\$/MCF	\$4.01
	\$/month	\$10.00
Diesel fuel	\$/gallon	\$2.35
Gasoline	\$/gallon	\$2.10
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%
<b>Financial Rates:</b>		
Operating Capital Interest Rate	percent	5.50%
Land Interest Rate	percent	5.00%
Equipment Interest Rate	percent	5.50%
Expected Inflation Rate	percent	3.00%
Land Taxes	\$300.00 /acre (full value)	\$3.22
Personal Property Tax Rate	- NR - R	\$/ \$1,000 (Assessed Value) \$32.16 \$24.48
<b>Supervision Factors</b>		
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 2017

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
<b>Insurance</b>			
- general liability (non-employee)			\$290
- fire/theft			\$194
<b>Property Taxes</b>			
- 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 4. Pumping costs and data for irrigation wells, Tulelake Basin, Glenn County, Proposed 2017

WELL DATA		DEPTH CHARACTERISTICS	
DELIVERY PPS	40	STAKE	145
SPRINKLER		DIAG. COLUMN	26
		TOTAL HEAD	180
		CHRG.	275
GALLONS PER MINUTE (GPM)	300		
WORK HORSEPOWER	21		
EFFICIENCY FACTOR:			
ELECTRICITY	0.290		
NATURAL GAS	0.151		
LP GAS	0.151		
DIESEL	0.160		
FUEL COST PER HOUR:			
ELECTRICITY	0.34	CENT/KWH	
NATURAL GAS	\$4.01	\$/GAL	
LP GAS	\$0.62	\$/GAL	
DIESEL	\$2.35	\$/GAL	
PUMPING COSTS			
ELECTRICAL WELL:			
COST PER HOUR	\$3.93		
COST PER ACRE INCH	\$5.03		
NATURAL GAS WELL:			
COST PER HOUR	\$1.56		
COST PER ACRE INCH	\$2.35		
BUTANE WELL:			
COST PER HOUR	\$2.38		
COST PER ACRE INCH	\$3.59		
DIESEL WELL:			
COST PER HOUR	\$4.96		
COST PER ACRE INCH	\$7.34		

TABLE 5. Equipment summary for a 50 acre per-ha farm, Tulelake Basin, Glenn County, Proposed 2017

EQUIPMENT	ITEM #	SIZE	ANNUAL HOURS OF USE	NUMBER	TOTAL VALUE	VARIABLE COSTS				FIXED COSTS		TOTAL PER HA
						FUEL OIL LUBRICANT	REPAIR	FUEL OIL PER HR	REPAIR PER HR	DEPRECIATION	TAXES	
TRACTOR	50 HP	122	1	\$7,000	\$98	\$132	\$7.85	\$1.08	\$809	\$26	\$835	
BALEWAGON	PTD	42	1	\$1,000	\$50			\$1.28	\$200	\$26	\$226	
BALEWAGON	PTD	2 WIRE	45	1	\$1,800	\$7		\$0.15	\$35	\$41	\$48	
PLOW	8 FT	4	1	\$200	\$1		\$0.31	\$0.13	\$1	\$1	\$1.44	
PLOW	8 FT	4	1	\$200	\$1		\$0.31	\$0.13	\$1	\$1	\$1.44	
DISC	8 FT	12	1	\$700	\$11		\$0.87	\$0.33	\$13	\$4	\$18.17	
SPRINKLER	8 FT	3,000	1	\$2,200	\$9		\$0.05	\$0.23	\$37	\$0.12	\$37.34	
DRILL	12 FT	3	1	\$2,200	\$3		\$1.06	\$440	\$24	\$157.68		
SWATHER	14 FT	34	1	\$2,100	\$10		\$0.28	\$70	\$75	\$23.93		
NATURAL GAS WELL	14 FT	3,000	1	\$13,025	\$4,709	\$9	\$1.56	\$0.00	\$1,042	\$140	\$3,443	
						\$31,278	\$5,887	\$219		\$4,766	\$502	

