

TABLE 1. Basic cost information for the Artesia-Lake Arthur area, 2003.

Item		
Labor Wage Rate:		
Equipment operators	\$/hour	\$7.30
General & Irrigators	\$/hour	\$6.70
Purchased Inputs:		
Fertilizer:		
Nitrogen (N)	\$/pound	\$0.36
Phosphate (P205)	\$/pound	\$0.33
Seed:		
Alfalfa	\$/pound	\$3.00
Cotton picker	\$/pound	\$0.56
stripper	\$/pound	\$0.51
Barley	\$/pound	\$0.30
Oats	\$/pound	\$0.40
Red Chile	\$/pound	\$18.00
Wire:	\$/lb.	\$0.38
Natural gas (service charge)	\$/MCF	\$3.28
	\$/month	\$10.00
Diesel fuel	\$/gallon	\$1.30
Gasoline	\$/gallon	\$1.35
Electricity	cents/KwHr	6.34
LP Gas	\$/gallon	\$1.21
Employee Liability Insurance	\$/1000 wages	20.00
Employee Benefits	percent/wages	18.00%
Labor Downtime	percent	25.00%
Financial Rates:		
Operating Capital Interest Rate	percent	8.00%
Land Interest Rate	percent	7.00%
Equipment Interest Rate	percent	8.00%
Real Interest Rate	percent	4.00%
Land Taxes	\$217.50 /acre (full value)	\$1.75
Personal Property Tax Rate - NR	\$/1,000 (Assessed Value)	\$24.18
- R		\$20.02
Supervision Factors		
Field Crop-Irrigation	\$/labor hour	\$1.00
Field Crop-Equipment & General	\$/labor hour	\$0.50
Vegetable Crop-Irrigation	\$/labor hour	\$2.90
Vegetable Crop-Equip. & General	\$/labor hour	\$1.00
Management Rate		
Field Crops	percent/GR	7.00%
Vegetable Crops	percent/TOE	10.00%

BUDGET AREA..... ARTESIA-LAKE ARTHUR AREA, 2003.
 FARM SIZE 500 ACRES
 IRRIGATION TYPE..... FLOOD
 NUMBER OF CROPS... 6

ACREAGE SUMMARY:	LAND USE (ACRES)	WATER USE	
		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 1a. Overhead cost information for the Artesia-Lake Arthur area, 2003.

ITEM			
Electricity (Domestic & Shop)		\$215.00 per month	\$2,160
Telephone		\$115.00 per month	\$1,380
Accounting & Legal			\$1,525
Misc. Supplies & Hand Tools			\$1,430
Pickup and Auto miles	20,000 @	\$0.365 per mile	\$7,300
Insurance			
- general liability (non-employee)			\$1,710
- fire/theft			\$1,525
Property Taxes			
- non-planted land			\$0
- other than land & machinery			\$6,010
Building repairs and maintenance			\$1,290
Dues, fees, publications			\$405
Farmstead Equipment			\$185
Total			\$24,920
Total Per Planted Acre			\$49.84

TABLE 2. Pumping costs and data for irrigation wells, Artesia-Lake Arthur area, 2003.

INPUT DATA		DEPTH CHARACTERISTICS:	
		STATIC.....	60
		DRAW DOV.....	20
		TOTAL HEAD.....	80
		CASING.....	250
GALLONS PER MINUTE (GPM)...	500		
WORK HORSEPOWER	10		
EFFICIENCY FACTOR:			
ELECTRICITY.....	0.470		
NATURAL GAS.....	0.120		
LP GAS.....	0.120		
DIESEL.....	0.160		
FUEL COST PER UNIT :			
ELECTRICITY.....	6.34	CENTS/K wHr	
NATURAL GAS.....	\$3.28	\$/MCF	
LP GAS.....	\$1.21	\$/GAL	
DIESEL.....	\$1.30	\$/GAL	
TOTAL FUEL COSTS:			
ELECTRIC WELL:			
COST PER HOUR.....		\$1.05	
COST PER ACRE INCH.....		\$0.95	
NATURAL GAS WELL:			
COST PER HOUR.....		\$0.80	
COST PER ACRE INCH.....		\$0.72	
LP GAS WELL:			
COST PER HOUR.....		\$2.85	
COST PER ACRE INCH.....		\$2.58	
DIESEL WELL:			
COST PER HOUR.....		\$1.50	
COST PER ACRE INCH.....		\$1.36	

TABLE 3. Equipment summary for a 500 acre flood-irrigated farm with above average management, Artesia-Lake Arthur area, 2003.

