

TABLE 13. Summary of per acre costs and returns for a 500 acre farm with above average management, Artesia-Lake Arthur area,
Projected 2018

	ALFALFA ESTABLISHMENT	ALFALFA HAY	BARLEY	OAT HAY	PICKER COTTON	STRIPPER COTTON	RED CHILE
		TONS	CWT	TONS	LBS	LBS	LBS
PRIMARY YIELD		5.60	35.00	3.50	700.00	700.00	3200.00
PRIMARY PRICE		\$185.00	\$6.12	\$150.00	\$0.75	\$0.73	\$0.60
GOVERNMENT PAYMENTS		\$0.00	\$0.00	\$0.00	\$61.11	\$96.11	\$0.00
SECOND INCOME		\$40.00	\$40.00	\$0.00	\$84.00	\$84.00	\$0.00
GROSS RETURN		\$1,076.00	\$254.20	\$525.00	\$670.11	\$691.11	\$1,920.00
CASH OPERATING EXPENSES							
SEED	\$80.00		\$49.50	\$44.00	\$113.25	\$151.00	\$128.00
FERTILIZER		\$42.00	\$46.50	\$25.50	\$4.80	\$4.80	\$54.00
CHEMICALS	\$32.40	\$86.41	\$20.01		\$117.72	\$83.76	\$75.47
CROP INSURANCE			\$2.94		\$0.53	\$0.74	\$20.00
OTHER PURCHASED INPUTS		\$53.04					
CANAL WATER							
FUEL, OIL & LUBRICANTS-EQUIPMENT	\$44.91	\$46.96	\$20.56	\$34.75	\$72.22	\$67.41	\$67.16
FUEL-IRRIGATION	\$7.02	\$43.87	\$24.57	\$24.57	\$26.32	\$26.32	\$42.12
REPAIRS	\$12.42	\$28.48	\$10.69	\$16.38	\$31.46	\$21.93	\$23.96
CUSTOM CHARGES			\$24.91		\$124.30	\$154.89	\$801.00
LAND TAXES		\$1.78	\$1.78	\$1.78	\$1.78	\$1.78	\$1.78
OTHER EXPENSES	\$0.02	\$66.61	\$66.59	\$66.59	\$66.61	\$66.61	\$66.62
TOTAL CASH EXPENSES	\$176.76	\$369.16	\$268.05	\$213.57	\$558.99	\$579.25	\$1,280.10
RETURN OVER CASH EXPENSES	(\$176.76)	\$706.84	(\$13.85)	\$311.43	\$111.12	\$111.86	\$639.90
FIXED EXPENSES	\$30.80	\$102.17	\$19.34	\$26.84	\$197.77	\$100.50	\$48.86
TOTAL EXPENSES	\$207.56	\$471.34	\$287.39	\$240.42	\$756.76	\$679.75	\$1,328.96
NET FARM INCOME	(\$207.56)	\$604.66	(\$33.19)	\$284.58	(\$86.65)	\$11.36	\$591.04
LABOR AND MANAGEMENT COSTS	\$47.99	\$137.53	\$45.84	\$72.34	\$111.77	\$109.12	\$210.66
NET OPERATING PROFIT	(\$255.55)	\$467.13	(\$79.03)	\$212.24	(\$198.43)	(\$97.76)	\$380.38
CAPITAL COSTS							
INTEREST ON OPERATING CAPITAL		\$8.21	\$5.66	\$3.84	\$10.83	\$10.89	\$12.61
INTEREST ON EQUIPMENT INVESTMENT		\$21.86	\$8.36	\$14.02	\$106.11	\$55.19	\$25.56
TOTAL CAPITAL COSTS	\$0.00	\$30.07	\$14.02	\$17.85	\$116.93	\$66.08	\$38.17
RETURN TO LAND AND RISK	(\$255.55)	\$437.06	(\$93.05)	\$194.39	(\$315.36)	(\$163.84)	\$342.21

MICROCOMPUTER CROP COST AND RETURN GENERATOR

BUDGET AREA..... ARTESIA-LAKE ARTHUR ARE/ Projected 2018
FARM SIZE... 500 ACRES
IRRIGATION TYPE..... FLOOD
NUMBER OF CROPS..... 6

VERSION 1.0

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TABLE 11. Cucumbers, flood-irrigated, budgeted per acre costs and returns for a 500 acre farm with above average management, Artesia-Lake Arthur, 2003.
 Planting dates: April 1 - April 15
 Harvesting dates: June 1 - July 31