EQUIPMENT LIST

ITEM	NEW VALUE	USED VALUE	YEARS LIFE	EQUIP CODE	MAX HOURS	FUEL LITERS/HR	LUBE COST/ACRE	ACCUM ACRES	INTEREST %	ALFALFA EST.	ALFALFA HAR	GATS SODIUM HAR	SLUDAN HAR	PER ACRE TOTALS
TRACTOR	17975.00	7000.00	20.00	1.00	800.00	3.40	0.10	1629.70	15.00	464.31				
BALEWAGON	16000.00	1500.00	20.00	5.00	800.00			258.00	0.00	1.00	0.20	0.4	1.60	
BALEWAGON	2 WIRE	7700.00	1600.00	20.00	5.00	200.00		812.70	16.00	211.75				
PLOW	2 BTM	500.00	250.00	15.00	3.00	300.00		67.20	16.00	13.75				
PLOW	8 FT	400.00	400.00	4.00	300.00			154.40	15.00	15.00				
DISC	8 FT	1400.00	700.00	15.00	3.00	300.00		169.28	16.00	30.00				
DISC	8 FT	1400.00	700.00	15.00	3.00	300.00		169.28	16.00	30.00				
SPRINKLER	8 FT	4400.00	2200.00	15.00	4.00	150.00		4305.26	15.00	137.00				
DRILL	12 FT	4400.00	2200.00	15.00	4.00	150.00		36.20	13.00	121.00				
SWATHER	14 FT	14000.00	2100.00	20.00	3.00	800.00		447.20	13.00	365.00				
NATURAL GAS WELL	14 FT	26900.00	13025.00	25.00	0.00	8740.00		4535.26	15.00	716.58				

USAGE LIST

ITEM	NEW VALUE	USED VALUE	YEARS LIFE	EQUIP CODE	MAX HOURS	FUEL LITERS/HR	LUBE COST/ACRE	ACCUM ACRES	INTEREST %	ALFALFA EST.	ALFALFA HAR	GATS SODIUM HAR	SLUDAN HAR	PER ACRE TOTALS
TRACTOR	17975.00	7000.00	20.00	1.00	800.00	3.40	0.10	1629.70	15.00	464.31				
BALEWAGON	16000.00	1500.00	20.00	5.00	800.00			258.00	0.00	1.00	0.20	0.4	1.60	
BALEWAGON	2 WIRE	7700.00	1600.00	20.00	5.00	200.00		812.70	16.00	211.75				
PLOW	2 BTM	500.00	250.00	15.00	3.00	300.00		67.20	16.00	13.75				
PLOW	8 FT	400.00	400.00	4.00	300.00			154.40	15.00	15.00				
DISC	8 FT	1400.00	700.00	15.00	3.00	300.00		169.28	16.00	30.00				
DISC	8 FT	1400.00	700.00	15.00	3.00	300.00		169.28	16.00	30.00				
SPRINKLER	8 FT	4400.00	2200.00	15.00	4.00	150.00		4305.26	15.00	137.00				
DRILL	12 FT	4400.00	2200.00	15.00	4.00	150.00		36.20	13.00	121.00				
SWATHER	14 FT	14000.00	2100.00	20.00	3.00	800.00		447.20	13.00	365.00				
NATURAL GAS WELL	14 FT	26900.00	13025.00	25.00	0.00	8740.00		4535.26	15.00	716.58				

INTEREST PROXATION

ALFALFA	GATS	SLUDAN
FOR	FOR	FOR
EST.	EST.	EST.
8.31	14.10	8.35
10.23	2.00	4.50
4.92	0.98	1.97
0.00	0.00	0.00
0.00	1.18	1.18
0.00	1.81	1.81
3.00	1.24	1.10
0.00	8.64	8.64
8.00	1.76	3.58
16.10	6.44	5.72
\$1.61	40.03	35.84

ALFALFA ESTABLISHMENT

MACHINE	POWER UNIT	TABES OVER	RATE	TOTAL	CUSTOM
DISC	50 HP	1.00	0.39	0.39	
PLOW	50 HP	1.00	1.05	1.05	
DISC (2X)	50 HP	2.00	0.39	0.78	
PLOW (2X)	50 HP	2.00	1.32	2.64	
DRILL	50 HP	1.00	0.21	0.21	
IRRIGATE (4X)		4.00	1.51	6.07	

ALFALFA HAR

MACHINE	POWER UNIT	TABES OVER	RATE	TOTAL	CUSTOM
IRRIGATE (11X)		11.00	1.51	16.61	

SWATHER (2X)