EQUIPMENT	ANNUAL HOURS OF USE	NUMBER	VARIABLE COSTS					FIXED COSTS		
			TOTAL VALUE	FUEL AND LUBRICANT	REPAIR	FUEL,LUBE PER HR	REPAIR PER HR	DEPRECIATION	TAXES	TOTAL PER HOUR
TRACTOR 40 HP	65	1	\$1,600	\$263	\$11	\$4.04	\$0.18	\$50	\$10	\$0.92
TRACTOR 65 HP	355	1	\$2,400	\$2,331	\$398	\$6.56	\$1.12	\$138	\$22	\$0.45
TRACTOR 70 HP	178	1	\$6,790	\$856	\$309	\$4.80	\$1.73	\$705	\$85	\$4.44
TRACTOR 96 HP	325	1	\$19,240	\$3,002	\$1,506	\$9.24	\$4.63	\$1,430	\$173	\$4.93
TRACTOR 145 HP	413	1	\$31,475	\$4,846	\$3,111	\$11.74	\$7.54	\$4,652	\$281	\$11.95
COTTON PICKER 4-ROW	70	1	\$62,940	\$553	\$3,418	\$7.86	\$48.62	\$9,350	\$754	\$143.72
COTTON STRIPPER MTD	42	1	\$2,520		\$136		\$3.22	\$767	\$46	\$19.28
SWATHER 16 FT	145	1	\$24,740	\$707	\$1,157	\$4.87	\$7.97	\$3,621	\$292	\$26.94
BALE WAGON S.P.	264	1	\$13,230	\$2,763	\$5,378	\$10.47	\$20.37	\$2,250	\$181	\$9.21
BALER PTO	330	2	\$8,200		\$617		\$1.87	\$1,100	\$89	\$3.60
PLANTER 4-ROW	53	1	\$3,400		\$352		\$6.66	\$680	\$27	\$13.40
CULTIVATOR 4-ROW	187	1	\$1,500		\$187		\$1.00	\$200	\$12	\$1.13
DISC 12 FT	133	1	\$2,250		\$168		\$1.26	\$300	\$18	\$2.39
DRILL 12 FT	30	1	\$2,200		\$93		\$3.12	\$440	\$18	\$15.46
PLANE 14 FT	36	1	\$2,750		\$24		\$0.66	\$367	\$22	\$10.79
FLOAT 14 FT	49	1	\$600		\$7		\$0.14	\$60	\$4	\$1.31
PLOW (MOLDBOARD) 4-16 IN	140	1	\$4,000		\$0		\$0.00	\$533	\$32	\$4.04
LISTER	37	1	\$1,600		\$40		\$1.09	\$213	\$13	\$6.19
SHREDDER 4-ROW	28	1	\$2,500		\$40		\$1.40	\$333	\$20	\$12.44
COTTON TRAILER	146	7	\$8,400		\$21		\$0.14	\$1,120	\$68	\$8.13
VEGETABLE TRAILER	36	1	\$1,200		\$11		\$0.31	\$160	\$10	\$4.71
TWIN RAKE 8 FT EACH	65	1	\$3,400		\$199		\$3.06	\$340	\$27	\$5.65
SLED	24	1	\$375		\$7		\$0.28	\$50	\$3	\$2.17
NATURAL GAS WELL	19,245	7	\$77,000	\$15,402	\$3,849	\$0.80	\$0.20	\$11,000	\$621	\$0.65
			\$284,310	\$30,722	\$21,037			\$39,859	\$2,828	