ITEM	PRICE	YIELD						TOTAL	
GROSS RETURNS									
CUCUMBERS	5	180 CWT						900	
TOTAL								900	
PURCHASED INPUTS									
	PRICE	QUANTITY	PURCHASED INPUTS					TOTAL	
SEED	40	5 LBS	200					200	
FERTILIZER (18-27-12)	0.14	150 LBS	21					21	
FERTILIZER (32-0-0)	0.11	150 LBS	16.5					16.5	
HERBICIDE	7.04	1 X/A	7.04					7.04	
INSECTICIDE (CUSTOM)	16.854	1 X/A	16.854					16.854	
PUMP WATER*		24 AC.							
SUBTOTAL			261.394					261.394	
PREHARVEST OPERATIONS									
	POWER UNIT	ACCOMPLISHMENT RATE	PURCHASED INPUTS	LABOR	FUEL & LUBE	REPAIRS	FIXED COST	TOTAL	
DISC	126 HP	0.17 HR		1.224	3.786348649	1.149387	1.591632387	7.751368036	
PLOW	126 HP	0.48 HR		3.456	10.69086677	3.900048	4.964370417	23.01128519	
DISC (2X)	126 HP	0.34 HR		2.448	7.572697297	2.298774	3.183264775	15.50273607	
FLOAT	70 HP	0.16 HR		1.152	2.6307072	0.153936	0.729367454	4.666010654	
FERTILIZE (CUSTOM)	DEALER APPLIED								
LISTER	126 HP	0.18 HR		1.296	4.00907504	1.071918	2.36442213	8.74141517	
PRE-IRRIGATE		0.05 HR		0.375	1.403917613	0.289642667	0.464792274	2.533352554	
CULTIVATOR	65 HP	0.21 HR		1.512	2.450448	0.481360256	1.151543291	5.595351547	
PLANTER	70 HP	0.26 HR		1.872	4.2748992	0.669786	4.316472333	11.13315753	
CULTIVATOR (2X)	40 HP	0.42 HR		3.024	3.76992	0.872252511	4.311454216	11.97762673	
THIN & HOE (2X)			40					40	
IRRIGATE (14X)		7 HR		52.5	19.65484659	4.054997333	6.507091838	82.71693576	
SUBTOTAL			9.1 HR	40	68.859	60.24372636	14.94210177	29.58441112	213.6292392
HARVEST OPERATIONS									
HARVEST (CUSTOM)			585					585	
HAUL (VEG. TRAILER)	40 HP	1 HR		7.2	8.976	1.1065	8.599186467	25.88168647	
SUBTOTAL			1 HR	585	7.2	8.976	1.1065	8.599186467	610.8816865
OVERHEAD EXPENSES									
DOWNTIME		0.805 HR			5.796			5.796	
EMPLOYEE BENEFITS					12.39462			12.39462	
INSURANCE			0.04957848					0.04957848	
LAND TAXES							1.781666667	1.781666667	
SUPERVISION AND MANAGEMENT				58.75001909				58.75001909	
OTHER EXPENSES			66.5734					66.5734	
SUBTOTAL			0.805 HR	66.62297848	76.94063909		1.781666667	145.3452842	
TOTAL OPERATING EXPENSES		10.905 HR	953.0169785	152.9996391	69.21972636	16.04860177	39.96526425	1231.25021	
NET OPERATING PROFIT								-331.25021	
INTEREST ON OPERATING CAPITAL	(200.4002642	@	0.075)				15.03001982	
INTEREST ON EQUIPMENT INVESTMENT								0	
RETURN TO LAND AND RISK								-346.28023	

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

BUDGET SUMMARY

GROSS RETURN		900	
VARIABLE OPERATING EXPENSES	1038.285307		
RETURN OVER VARIABLE EXPENSES	-138.285307	(GROSS MARGIN)	
FIXED EXPENSES	39.96526425		
NET FARM INCOME	-178.250571	(RETURN TO CAPITAL, LABOR, LAND & RISK)	
LABOR AND MANAGEMENT COST	152.9996391		
NET OPERATING PROFIT	-331.25021	(RETURN TO CAPITAL, LAND & RISK)	
CAPITAL COSTS	15.03001982		
RETURN TO LAND AND RISK	-346.28023		

TABLE 1. Acreage Summary, Eddy County, Artesia Lake Arthur Area, Projected 2018

BUDGET AREA..... ARTESIA-LAKE ARTHUR AREA			
FARM SIZE.....	500.00	ACRES	
IRRIGATION TYPE.....	FLOOD		
NUMBER OF CROPS.....	6		
WATER USE			
ACREAGE SUMMARY:	LAND USE (ACRES)	AC.IN. PER AC.	TOTAL AC.IN.
ALFALFA ESTABLISHMENT	52.00 *	8	416
ALFALFA	260.00	50	13,000
BARLEY	17.00	28	476
ARP	0.00		
FLEX IN PICKER COTTON	3.00	30	90
OAT HAY	20.00	28	560
PICKER COTTON	68.00	30	2,040
ARP	0.00		
FLEX IN PICKER COTTON	12.00	30	360
STRIPPER COTTON	68.00	30	2,040
ARP	0.00		
FLEX IN PICKER COTTON	12.00	30	360
RED CHILE	40.00	48	1,920
TOTAL	500.00		21,262
ACRE FEET PER ACRE OF WATER RIGHTS			3.54

*DOUBLE-CROPPED

TABLE 2. Basic cost information for the Artesia-Lake Arthur area, Projected 2018

Item		
Labor Wage Rate:		
Equipment operators	\$/hour	\$7.20
General & Irrigators	\$/hour	\$7.50
Purchased Inputs:		
Fertilizer:		
Nitrogen (N)	\$/pound	\$0.31
Phosphate (P ₂ O ₅)	\$/pound	\$0.24
Seed:		
Alfalfa	\$/pound	\$4.00
Cotton picker	\$/pound	\$7.55
stripper	\$/pound	\$7.55
Barley	\$/pound	\$0.40
Oats	\$/pound	\$0.44
Red Chile	\$/pound	\$16.00
Wire:	\$/lb.	\$0.03
Natural gas (service charge)	\$/MCF	\$4.00
Diesel fuel	\$/month	\$10.00
Diesel fuel	\$/gallon	\$2.70
Gasoline	\$/gallon	\$2.40
Electricity	cents/KwHr	\$8.32
LP Gas	\$/gallon	\$2.90
Employee Liability Insurance	\$/ \$1000 wages	\$0.72
Employee Benefits	percent/wages	18.00%
Labor Downtime	percent	25.00%
Financial Rates:		
Operating Capital Interest Rate	percent	7.50%
Land Interest Rate	percent	Amount
Equipment Interest Rate	percent	7.50%
Real Interest Rate	percent	7.00%
Land Taxes	\$250.00 /acre (full value)	\$1.78
Personal Property Tax Rat - NR	\$/ \$1,000	(Assessed Value) \$21.38
- R		\$18.58
Supervision Factors		
Field Crop-Irrigation	\$/labor hour	\$0.06
Field Crop-Equipment & General	\$/labor hour	\$0.03
Vegetable Crop-Irrigation	\$/labor hour	\$0.00
Vegetable Crop-Equip. & General	\$/labor hour	\$0.00
Management Rate		
Field Crops	percent/GR	7.00%
Vegetable Crops	percent/TOE	10.00%