BALEWAGON, PTD (2X)	50 HP	1.00	0.20	0.20	
BALEWAGON, PTD (2X)	50 HP	1.00	0.20	0.20	

GATS FOR HAR

MACHINE	POWER UNIT	TABES OVER	RATE	TOTAL	CUSTOM
DISC	10 HP	1.00	0.39	0.39	
PLOW	50 HP	1.00	1.05	1.05	
DISC (2X)	50 HP	2.00	0.39	0.78	
PLOW (2X)	50 HP	2.00	1.32	2.64	
DRILL	50 HP	1.00	0.21	0.21	
IRRIGATE (4X)		4.00	1.51	6.07	

SWATHER

BALEWAGON, PTD	50 HP	1.00	0.20	0.20	
BALEWAGON	50 HP	1.00	0.20	0.20	

SLUDAN HAR

MACHINE	POWER UNIT	TABES OVER	RATE	TOTAL	CUSTOM
DISC	50 HP	1.00	0.39	0.39	
PLOW (2X)	50 HP	2.00	1.32	2.64	
DRILL	50 HP	1.00	0.21	0.21	
IRRIGATE (4X)		4.00	1.51	6.07	
SWATHER	14 FT	2.00	0.16	0.32	
BALEWAGON	50 HP	2.00	0.21	0.42	
BALEWAGON	50 HP	2.00	0.20	0.40	

ANNUAL REPAIR COSTS AS A PERCENT OF NEW VALUE

Hour of Use	1	2	3	4	5	6	7	8	9
0	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
100	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
200	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
300	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
400	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
500	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
600	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
700	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
800	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
900	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
1000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
1200	0.00004	0.00014	0.00023	0.00033	0.00043	0.00053	0.00063	0.00073	0.00083
1400	0.00008	0.00017	0.00026	0.00035	0.00045	0.00054	0.00064	0.00074	0.00084
1600	0.00012	0.00024	0.00036	0.00048	0.00060	0.00072	0.00084	0.00096	0.00108
1800	0.00016	0.00032	0.00048	0.00064	0.00080	0.00096	0.00112	0.00128	0.00144
2000	0.00020	0.00040	0.00060	0.00080	0.00100	0.00120	0.00140	0.00160	0.00180
2200	0.00024	0.00048	0.00072	0.00096	0.00120	0.00144	0.00168	0.00192	0.00216
2400	0.00028	0.00056	0.00084	0.00112	0.00140	0.00168	0.00196	0.00224	0.00252
2600	0.00032	0.00064	0.00096	0.00128	0.00160	0.00192	0.00224	0.00256	0.00288
2800	0.00036	0.00072	0.00108	0.00144	0.00180	0.00216	0.00252	0.00288	0.00324
3000	0.00040	0.00080	0.00120	0.00160	0.00200	0.00240	0.00280	0.00320	0.00360
3200	0.00044	0.00088	0.00132	0.00176	0.00220	0.00264	0.00308	0.00352	0.00396
3400	0.00048	0.00096	0.00144	0.00192	0.00240	0.00288	0.00336	0.00384	0.00432
3600	0.00052	0.00104	0.00156	0.00208					

TABLE 6. Alfalfa establishment, sprinkler-irrigated, budgeted per acre costs and returns for a 50 acre part-time farm, Tularosa Basin, Otero County, Projected 2017  
Planting dates: September 1 - November 1

ITEM	PRICE	QUANTITY	PURCHASED INPUTS		TOTAL			
<u>PURCHASED INPUTS</u>								
ALFALFA SEED	\$3.05	30 LBS		\$91.50	\$91.50			
PUMP WATER*		8 AC. IN.						
SUBTOTAL				\$91.50	\$91.50			
PREHARVEST OPERATIONS	POWER UNIT	ACCOMPLISHMENT RATE	PURCHASED INPUTS	LABOR	FUEL & LUBE	REPAIRS	FIXED COST	TOTAL
DISC	50 HP	0.39 HR		\$2.93	\$3.06	\$0.42	\$3.23	\$9.64
PLOW	50 HP	1.05 HR		\$7.88	\$8.25	\$1.46	\$17.57	\$35.15
DISC (2X)	50 HP	0.78 HR		\$5.85	\$6.13	\$1.52	\$12.67	\$26.16
FLOAT (2X)	50 HP	0.64 HR		\$4.80	\$5.03	\$0.70	\$8.31	\$18.83
DRILL	50 HP	0.21 HR		\$1.58	\$1.65	\$0.45	\$34.83	\$38.50
IRRIGATE (4X)		2.00 HR		\$15.00	\$18.81	\$0.00	\$6.64	\$40.45
SUBTOTAL		5.07 HR		\$38.03	\$42.93	\$4.54	\$83.24	\$168.73
<u>OVERHEAD EXPENSES</u>								
DOWNTIME		0.77 HR		\$5.76				\$5.76
EMPLOYEE BENEFITS				\$4.56				\$4.56
FARM INSURANCE			\$0.46					\$0.46
SUPERVISION AND MANAGEMENT				\$13.94				\$13.94
SUBTOTAL		0.77 HR	\$0.46	\$24.26				\$24.72
<u>TOTAL OPERATING EXPENSES</u>		5.84 HR	\$91.96	\$62.29	\$42.93	\$4.54	\$83.24	\$284.95