TABLE 4. Alfalfa establishment, flood-irrigated, budgeted per acre costs and returns for a 500 acre farm with above average management, Artesia-Lake Arthur area, 2003.
Planting dates: September 1 - September 30

ITEM	PRICE	QUANTITY	PURCHASED INPUTS					TOTAL		
<u>PURCHASED INPUTS</u>										
SEED	\$3.00	20 LBS						\$60.00		
HERBICIDE	\$32.40	1 ACRE						\$32.40		
PUMP WATER*		8 AC. IN.								
SUBTOTAL								\$92.40		
<u>PREHARVEST OPERATIONS</u>										
	POWER UNIT	ACCOMPLISHMENT RATE		PURCHASED INPUTS	LABOR	FUEL & LUBE	REPAIRS	FIXED COST	TOTAL	
PLOW	145 HP	0.48 HR			\$3.50	\$5.64	\$3.62	\$7.67	\$20.43	
DISC (2X)	145 HP	0.34 HR			\$2.48	\$3.99	\$2.99	\$4.88	\$14.34	
PLANE (3X)	145 HP	0.57 HR			\$4.16	\$6.69	\$4.67	\$12.96	\$28.49	
DISC	145 HP	0.17 HR			\$1.24	\$2.00	\$1.50	\$2.44	\$7.17	
FLOAT (2X)	70 HP	0.32 HR			\$2.34	\$1.54	\$0.60	\$1.84	\$6.31	
DRILL (2X)	65 HP	0.42 HR			\$3.07	\$2.76	\$1.78	\$6.68	\$14.29	
IRRIGATE (2X)		1.00 HR			\$6.70	\$5.80	\$1.45	\$4.69	\$18.63	
SUBTOTAL		3.30 HR			\$23.49	\$28.40	\$16.61	\$41.16	\$109.66	
<u>OVERHEAD EXPENSES</u>										
DOWNTIME		0.46 HR			\$3.32				\$3.32	
EMPLOYEE BENEFITS					\$4.23				\$4.23	
INSURANCE					\$0.47				\$0.47	
SUPERVISION AND MANAGEMENT					\$16.05				\$16.05	
SUBTOTAL		0.46 HR			\$0.47	\$23.60			\$24.07	
<u>TOTAL OPERATING EXPENSES</u>		3.76 HR			\$92.87	\$47.09	\$28.40	\$16.61	\$41.16	\$226.13

TABLE 5. Alfalfa hay, flood-irrigated, budgeted per acre costs and returns for a 500 acre farm with above average management, Artesia-Lake Arthur area, 2003.
Harvesting dates: May 5 - November 1

ITEM	PRICE	YIELD						TOTAL		
GROSS RETURNS										
ALFALFA HAY	\$140.00	6.50	TONS (STACKED)					\$910.00		
GRAZING	\$40.00							\$40.00		
TOTAL								\$950.00		
PURCHASED INPUTS										
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	\$0.38	56	LBS	\$21.17				\$21.17		
DRYING AGENT (AGRI-DRY)	\$8.26	1	/TON	\$53.66				\$53.66		
ESTABLISHMENT: Principal		5	YEARS				\$45.23	\$45.23		
: Interest							\$9.33	\$9.33		
PUMP WATER*		50	AC. IN.							
SUBTOTAL				\$208.49			\$54.56	\$263.05		
PREHARVEST OPERATIONS										
PREHARVEST OPERATIONS	POWER UNIT	ACCOMPLISHMENT RATE		PURCHASED INPUTS	LABOR	FUEL & LUBE	REPAIRS	FIXED COST	TOTAL	
IRRIGATE (7X)		3.50	HR		\$23.45	\$36.22	\$9.05	\$29.30	\$98.02	
SUBTOTAL		3.50	HR		23.45	36.22	9.05	29.30	98.02	
HARVEST OPERATIONS										
SWATHER (5X)	16 FT SP	0.55	HR		\$4.02	\$2.68	\$4.38	\$14.82	\$25.89	
RAKE (5X)	40 HP	0.25	HR		\$1.83	\$1.01	\$0.81	\$1.64	\$5.29	
BALER (5X)	96 HP	1.25	HR		\$9.13	\$11.55	\$8.13	\$10.67	\$39.47	
BALE WAGON (5X)	SP	1.00	HR		\$7.30	\$10.47	\$20.37	\$9.21	\$47.35	
SUBTOTAL		3.05	HR		\$22.27	\$25.70	\$33.69	\$36.34	\$118.00	
OVERHEAD EXPENSES										
DOWNTIME		0.70	HR		\$5.11				\$5.11	
EMPLOYEE BENEFITS					\$8.23				\$8.23	
INSURANCE				\$0.91					\$0.91	
LAND TAXES							\$1.75		\$1.75	
SUPERVISION AND MANAGEMENT					\$71.53				\$71.53	
OTHER EXPENSES				\$49.84					\$49.84	
SUBTOTAL		0.70	HR		\$50.75	\$84.86		\$1.75	\$137.37	
TOTAL OPERATING EXPENSES		7.25	HR		\$259.25	\$130.58	\$61.92	\$42.74	\$121.96	\$616.45
NET OPERATING PROFIT								\$333.55		
INTEREST ON OPERATING CAPITAL	(	120.51	@	8.00%				\$9.64	
INTEREST ON EQUIPMENT INVESTMENT								\$29.56		
RETURN TO LAND AND RISK								\$294.36		