TABLE 3. Overhead cost information for the Artesia-Lake Arthur area, Projected 2018

Item		
Electricity (Domestic & Shop)	\$304.80	per month \$3,658
Telephone	\$222.25	per month \$2,667
Accounting & Legal		\$3,359
Misc. Supplies & Hand Tools		\$4,293
Pickup and Auto	25,400 miles @ \$0.500 per mile	\$12,700
Insurance		
- general liability (non-employee)		\$1,892
- fire/theft		\$2,851
Property Taxes		
- non-planted land		\$0
- other than land & machinery		\$0
Building repairs and maintenance		\$0
Dues, fees, publications		\$1,435
Farmstead Equipment		\$432
		Total \$33,287
		Total Per Planted Acre \$66.57

TABLE 6. Alfalfa establishment, flood-irrigated, budgeted per acre costs and returns for a 500 acre farm with above average management, Artesia-Lake Arthur area, Projected 2018
Planting dates: September 1 - September 30

ITEM	PRICE	QUANTITY	PURCHASED INPUTS				TOTAL	
PURCHASED INPUTS								
SEED	\$4.00	20 LBS		\$80.00			\$80.00	
HERBICIDE	\$32.40	1 ACRE		\$32.40			\$32.40	
PUMP WATER		8 AC. IN.						
SUBTOTAL				\$112.40			\$112.40	
PREHARVEST OPERATIONS								
	POWER UNIT	ACCOMPLISHMENT RATE	PURCHASED INPUTS	LABOR	FUEL & LUBE	REPAIRS	FIXED COST	TOTAL
PLOW	145 HP	0.48 HR		\$3.46	\$10.69	\$3.90	\$4.96	\$23.01
DISC (2X)	145 HP	0.34 HR		\$2.45	\$7.57	\$2.30	\$3.18	\$15.50
PLANE (3X)	145 HP	0.57 HR		\$4.10	\$12.70	\$2.33	\$10.09	\$29.22
DISC	145 HP	0.17 HR		\$1.22	\$3.79	\$1.15	\$1.59	\$7.75
FLOAT (2X)	70 HP	0.32 HR		\$2.30	\$5.26	\$0.31	\$1.46	\$9.33
DRILL (2X)	65 HP	0.42 HR		\$3.02	\$4.90	\$0.99	\$7.19	\$16.10
IRRIGATE (2X)		1.00 HR		\$7.50	\$7.02	\$1.45	\$2.32	\$18.29
SUBTOTAL		3.30 HR		\$24.06	\$51.93	\$12.42	\$30.80	\$119.21
OVERHEAD EXPENSES								
DOWNTIME		0.46 HR		\$3.28				\$3.28
EMPLOYEE BENEFITS				\$4.33				\$4.33
INSURANCE			\$0.02					\$0.02
SUPERVISION AND MANAGEMENT				\$16.32				\$16.32
SUBTOTAL		0.46 HR	\$0.02	\$23.93				\$23.95
TOTAL OPERATING EXPENSES		3.76 HR	\$112.41	\$47.99	\$51.93	\$12.42	\$30.80	\$255.55

TABLE 7. Alfalfa hay, flood-irrigated, budgeted per acre costs and returns for a 500 acre farm with above average management, Artesia-Lake Arthur area, Projected 2018
Harvesting dates: May 5 - November 1

ITEM	PRICE	YIELD						TOTAL	
GROSS RETURNS									
ALFALFA HAY	\$185.00	5.60 TONS (STACKED)						\$1,036.00	
GRAZING	\$40.00							\$40.00	
TOTAL								\$1,076.00	
PURCHASED INPUTS									
	PRICE	QUANTITY	PURCHASED INPUTS				FIXED COST	TOTAL	
INSECTICIDE (CUSTOM)	\$25.02	2	X/ACRE	\$50.05				\$50.05	
HERBICIDE (CUSTOM)	\$36.36	1	ACRE	\$36.36				\$36.36	
INSECT SCOUTING	\$5.25	1	ACRE	\$5.25				\$5.25	
FERTILIZER (5-26-30)	\$0.21	200	LBS	\$42.00				\$42.00	
WIRE	\$0.03	48	LBS	\$1.56				\$1.56	
DRYING AGENT (AGRI-DRY)	\$8.26	1	/TON	\$46.23				\$46.23	
ESTABLISHMENT: Principal		5	YEARS			\$51.11	\$51.11		
Interest						\$10.60	\$10.60		
PUMP WATER*		50	AC. IN.						
SUBTOTAL				\$181.46				\$61.71	\$243.17
PREHARVEST OPERATIONS									
	POWER UNIT	ACCOMPLISHMENT RATE	PURCHASED INPUTS	LABOR	FUEL & LUBE	REPAIRS	FIXED COST	TOTAL	
IRRIGATE (7X)		3.50 HR		\$26.25	\$43.87	\$9.05	\$14.52	\$93.70	
SUBTOTAL				\$26.25	\$43.87	\$9.05	\$14.52	\$93.70	
HARVEST OPERATIONS									
SWATHER (5X)	16 FT SP	0.55 HR		\$3.96	\$5.56	\$0.80	\$12.05	\$22.37	
RAKE (5X)	40 HP	0.25 HR		\$1.80	\$2.24	\$0.51	\$2.86	\$7.41	
BALER (5X)	96 HP	1.25 HR		\$9.00	\$20.55	\$1.37	\$3.52	\$34.44	
BALE WAGON (5X)	SP	1.00 HR		\$7.20	\$18.60	\$16.75	\$7.51	\$50.07	
SUBTOTAL				\$21.96	\$46.96	\$19.43	\$25.94	\$114.29	
OVERHEAD EXPENSES									
DOWNTIME		0.70 HR		\$5.04				\$5.04	
EMPLOYEE BENEFITS				\$8.68				\$8.68	
INSURANCE				\$0.03				\$0.03	
LAND TAXES							\$1.78	\$1.78	
SUPERVISION AND MANAGEMENT				\$75.60				\$75.60	
OTHER EXPENSES				\$66.57				\$66.57	
SUBTOTAL				\$66.61	\$89.32			\$1.78	\$157.71
TOTAL OPERATING EXPENSES				\$248.06	\$137.53	\$90.83	\$28.48	\$103.96	\$608.87
NET OPERATING PROFIT								\$467.13	
INTEREST ON OPERATING CAPITAL								\$8.21	
INTEREST ON EQUIPMENT INVESTMENT								\$21.86	
RETURN TO LAND AND RISK								\$437.06	