TABLE 7. Alfalfa hay, sprinkler-irrigated, budgeted per acre costs and returns for a 50 acre part-time farm, Tularosa Basin, Otero County, Projected 2017  
Harvesting dates: May 10 - October 15

ITEM	PRICE	YIELD						TOTAL
<b>GROSS RETURNS</b>								
ALFALFA HAY	\$175.00	6.00 TONS (STACKED)						\$1,050.00
<b>TOTAL</b>								<b>\$1,050.00</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					\$28.50	\$28.50
: Interest							\$6.59	\$6.59
PUMP WATER*		45 AC. IN.						
<b>SUBTOTAL</b>			<b>\$84.13</b>				<b>\$35.08</b>	<b>\$119.22</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		\$41.25	\$105.83	\$0.00	\$37.35	\$184.43
<b>SUBTOTAL</b>		<b>5.50 HR</b>		<b>\$41.25</b>	<b>\$105.83</b>	<b>\$0.00</b>	<b>\$37.35</b>	<b>\$184.43</b>
<b>HARVEST OPERATIONS</b>								
SWATHER (5X)	14 FT	0.80 HR		\$6.00	\$0.00	\$0.22	\$18.02	\$24.25
BALER, PTO (5X)	50 HP	1.05 HR		\$7.88	\$8.25	\$1.29	\$18.48	\$35.89
BALEWAGON, PTO (5X)	50 HP	1.00 HR		\$7.50	\$7.85	\$2.36	\$28.76	\$46.47
<b>SUBTOTAL</b>		<b>2.85 HR</b>		<b>\$21.38</b>	<b>\$16.10</b>	<b>\$3.88</b>	<b>\$65.26</b>	<b>\$106.61</b>
<b>OVERHEAD EXPENSES</b>								
DOWNTIME		0.71 HR		\$5.34				\$5.34
EMPLOYEE BENEFITS				\$7.52				\$7.52
FARM INSURANCE			\$0.75					\$0.75
LAND TAXES							\$3.22	\$3.22
SUPERVISION AND MANAGEMENT				\$48.93				\$48.93
OTHER EXPENSES			\$289.38					\$289.38
<b>SUBTOTAL</b>		<b>0.71 HR</b>		<b>\$290.13</b>	<b>\$61.78</b>		<b>\$3.22</b>	<b>\$355.13</b>
<b>TOTAL OPERATING EXPENSES</b>		<b>9.06 HR</b>		<b>\$374.26</b>	<b>\$124.41</b>	<b>\$121.93</b>	<b>\$3.88</b>	<b>\$765.39</b>
<b>NET OPERATING PROFIT</b>								<b>\$284.61</b>
INTEREST ON OPERATING CAPITAL		(	\$70.19	@	5.50%	)		\$3.86
INTEREST ON EQUIPMENT INVESTMENT								\$51.61
<b>RETURN TO LAND AND RISK</b>								<b>\$229.14</b>

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

**BUDGET SUMMARY**

GROSS RETURN		\$1,050.00	
VARIABLE OPERATING EXPENSES	\$503.93		
RETURN OVER VARIABLE EXPENSES		\$546.07	(GROSS MARGINS)
FIXED EXPENSES	\$140.91		
NET FARM INCOME		\$405.16	(RETURNS TO CAPITAL, LABOR, LAND & RISK)
LABOR AND MANAGEMENT COST	\$124.41		
NET OPERATING PROFIT		\$280.75	(RETURNS TO CAPITAL, LAND & RISK)
CAPITAL COSTS	\$51.61		
RETURN TO LAND AND RISK		\$229.14	