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

BUDGET SUMMARY

GROSS RETURN		\$950.00	
VARIABLE OPERATING EXPENSES	\$363.91		
RETURN OVER VARIABLE EXPENSES		\$586.09	(GROSS MARGIN)
FIXED EXPENSES	\$121.96		
NET FARM INCOME		\$464.13	(RETURN TO CAPITAL, LABOR, LAND & RISK)
LABOR AND MANAGEMENT COST	\$130.58		
NET OPERATING PROFIT		\$333.55	(RETURN TO CAPITAL, LAND & RISK)
CAPITAL COSTS	\$39.20		
RETURN TO LAND AND RISK		\$294.36	

TABLE 6. Barley, flood-irrigated, budgeted per acre costs and returns for a 500 acre farm with above average management, Artesia-Lake Arthur, 2003.
 Planting dates: August 20 - September 30
 Harvesting dates: June 15 - July 1

ITEM	PRICE	YIELD							TOTAL
GROSS RETURNS									
BARLEY	\$3.30	35.00	CWT						\$115.50
DIRECT PAYMENT	\$0.240	35.00	CWT						\$8.40
COUNTER CYCLICAL PAYMENT	\$0.00								\$0.00
GRAZING	\$40.00								\$40.00
TOTAL									\$163.90
PURCHASED INPUTS									
PURCHASED INPUTS	PRICE	QUANTITY		PURCHASED INPUTS					TOTAL
SEED	\$0.30	110	LBS	\$33.00					\$33.00
NITROGEN (N)	\$0.36	150	LBS	\$54.00					\$54.00
INSECTICIDE (CUSTOM)	\$20.01	1	ACRE	\$20.01					\$20.01
PUMP WATER*		28	AC. IN.						
CROP INSURANCE	\$2.94			\$2.94					\$2.94
SUBTOTAL				\$109.95					\$109.95
PREHARVEST OPERATIONS									
PREHARVEST OPERATIONS	POWER UNIT	ACCOMPLISHMENT RATE		PURCHASED INPUTS	LABOR	FUEL & LUBE	REPAIRS	FIXED COST	TOTAL
PLOW	145 HP	0.48	HR		\$3.50	\$5.64	\$3.62	\$7.67	\$20.43
DISC	145 HP	0.17	HR		\$1.24	\$2.00	\$1.50	\$2.44	\$7.17
FLOAT	70 HP	0.16	HR		\$1.17	\$0.77	\$0.30	\$0.92	\$3.15
FERTILIZE	DEALER APPLIED								
DRILL	70 HP	0.21	HR		\$1.53	\$1.01	\$1.02	\$4.18	\$7.74
IRRIGATE (4X)		2.00	HR		\$13.40	\$20.28	\$5.07	\$16.41	\$55.16
SUBTOTAL		3.02	HR		\$20.85	\$29.69	\$11.50	\$31.62	\$93.66
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		\$1.57				\$1.57
EMPLOYEE BENEFITS					\$3.75				\$3.75
INSURANCE				\$0.42					\$0.42
LAND TAXES								\$1.75	\$1.75
SUPERVISION AND MANAGEMENT					\$13.90				\$13.90
OTHER EXPENSES				\$49.84					\$49.84
SUBTOTAL		0.22	HR	\$50.26	\$19.22			\$1.75	\$71.23
TOTAL OPERATING EXPENSES		3.24	HR	\$185.11	\$40.07	\$29.69	\$11.50	\$33.37	\$299.75
NET OPERATING PROFIT									(\$135.85)
INTEREST ON OPERATING CAPITAL	(	67.35	@	8.00%					\$5.39
INTEREST ON EQUIPMENT INVESTMENT								\$10.00	
RETURN TO LAND AND RISK									(\$151.24)