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

BUDGET SUMMARY

GROSS RETURN		\$1,076.00	
VARIABLE OPERATING EXPENSES	\$367.38		
RETURN OVER VARIABLE EXPENSES		\$708.62	(GROSS MARGIN)
FIXED EXPENSES	\$103.96		
NET FARM INCOME		\$604.66	(RETURN TO CAPITAL, LABOR, LAND & RISK)
LABOR AND MANAGEMENT COST	\$137.53		
NET OPERATING PROFIT		\$467.13	(RETURN TO CAPITAL, LAND & RISK)
CAPITAL COSTS	\$30.07		
RETURN TO LAND AND RISK		\$437.06	

TABLE 8. Barley, flood-irrigated, budgeted per acre costs and returns for a 500 acre farm with above average management, Artesia-Lake Arthur area, Projected 2018
 Planting dates: August 20 - September 30
 Harvesting dates: June 15 - July 1

ITEM	PRICE	YIELD						TOTAL
GROSS RETURNS								
BARLEY	\$6.12	35.00 CWT						\$214.20
DIRECT PAYMENT	\$0.00	35.00 CWT						\$0.00
COUNTER CYCLICAL PAYMENT	\$0.00							\$0.00
GRAZING	\$40.00							\$40.00
TOTAL								\$254.20
PURCHASED INPUTS								
	PRICE	QUANTITY	PURCHASED INPUTS					TOTAL
SEED	\$0.45	110 LBS	\$49.50					\$49.50
NITROGEN (N)	\$0.31	150 LBS	\$46.50					\$46.50
INSECTICIDE (CUSTOM)	\$20.01	1 ACRE	\$20.01					\$20.01
PUMP WATER*		28 AC. IN.						
CROP INSURANCE	\$2.94		\$2.94					\$2.94
SUBTOTAL			\$118.95					\$118.95
PREHARVEST OPERATIONS								
	POWER UNIT	ACCOMPLISHMENT RATE	PURCHASED INPUTS	LABOR	FUEL & LUBE	REPAIRS	FIXED COST	TOTAL
PLOW	145 HP	0.48 HR		\$3.46	\$10.69	\$3.90	\$4.96	\$23.01
DISC	145 HP	0.17 HR		\$1.22	\$3.79	\$1.15	\$1.59	\$7.75
FLOAT	70 HP	0.16 HR		\$1.15	\$2.63	\$0.15	\$0.73	\$4.67
FERTILIZE	DEALER APPLIED							
DRILL	70 HP	0.21 HR		\$1.51	\$3.45	\$0.42	\$3.92	\$9.30
IRRIGATE (4X)		2.00 HR		\$15.00	\$24.57	\$5.07	\$8.13	\$52.77
SUBTOTAL		3.02 HR		\$22.34	\$45.13	\$10.69	\$19.34	\$97.50
HARVEST OPERATIONS								
COMBINE (CUSTOM)			\$17.91					\$17.91
HAUL (CUSTOM)			\$7.00					\$7.00
SUBTOTAL			\$24.91					\$24.91
OVERHEAD EXPENSES								
DOWNTIME		0.22 HR		\$1.55				\$1.55
EMPLOYEE BENEFITS				\$4.02				\$4.02
INSURANCE			\$0.02				\$0.02	
LAND TAXES						\$1.78	\$1.78	
SUPERVISION AND MANAGEMENT				\$17.93				\$17.93
OTHER EXPENSES			\$66.57				\$66.57	
SUBTOTAL		0.22 HR	\$66.59	\$23.50			\$1.78	\$91.87
TOTAL OPERATING EXPENSES		3.24 HR	\$210.45	\$45.84	\$45.13	\$10.69	\$21.12	\$333.23
NET OPERATING PROFIT								(\$79.03)
INTEREST ON OPERATING CAPITAL		(\$75.50 @ 7.50%)						\$5.66
INTEREST ON EQUIPMENT INVESTMENT								\$8.36
RETURN TO LAND AND RISK								(\$93.05)

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

BUDGET SUMMARY

GROSS RETURN		\$254.20	
VARIABLE OPERATING EXPENSES	\$266.27		
RETURN OVER VARIABLE EXPENSES		(\$12.07)	(GROSS MARGIN)
FIXED EXPENSES	\$21.12		
NET FARM INCOME		(\$33.19)	(RETURN TO CAPITAL, LABOR, LAND & RISK)
LABOR AND MANAGEMENT COST	\$45.84		
NET OPERATING PROFIT		(\$79.03)	(RETURN TO CAPITAL, LAND & RISK)
CAPITAL COSTS	\$14.02		
RETURN TO LAND AND RISK		(\$93.05)	