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 2017  
 Planting dates: September 1 - November 1  
 Harvesting dates: April 15 - May 15

ITEM	PRICE	YIELD						TOTAL
GROSS RETURNS								
OATS FOR HAY	\$140.00	3.00	TONS (STACKED)					\$420.00
TOTAL								\$420.00

  

PURCHASED INPUTS	PRICE	QUANTITY	PURCHASED INPUTS		FIXED COST	TOTAL
OAT SEED	\$0.34	100 LBS		\$34.00		\$34.00
NITROGEN (N)	\$0.22	100 LBS		\$22.00		\$22.00
PUMP WATER*		18 AC. IN.				
SUBTOTAL				\$56.00		\$56.00

  

PREHARVEST OPERATIONS	POWER UNIT	ACCOMPLISHMENT RATE	PURCHASED INPUTS	LABOR	FUEL & LUBE	REPAIRS	FIXED COST	TOTAL
DISC	50 HP	0.39 HR		\$2.93	\$3.06	\$0.76	\$6.33	\$13.08
FLOW	50 HP	1.05 HR		\$7.88	\$8.25	\$1.46	\$17.57	\$35.15
DISC (2X)	50 HP	0.78 HR		\$5.85	\$6.13	\$1.52	\$12.67	\$26.16
FLOAT (2X)	50 HP	0.64 HR		\$4.80	\$5.03	\$0.70	\$8.31	\$18.83
DRILL	50 HP	0.21 HR		\$1.58	\$1.65	\$0.45	\$34.83	\$38.50
IRRIGATE (4X)		2.00 HR		\$15.00	\$42.33	\$0.00	\$14.94	\$72.27
SUBTOTAL		5.07 HR		\$38.03	\$66.45	\$4.88	\$94.64	\$203.99

  

HARVEST OPERATIONS	POWER UNIT	ACCOMPLISHMENT RATE	PURCHASED INPUTS	LABOR	FUEL & LUBE	REPAIRS	FIXED COST	TOTAL
SWATHER	14 FT	0.16 HR		\$1.20	\$0.00	\$0.04	\$3.60	\$4.85
BALER, PTO	50 HP	0.21 HR		\$1.58	\$1.65	\$0.26	\$3.70	\$7.18
BALE WAGON	50 HP	0.20 HR		\$1.50	\$1.57	\$0.47	\$5.75	\$9.29
SUBTOTAL		0.57 HR		\$4.28	\$3.22	\$0.78	\$13.05	\$21.32

  

OVERHEAD EXPENSES	ACCOMPLISHMENT RATE	PURCHASED INPUTS	LABOR	FUEL & LUBE	REPAIRS	FIXED COST	TOTAL
DOWNTIME	0.91 HR			\$6.83			\$6.83
EMPLOYEE BENEFITS				\$5.08			\$5.08
FARM INSURANCE		\$0.51					\$0.51
LAND TAXES						\$1.61	\$1.61
SUPERVISION AND MANAGEMENT			\$20.62				\$20.62
OTHER EXPENSES		\$144.69					\$144.69
SUBTOTAL	0.91 HR	\$145.20	\$32.52			\$1.61	\$179.32

  

TOTAL OPERATING EXPENSES	6.55 HR	\$201.20	\$74.82	\$69.67	\$5.66	\$109.30	\$460.64
NET OPERATING PROFIT							(\$40.64)
INTEREST ON OPERATING CAPITAL	( \$46.16 @ 5.50% )						\$2.54
INTEREST ON EQUIPMENT INVESTMENT							\$40.03
RETURN TO LAND AND RISK							(\$83.21)

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

BUDGET SUMMARY

GROSS RETURN		\$420.00	
VARIABLE OPERATING EXPENSES	\$279.06		
RETURN OVER VARIABLE EXPENSES		\$140.94	(GROSS MARGINS)
FIXED EXPENSES	\$109.30		
NET FARM INCOME		\$31.64	(RETURNS TO CAPITAL, LABOR, LAND & RISK)
LABOR AND MANAGEMENT COST	\$74.82		
NET OPERATING PROFIT		(\$43.18)	(RETURNS TO CAPITAL, LAND & RISK)
CAPITAL COSTS	\$40.03		
RETURN TO LAND AND RISK		(\$83.21)	