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

BUDGET SUMMARY

GROSS RETURN		\$163.90	
VARIABLE OPERATING EXPENSES	\$226.31		
RETURN OVER VARIABLE EXPENSES		(\$62.41)	(GROSS MARGIN)
FIXED EXPENSES	\$33.37		
NET FARM INCOME		(\$95.78)	(RETURN TO CAPITAL, LABOR, LAND & RISK)
LABOR AND MANAGEMENT COST	\$40.07		
NET OPERATING PROFIT		(\$135.85)	(RETURN TO CAPITAL, LAND & RISK)
CAPITAL COSTS	\$15.39		
RETURN TO LAND AND RISK		(\$151.24)	

TABLE 7. Oat hay, flood-irrigated, budgeted per acre costs and returns for a 500 acre farm with above average management, Artesia-Lake Arthur area, 2003.

Planting dates: February 1 - February 28

Harvesting dates: June 1 - June 30

ITEM	PRICE	YIELD		PURCHASED INPUTS					TOTAL
GROSS RETURNS									
OAT HAY	\$100.00	3.50	TONS (STACKED)						\$350.00
TOTAL									\$350.00
PURCHASED INPUTS	PRICE	QUANTITY		PURCHASED INPUTS					TOTAL
SEED	\$0.40	100	LBS	\$40.00					\$40.00
FERTILIZER (16-20-0)	\$0.170	150	LBS	\$25.50					\$25.50
PUMP WATER*		28	AC. IN.						
SUBTOTAL				\$65.50					\$65.50
PREHARVEST OPERATIONS	POWER UNIT	ACCOMPLISHMENT RATE		PURCHASED INPUTS	LABOR	FUEL & LUBE	REPAIRS	FIXED COST	TOTAL
PLOW	145 HP	0.48	HR		\$3.50	\$5.64	\$3.62	\$7.67	\$20.43
DISC	145 HP	0.34	HR		\$2.48	\$3.99	\$2.99	\$4.88	\$14.34
FLOAT	70 HP	0.16	HR		\$1.17	\$0.77	\$0.30	\$0.92	\$3.15
FERTILIZE (CUSTOM)				\$0.00					\$0.00
DRILL	70 HP	0.21	HR		\$1.53	\$1.01	\$1.02	\$4.18	\$7.74
IRRIGATE (4X)		2.00	HR		\$13.40	\$20.28	\$5.07	\$16.41	\$55.16
SUBTOTAL		3.19	HR		\$22.09	\$31.69	\$13.00	\$34.06	\$100.83
HARVEST OPERATIONS									
SWATHER	16 FT	0.11	HR		\$0.80	\$0.54	\$0.88	\$2.96	\$5.18
BALER	126 HP	0.25	HR		\$1.83	\$2.94	\$2.35	\$3.89	\$11.00
BALE WAGON	S. P.	0.20	HR		\$1.46	\$2.09	\$4.07	\$1.84	\$9.47
SUBTOTAL		0.56	HR		\$4.09	\$5.56	\$7.30	\$8.69	\$25.65
OVERHEAD EXPENSES									
DOWNTIME		0.40	HR		\$2.90				\$2.90
EMPLOYEE BENEFITS					\$4.71				\$4.71
INSURANCE				\$0.52					\$0.52
LAND TAXES								\$1.75	\$1.75
SUPERVISION AND MANAGEMENT					\$27.38				\$27.38
OTHER EXPENSES				\$49.84					\$49.84
SUBTOTAL		0.40	HR	\$50.36	\$34.99			\$1.75	\$87.10
TOTAL OPERATING EXPENSES		4.15	HR	\$115.86	\$61.16	\$37.25	\$20.30	\$44.51	\$279.08
NET OPERATING PROFIT									\$70.92
INTEREST ON OPERATING CAPITAL	(	44.99	@	8.00%					\$3.60
INTEREST ON EQUIPMENT INVESTMENT									\$16.97
RETURN TO LAND AND RISK									\$50.35