TABLE 9. Oat hay, flood-irrigated, budgeted per acre costs and returns for a 500 acre farm with above average management, Artesia-Lake Arthur area, Projected 2018
 Planting dates: February 1 - February 28
 Harvesting dates: June 1 - June 30

ITEM	PRICE	YIELD						TOTAL
GROSS RETURNS								
OAT HAY	\$150.00	3.50 TONS (STACKED)						\$525.00
TOTAL							\$525.00	
PURCHASED INPUTS								
	PRICE	QUANTITY	PURCHASED INPUTS					TOTAL
SEED	\$0.44	100 LBS	\$44.00					\$44.00
FERTILIZER (16-20-0)	\$0.17	150 LBS	\$25.50					\$25.50
PUMP WATER*		28 AC. IN.						
SUBTOTAL			\$69.50					\$69.50
PREHARVEST OPERATIONS								
	POWER UNIT	ACCOMPLISHMENT RATE	PURCHASED INPUTS	LABOR	FUEL & LUBE	REPAIRS	FIXED COST	TOTAL
PLOW	145 HP	0.48 HR		\$3.46	\$10.69	\$3.90	\$4.96	\$23.01
DISC	145 HP	0.34 HR		\$2.45	\$7.57	\$2.30	\$3.18	\$15.50
FLOAT	70 HP	0.16 HR		\$1.15	\$2.63	\$0.15	\$0.73	\$4.67
FERTILIZE (CUSTOM)			\$0.00					\$0.00
DRILL	70 HP	0.21 HR		\$1.51	\$3.45	\$0.42	\$3.92	\$9.30
IRRIGATE (4X)		2.00 HR		\$15.00	\$24.57	\$5.07	\$8.13	\$52.77
SUBTOTAL	3.19 HR			\$23.57	\$48.92	\$11.84	\$20.93	\$105.25
HARVEST OPERATIONS								
SWATHER	16 FT	0.11 HR		\$0.79	\$1.11	\$0.16	\$2.41	\$4.47
BALER	126 HP	0.25 HR		\$1.80	\$5.57	\$1.03	\$2.00	\$10.40
BALE WAGON	S. P.	0.20 HR		\$1.44	\$3.72	\$3.35	\$1.50	\$10.01
SUBTOTAL	0.56 HR			\$4.03	\$10.40	\$4.54	\$5.92	\$24.89
OVERHEAD EXPENSES								
DOWNTIME		0.40 HR		\$2.86				\$2.86
EMPLOYEE BENEFITS				\$4.97				\$4.97
INSURANCE			\$0.02					\$0.02
LAND TAXES							\$1.78	\$1.78
SUPERVISION AND MANAGEMENT				\$36.91				\$36.91
OTHER EXPENSES			\$66.57					\$66.57
SUBTOTAL	0.40 HR		\$66.59	\$44.74			\$1.78	\$113.12
TOTAL OPERATING EXPENSES	4.15 HR		\$136.09	\$72.34	\$59.32	\$16.38	\$28.62	\$312.76
NET OPERATING PROFIT								\$212.24
INTEREST ON OPERATING CAPITAL		(\$51.18 @ 7.50%)						\$3.84
INTEREST ON EQUIPMENT INVESTMENT								\$14.02
RETURN TO LAND AND RISK								\$194.39

* Pump water costs are shown under irrigation in the preharvest operation section.
 BUDGET SUMMARY

GROSS RETURN		\$525.00	
VARIABLE OPERATING EXPENSES	\$211.79		
RETURN OVER VARIABLE EXPENSES		\$313.21	(GROSS MARGIN)
FIXED EXPENSES	\$28.62		
NET FARM INCOME		\$284.58	(RETURN TO CAPITAL, LABOR, LAND & RISK)
LABOR AND MANAGEMENT COST	\$72.34		
NET OPERATING PROFIT		\$212.24	(RETURN TO CAPITAL, LAND & RISK)
CAPITAL COSTS	\$17.85		
RETURN TO LAND AND RISK		\$194.39	

TABLE 10. Upland cotton (picker), flood-irrigated, budgeted per acre costs and returns for a 500 acre farm with above average management, Artesia-Lake Arthur area, 2002.
Planting dates: April 15 - May 15
Harvesting dates: October 15 - January 15