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 2017  
Planting dates: May 1 - June 1  
Harvesting dates: June 1 - August 1

ITEM	PRICE	YIELD							TOTAL
<b>GROSS RETURNS</b>									
SORGHUM/SUDAN HAY	\$160.00	5.00 TONS (STACKED)							\$800.00
<b>TOTAL</b>									<b>\$800.00</b>
<b>PURCHASED INPUTS</b>									
	PRICE	QUANTITY	PURCHASED INPUTS		FIXED COST			TOTAL	
SEED	\$1.04	50 LBS	\$52.00					\$52.00	
NITROGEN (N)	\$0.22	100 LBS	\$22.00					\$22.00	
PUMP WATER*		16 AC. IN.							
<b>SUBTOTAL</b>								<b>\$74.00</b>	
<b>PREHARVEST OPERATIONS</b>									
	POWER UNIT	ACCOMPLISHMENT RATE	PURCHASED INPUTS	LABOR	FUEL & LUBE	REPAIRS	FIXED COST	TOTAL	
DISC	50 HP	0.39 HR		\$2.93	\$3.06	\$0.76	\$6.33	\$13.08	
FLOAT (2X)	50 HP	0.64 HR		\$4.80	\$5.03	\$0.70	\$8.31	\$18.83	
DRILL	50 HP	0.21 HR		\$1.58	\$1.65	\$0.45	\$34.83	\$38.50	
IRRIGATE (4X)		2.00 HR		\$15.00	\$37.63	\$0.00	\$13.28	\$65.91	
<b>SUBTOTAL</b>								<b>\$136.32</b>	
<b>HARVEST OPERATIONS</b>									
SWATHER (2X)	14 FT	0.32 HR		\$2.40	\$0.00	\$0.09	\$7.21	\$9.70	
BALER, PTO (2X)	50 HP	0.42 HR		\$3.15	\$3.30	\$0.52	\$7.39	\$14.36	
BALE WAGON (2X)	50 HP	0.40 HR		\$3.00	\$3.14	\$0.94	\$11.50	\$18.59	
<b>SUBTOTAL</b>								<b>\$42.65</b>	
<b>OVERHEAD EXPENSES</b>									
DOWNTIME		0.60 HR		\$4.46				\$4.46	
EMPLOYEE BENEFITS				\$3.94				\$3.94	
FARM INSURANCE			\$0.39					\$0.39	
LAND TAXES						\$1.61		\$1.61	
SUPERVISION AND MANAGEMENT				\$35.19				\$35.19	
OTHER EXPENSES			\$144.69					\$144.69	
<b>SUBTOTAL</b>								<b>\$190.29</b>	
<b>TOTAL OPERATING EXPENSES</b>		<b>4.98 HR</b>	<b>\$219.08</b>	<b>\$76.44</b>	<b>\$53.81</b>	<b>\$3.46</b>	<b>\$90.46</b>	<b>\$443.25</b>	
<b>NET OPERATING PROFIT</b>								<b>\$356.75</b>	
INTEREST ON OPERATING CAPITAL		( \$49.98 @	5.50%	)				\$2.75	
INTEREST ON EQUIPMENT INVESTMENT								\$35.84	
<b>RETURN TO LAND AND RISK</b>								<b>\$318.16</b>	

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

**BUDGET SUMMARY**

GROSS RETURN		\$800.00
VARIABLE OPERATING EXPENSES	\$279.10	
RETURN OVER VARIABLE EXPENSES	\$520.90	(GROSS MARGINS)
FIXED EXPENSES	\$90.46	
NET FARM INCOME	\$430.44	(RETURNS TO CAPITAL, LABOR, LAND & RISK)
LABOR AND MANAGEMENT COST	\$76.44	
NET OPERATING PROFIT	\$354.00	(RETURNS TO CAPITAL, LAND & RISK)
CAPITAL COSTS	\$35.84	
RETURN TO LAND AND RISK		\$318.16

TABLE 10. Summary of per acre costs and returns, 50-acre part-time farm, Tularosa Basin, Otero County, Projected 2017