ITEM	PRICE	YIELD						TOTAL
GROSS RETURNS								
COTTON LINT	\$0.750	700 LBS						\$525.00
COTTON SEED	\$0.075	1,120 LBS						\$84.00
DIRECT PAYMENT	\$0.000	700 LBS						\$0.00
COUNTER CYCLICAL PAYMENT	\$0.087	700 LBS						\$61.11
TOTAL								\$670.11
PURCHASED INPUTS								
PURCHASED INPUTS	PRICE	QUANTITY	PURCHASED INPUTS					TOTAL
SEED	\$7.55	15 LBS	\$113.25					\$113.25
FOLIAR FERTILIZER	\$4.80	1 X/ACRE	\$4.80					\$4.80
INSECT SCOUTING	\$5.25	1 ACRE	\$5.25					\$5.25
HERBICIDE (CUSTOM)	\$80.91	1 X/ACRE	\$80.91					\$80.91
INSECTICIDE (CUSTOM)	\$31.56	3 X/ACRE	\$31.56					\$31.56
CROP INSURANCE		FCIC	\$0.53					\$0.53
PUMP WATER*		30 AC. IN.						
SUBTOTAL			\$236.30					\$236.30
PREHARVEST OPERATIONS								
PREHARVEST OPERATIONS	POWER UNIT	ACCOMPLISHMENT RATE	PURCHASED INPUTS	LABOR	FUEL & LUBE	REPAIRS	FIXED COST	TOTAL
DISC	145 HP	0.17 HR		\$1.22	\$3.79	\$1.15	\$1.59	\$7.75
PLOW	145 HP	0.48 HR		\$3.46	\$10.69	\$3.90	\$4.96	\$23.01
DISC (2X)	145 HP	0.34 HR		\$2.45	\$7.57	\$2.30	\$3.18	\$15.50
FLOAT	145 HP	0.16 HR		\$1.15	\$3.56	\$0.64	\$1.33	\$6.68
LISTER	145 HP	0.18 HR		\$1.30	\$4.01	\$1.07	\$2.36	\$8.74
PRE-IRRIGATE		0.75 HR		\$5.63	\$6.58	\$1.36	\$2.18	\$15.74
CULTIVATOR	65 HP	0.21 HR		\$1.51	\$2.45	\$0.48	\$1.15	\$5.60
PLANTER	70 HP	0.26 HR		\$1.87	\$4.27	\$0.67	\$4.32	\$11.13
SLED	70 HP	0.15 HR		\$1.08	\$2.47	\$0.18	\$0.81	\$4.54
CULTIVATOR (3X)	65 HP	0.63 HR		\$4.54	\$7.35	\$1.44	\$3.45	\$16.79
HAND HOE (CUSTOM)			\$20.00					\$20.00
IRRIGATE (3X)		1.50 HR		\$11.25	\$19.74	\$4.07	\$6.54	\$41.60
SUBTOTAL		4.83 HR	\$20.00	\$35.45	\$72.49	\$17.27	\$31.88	\$177.09
HARVEST OPERATIONS								
COTTON PICKER (2X)	2-ROW	0.74 HR		\$5.33	\$12.08	\$12.68	\$158.38	\$188.47
HAUL (2X)	65 HP	1.00 HR		\$7.20	\$11.67	\$1.32	\$5.33	\$25.52
GIN COTTON (CUSTOM)			\$104.30					\$104.30
SUBTOTAL		1.74 HR	\$104.30	\$12.53	\$23.75	\$14.00	\$163.71	\$318.29
POSTHARVEST OPERATIONS								
SHREDDER	70 HP	0.14 HR		\$1.01	\$2.30	\$0.19	\$2.19	\$5.68
SUBTOTAL		0.14 HR		\$1.01	\$2.30	\$0.19	\$2.19	\$5.68
OVERHEAD EXPENSES								
DOWNTIME		0.95 HR		\$6.82				\$6.82
EMPLOYEE BENEFITS				\$8.82				\$8.82
INSURANCE			\$0.04				\$0.04	
LAND TAXES						\$1.78	\$1.78	
SUPERVISION AND MANAGEMENT				\$47.15				\$47.15
OTHER EXPENSES			\$66.57				\$66.57	
SUBTOTAL		0.95 HR	\$66.61	\$62.78			\$1.78	\$131.18
TOTAL OPERATING EXPENSES		7.66 HR	\$427.21	\$111.77	\$98.54	\$31.46	\$199.55	\$868.54
NET OPERATING PROFIT								(\$198.43)
INTEREST ON OPERATING CAPITAL		(\$144.36 @	7.50%)				\$10.83
INTEREST ON EQUIPMENT INVESTMENT								\$106.11
RETURN TO LAND AND RISK								(\$315.36)
* Pump water costs are shown under irrigation in the preharvest operation section.								
BUDGET SUMMARY								
GROSS RETURN		\$670.11						
VARIABLE OPERATING EXPENSES	\$557.21							
RETURN OVER VARIABLE EXPENSES	\$112.90	(GROSS MARGIN)						
FIXED EXPENSES	\$199.55							
NET FARM INCOME		(\$86.65)	(RETURN TO CAPITAL, LABOR, LAND & RISK)					
LABOR AND MANAGEMENT COST	\$111.77							
NET OPERATING PROFIT		(\$198.43)	(RETURN TO CAPITAL, LAND & RISK)					
CAPITAL COSTS	\$116.93							
RETURN TO LAND AND RISK		(\$315.36)						

TABLE 11. Upland cotton (stripper), flood-irrigated, budgeted per acre costs and returns for a 500 acre farm with above average management, Artesia-Lake Arthur area, Projected 2018
 Planting dates: April 15 - May 15
 Harvesting dates: October 15 - January 15

ITEM	PRICE	YIELD						TOTAL
GROSS RETURNS								
COTTON LINT	\$0.730	700 LBS						\$511.00
COTTON SEED	\$0.075	1,120 LBS						\$84.00
DIRECT PAYMENT	\$0.000	700 LBS						\$0.00
COUNTER CYCLICAL PAYMENT	\$0.137	700 LBS						\$96.11
TOTAL							\$691.11	
PURCHASED INPUTS								
PURCHASED INPUTS	PRICE	QUANTITY	PURCHASED INPUTS					TOTAL
SEED	\$7.55	20 LBS	\$151.00					\$151.00
FOLIAR FERTILIZER	\$4.80	1 X/ACRE	\$4.80					\$4.80
INSECT SCOUTING	\$5.25	1 ACRE	\$5.25					\$5.25
HERBICIDE (CUSTOM)	\$45.34	1 X/ACRE	\$45.34					\$45.34
INSECTICIDE (CUSTOM)	\$33.18	3 X/ACRE	\$33.18					\$33.18
CROP INSURANCE		FCIC	\$0.74					\$0.74
PUMP WATER*		30 AC. IN.						
CROP INSURANCE	\$0.00		\$0.00					\$0.00
SUBTOTAL			\$240.30					\$240.30
PREHARVEST OPERATIONS								
	POWER UNIT	ACCOMPLISHMENT RATE	PURCHASED INPUTS	LABOR	FUEL & LUBE	REPAIRS	FIXED COST	TOTAL
DISC	145 HP	0.17 HR		\$1.22	\$3.79	\$1.15	\$1.59	\$7.75
PLOW	145 HP	0.48 HR		\$3.46	\$10.69	\$3.90	\$4.96	\$23.01
DISC (2X)	145 HP	0.34 HR		\$2.45	\$7.57	\$2.30	\$3.18	\$15.50
FLOAT	145 HP	0.16 HR		\$1.15	\$3.56	\$0.64	\$1.33	\$6.68
LIST	145 HP	0.18 HR		\$1.30	\$4.01	\$1.07	\$2.36	\$8.74
PRE-IRRIGATE		0.75 HR		\$5.63	\$6.58	\$1.36	\$2.18	\$15.74
CULTIVATOR	65 HP	0.21 HR		\$1.51	\$2.45	\$0.48	\$1.15	\$5.60
PLANTER	70 HP	0.26 HR		\$1.87	\$4.27	\$0.67	\$4.32	\$11.13
SLED	70 HP	0.15 HR		\$1.08	\$2.47	\$0.18	\$0.81	\$4.54
CULTIVATOR (3X)	65 HP	0.63 HR		\$4.54	\$7.35	\$1.44	\$3.45	\$16.79
HAND HOE (CUSTOM)			\$20.00					\$20.00
IRRIGATE (3X)		1.50 HR		\$11.25	\$19.74	\$4.07	\$6.54	\$41.60
SUBTOTAL		4.83 HR	\$20.00	\$35.45	\$72.49	\$17.27	\$31.88	\$177.09
HARVEST OPERATIONS								
COTTON STRIPPER	70 HP	0.62 HR		\$4.46	\$10.19	\$3.49	\$62.44	\$80.58
HAUL	65 HP	0.75 HR		\$5.40	\$8.75	\$0.99	\$4.00	\$19.14
GIN COTTON (CUSTOM)			\$134.89					\$134.89
SUBTOTAL		1.37 HR	\$134.89	\$9.86	\$18.95	\$4.48	\$66.44	\$234.61
POSTHARVEST OPERATIONS								
SHREDDER	70 HP	0.14 HR		\$0.56	\$2.30	\$0.19	\$2.19	\$5.24
SUBTOTAL		0.14 HR		\$0.56	\$2.30	\$0.19	\$2.19	\$5.24
OVERHEAD EXPENSES								
DOWNTIME		0.89 HR		\$6.43				\$6.43
EMPLOYEE BENEFITS				\$8.26				\$8.26
INSURANCE			\$0.03					\$0.03
LAND TAXES						\$1.78		\$1.78
SUPERVISION AND MANAGEMENT				\$48.56				\$48.56
OTHER EXPENSES			\$66.57					\$66.57
SUBTOTAL		0.89 HR	\$66.61	\$63.25		\$1.78		\$131.63
TOTAL OPERATING EXPENSES		7.23 HR	\$461.79	\$109.12	\$93.74	\$21.93	\$102.28	\$788.87
NET OPERATING PROFIT								
							(\$97.76)	
INTEREST ON OPERATING CAPITAL		(\$145.16 @ 7.50%)						\$10.89
INTEREST ON EQUIPMENT INVESTMENT								\$55.19
RETURN TO LAND AND RISK							(\$163.84)	

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

BUDGET SUMMARY

GROSS RETURN		\$691.11		
VARIABLE OPERATING EXPENSES	\$577.47			
RETURN OVER VARIABLE EXPENSES	\$113.64	(GROSS MARGIN)		
FIXED EXPENSES	\$102.28			
NET FARM INCOME	\$11.36	(RETURN TO CAPITAL, LABOR, LAND & RISK)		
LABOR AND MANAGEMENT COST	\$109.12			
NET OPERATING PROFIT	(\$97.76)	(RETURN TO CAPITAL, LAND & RISK)		
CAPITAL COSTS	\$66.08			
RETURN TO LAND AND RISK		(\$163.84)		

TABLE 12. Red chile, flood-irrigated, budgeted per acre costs and returns for a 500 acre farm with above average management, Artesia-Lake Arthur area, Projected 2018
 Planting dates: April 1 - April 15
 Harvesting dates: September 1 - October 30