	ALFALFA ESTABLISHMENT	ALFALFA HAY	OATS FOR HAY	SORGHUM SUDAY HAY
		TONS	TONS	TONS
PRIMARY YIELD		6.00	3.00	5.00
PRIMARY PRICE		\$175.00	\$140.00	\$160.00
GOVERNMENT PAYMENTS		\$0.00	\$0.00	\$0.00
SECOND INCOME		\$0.00	\$0.00	\$0.00
GROSS RETURN		\$1,050.00	\$420.00	\$800.00
CASH OPERATING EXPENSES				
SEED	\$91.50		\$34.00	\$52.00
FERTILIZER		\$40.00	\$22.00	\$22.00
CHEMICALS		\$23.97		
CROP INSURANCE				
OTHER PURCHASED INPUTS		\$20.16		
CANAL WATER				
FUEL, OIL & LUBRICANTS-EQUIPMENT	\$24.11	\$16.10	\$27.33	\$16.18
FUEL-IRRIGATION	\$18.81	\$105.83	\$42.33	\$37.63
REPAIRS	\$4.54	\$3.88	\$5.66	\$3.46
CUSTOM CHARGES				
LAND TAXES		\$3.22	\$1.61	\$1.61
OTHER EXPENSES	\$0.46	\$290.13	\$145.20	\$145.08
TOTAL CASH EXPENSES	\$139.43	\$503.29	\$278.13	\$277.96
RETURN OVER CASH EXPENSES	(\$139.43)	\$546.71	\$141.87	\$522.04
FIXED EXPENSES	\$83.24	\$137.69	\$107.69	\$88.85
TOTAL EXPENSES	\$222.66	\$640.98	\$385.82	\$366.81
NET FARM INCOME	(\$222.66)	\$409.02	\$34.18	\$433.19
LABOR AND MANAGEMENT COSTS	\$62.29	\$124.41	\$74.82	\$76.44
NET OPERATING PROFIT	(\$284.95)	\$284.61	(\$40.64)	\$356.75
CAPITAL COSTS				
INTEREST ON OPERATING CAPITAL		\$3.86	\$2.54	\$2.75
INTEREST ON EQUIPMENT INVESTMENT		\$51.61	\$40.03	\$35.84
TOTAL CAPITAL COSTS	\$0.00	\$55.47	\$42.57	\$38.59
RETURN TO LAND AND RISK	(\$284.95)	\$229.14	(\$83.21)	\$318.16

TABLE 11. Whole farm summary, Tularosa Basin, Otero County,  
Projected 2017

GROSS RETURNS		
ALFALFA HAY	40.00 ACRES	
CROP		\$42,000
OATS FOR HAY	5.00 ACRES	
CROP		\$2,100
SORGHUM/SUDAN	5.00 ACRES	
CROP		\$4,000
GROSS RETURN		<u>\$48,100</u>
CASH OPERATING EXPENSES		
SEED		\$796
FERTILIZER		\$1,820
CHEMICALS		\$959
CROP INSURANCE		\$0
OTHER PURCHASED INPUTS		\$806
CANAL WATER		\$0
FUEL, OIL & LUBRICANTS-EQUIPMENT		\$958
FUEL-IRRIGATION		\$4,708
REPAIRS		\$219
CUSTOM CHARGES		\$0
LAND TAXES		\$145
OTHER EXPENSES		\$13,058
TOTAL CASH EXPENSES		<u>\$23,470</u>
RETURN OVER CASH EXPENSES		\$24,630
FIXED EXPENSES		\$5,239
TOTAL EXPENSES		\$28,709
NET FARM INCOME		\$19,391
LABOR AND MANAGEMENT COSTS		\$5,982
NET OPERATING PROFIT		\$13,409
CAPITAL COSTS		
INTEREST ON OPERATING CAPITAL		\$181
INTEREST ON EQUIPMENT INVESTMENT		\$2,444
TOTAL CAPITAL COSTS		<u>\$2,625</u>
RETURN TO LAND AND RISK		<u>\$10,785</u>

LAND VALUE	RETURNS TO RISK*	RETURN ON INVESTMENT**
\$700 /ACRE	\$9,735	20.23%
\$900 /ACRE	\$9,435	17.58%
\$1,100 /ACRE	\$9,135	15.54%
\$1,300 /ACRE	\$8,835	13.93%
\$1,500 /ACRE	\$8,535	12.62%
\$1,700 /ACRE	\$8,235	11.53%
\$1,900 /ACRE	\$7,935	10.62%
\$2,100 /ACRE	\$7,635	9.84%

\* 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)