ITEM	PRICE	YIELD						TOTAL
GROSS RETURNS								
RED CHILE	\$0.60	3,200 LBS						\$1,920.00
TOTAL							\$1,920.00	
PURCHASED INPUTS								
PURCHASED INPUTS	PRICE	QUANTITY	PURCHASED INPUTS					TOTAL
SEED	\$16.00	8 LBS	\$128.00					\$128.00
NITROGEN (N)	\$0.31	120 LBS	\$37.20					\$37.20
PHOSPHATE (P205)	\$0.24	70 LBS	\$16.80					\$16.80
HERBICIDE (CUSTOM)	\$34.59	1 X/ACRE	\$34.59					\$34.59
INSECTICIDE (CUSTOM)	\$40.88	3 X/ACRE	\$40.88					\$40.88
CROP INSURANCE		400 DOLLARS	\$20.00					\$20.00
NOVA CHEMICAL APPLICATION	\$4.30	0 AI OZ PER ACRE	\$0.00					\$0.00
PUMP WATER*		48 AC. IN.						
SUBTOTAL			\$277.47					\$277.47
PREHARVEST OPERATIONS								
	POWER UNIT	ACCOMPLISHMENT RATE	PURCHASED INPUTS	LABOR	FUEL & LUBE	REPAIRS	FIXED COST	TOTAL
PLOW	145 HP	0.48 HR		\$3.46	\$10.69	\$3.90	\$4.96	\$23.01
DISC (2X)	145 HP	0.34 HR		\$2.45	\$7.57	\$2.30	\$3.18	\$15.50
PLANE	145 HP	0.16 HR		\$1.15	\$3.56	\$0.65	\$2.83	\$8.20
FERTILIZE LIST	DEALER APPLIED 145 HP	0.18 HR		\$1.30	\$4.01	\$1.07	\$2.36	\$8.74
PRE-IRRIGATE CULTIVATOR		0.75 HR		\$5.63	\$5.26	\$1.09	\$1.74	\$13.72
PLANTER	65 HP	0.21 HR		\$1.51	\$2.45	\$0.48	\$1.15	\$5.60
CULTIVATOR (5X)	70 HP	0.26 HR		\$1.87	\$4.27	\$0.67	\$4.32	\$11.13
THIN (CUSTOM)	65 HP	1.05 HR		\$7.56	\$12.25	\$2.41	\$5.76	\$27.98
IRRIGATE (7X)		3.50 HR	\$45.00	\$26.25	\$36.85	\$7.60	\$12.20	\$82.91
HAND HOE (CUSTOM)			\$20.00					\$20.00
CHEMICAL APPLICATION (CUSTOM)			\$0.00					\$0.00
SUBTOTAL	6.93 HR		\$65.00	\$51.17	\$86.93	\$20.17	\$38.51	\$261.79
HARVEST OPERATIONS								
HAND PICK (CUSTOM)			\$640.00					\$640.00
FIELD HAUL	145 HP	0.90 HR		\$6.48	\$20.05	\$3.60	\$8.16	\$38.29
HAUL (CUSTOM)			\$96.00					\$96.00
SUBTOTAL	0.90 HR		\$736.00	\$6.48	\$20.05	\$3.60	\$8.16	\$774.29
POSTHARVEST OPERATIONS								
SHREDDER	70 HP	0.14 HR		\$1.01	\$2.30	\$0.19	\$2.19	\$5.68
SUBTOTAL	0.14 HR			\$1.01	\$2.30	\$0.19	\$2.19	\$5.68
OVERHEAD EXPENSES								
DOWNTIME		0.93 HR		\$6.70				\$6.70
EMPLOYEE BENEFITS				\$10.56				\$10.56
INSURANCE			\$0.04					\$0.04
LAND TAXES						\$1.78		\$1.78
SUPERVISION AND MANAGEMENT				\$134.75				\$134.75
OTHER EXPENSES			\$66.57					\$66.57
SUBTOTAL	0.93 HR		\$66.62	\$152.00			\$1.78	\$220.40
TOTAL OPERATING EXPENSES	8.90 HR		\$1,145.08	\$210.66	\$109.28	\$23.96	\$50.64	\$1,539.62
NET OPERATING PROFIT								\$380.38
INTEREST ON OPERATING CAPITAL		(\$168.10 @		7.50%)			\$12.61
INTEREST ON EQUIPMENT INVESTMENT								\$25.56
RETURN TO LAND AND RISK								\$342.21

* Pump water costs are shown under irrigation in the preharvest operation section.
 BUDGET SUMMARY

GROSS RETURN		\$1,920.00	
VARIABLE OPERATING EXPENSES	#####		
RETURN OVER VARIABLE EXPENSES		\$641.68	(GROSS MARGIN)
FIXED EXPENSES	\$50.64		
NET FARM INCOME		\$591.04	(RETURN TO CAPITAL, LABOR, LAND & RISK)
LABOR AND MANAGEMENT COST	\$210.66		
NET OPERATING PROFIT		\$380.38	(RETURN TO CAPITAL, LAND & RISK)
CAPITAL COSTS	\$38.17		
RETURN TO LAND AND RISK		\$342.21	

TABLE 14. Whole farm summary, Artesia-Lake Arthur area,
Projected 2018

GROSS RETURNS		
ALFALFA HAY	260 ACRES	
CROP		\$279,760
BARLEY	17 ACRES	
CROP		\$4,321
DIRECT PAYMENT		\$0
COUNTER CYCLICAL PAYMENT		\$0
OAT HAY	20 ACRES	
CROP		\$10,500
PICKER COTTON	95 ACRES	
COTTON LINT		\$49,875
COTTON SEED		\$7,980
DIRECT PAYMENT		\$0
COUNTER CYCLICAL PAYMENT		\$5,805
STRIPPER COTTON	68 ACRES	
COTTON LINT		\$34,748
COTTON SEED		\$5,712
DIRECT PAYMENT		\$0
COUNTER CYCLICAL PAYMENT		\$6,535
RED CHILE	40 ACRES	
CROP		\$76,800
GROSS RETURN		<u>\$482,037</u>
CASH OPERATING EXPENSES		
SEED		\$32,028
FERTILIZER		\$15,163
CHEMICALS		\$44,390
CROP INSURANCE		\$950
OTHER PURCHASED INPUTS		\$13,791
CANAL WATER		\$0
FUEL, OIL & LUBRICANTS-EQUIPMENT		\$29,721
FUEL-IRRIGATION		\$18,656
REPAIRS		\$13,999
CUSTOM CHARGES		\$54,804
LAND TAXES		\$891
OTHER EXPENSES		\$33,305
TOTAL CASH EXPENSES		<u>\$257,699</u>
RETURN OVER CASH EXPENSES		\$224,338
FIXED EXPENSES		\$43,321
TOTAL EXPENSES		\$301,020
NET FARM INCOME		\$181,018
LABOR AND MANAGEMENT COSTS		\$66,945
NET OPERATING PROFIT		\$114,073
CAPITAL COSTS		
INTEREST ON OPERATING CAPITAL		\$4,581
INTEREST ON EQUIPMENT INVESTMENT		\$20,962
TOTAL CAPITAL COSTS		<u>\$25,543</u>
RETURN TO LAND AND RISK		<u>\$88,529</u>
LAND VALUE	RETURN TO RISK*	RETURN ON INVESTMENT**
\$1,000 /ACRE	\$53,529	16.51%
\$2,500 /ACRE	\$1,029	7.92%
\$4,000 /ACRE	(\$51,471)	5.21%
\$5,500 /ACRE	(\$103,971)	3.88%

* 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)