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

BUDGET SUMMARY

GROSS RETURN		\$350.00	
VARIABLE OPERATING EXPENSES	\$173.41		
RETURN OVER VARIABLE EXPENSES		\$176.59	(GROSS MARGIN)
FIXED EXPENSES	\$44.51		
NET FARM INCOME		\$132.08	(RETURN TO CAPITAL, LABOR, LAND & RISK)
LABOR AND MANAGEMENT COST	\$61.16		
NET OPERATING PROFIT		\$70.92	(RETURN TO CAPITAL, LAND & RISK)
CAPITAL COSTS	\$20.57		
RETURN TO LAND AND RISK		\$50.35	

TABLE 8. Upland cotton (picker), flood-irrigated, budgeted per acre costs and returns for a 500 acre farm with above average management, Artesia-Lake Arthur area, 2003.

Planting dates: April 15 - May 15

Harvesting dates: October 15 - January 15

ITEM	PRICE	YIELD							TOTAL
GROSS RETURNS									
COTTON LINT	\$0.570	700	LBS						\$399.00
COTTON SEED	\$0.08	1,120	LBS						\$84.00
DIRECT PAYMENT	\$0.0667	700	LBS						\$46.69
COUNTER CYCLICAL PAYMENT	\$0.0873	700	LBS						\$61.11
TOTAL								\$590.80	
PURCHASED INPUTS									
PURCHASED INPUTS	PRICE	QUANTITY		PURCHASED INPUTS					TOTAL
SEED	\$0.56	15	LBS	\$8.40					\$8.40
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				\$131.45					\$131.45
PREHARVEST OPERATIONS									
	POWER UNIT	ACCOMPLISHMENT RATE		PURCHASED INPUTS	LABOR	FUEL & LUBE	REPAIRS	FIXED COST	TOTAL
DISC	145 HP	0.17	HR		\$1.24	\$2.00	\$1.50	\$2.44	\$7.17
PLOW	145 HP	0.48	HR		\$3.50	\$5.64	\$3.62	\$7.67	\$20.43
DISC (2X)	145 HP	0.34	HR		\$2.48	\$3.99	\$2.99	\$4.88	\$14.34
FLOAT	145 HP	0.16	HR		\$1.17	\$1.88	\$1.23	\$2.12	\$6.40
LISTER	145 HP	0.18	HR		\$1.31	\$2.11	\$1.55	\$3.27	\$8.25
PRE-IRRIGATE		0.75	HR		\$5.03	\$5.43	\$1.36	\$4.40	\$16.21
CULTIVATOR	65 HP	0.21	HR		\$1.53	\$1.38	\$0.45	\$0.33	\$3.69
PLANTER	70 HP	0.26	HR		\$1.90	\$1.25	\$2.18	\$4.64	\$9.97
SLED	70 HP	0.15	HR		\$1.10	\$0.72	\$0.30	\$0.99	\$3.11
CULTIVATOR (3X)	65 HP	0.63	HR		\$4.60	\$4.14	\$1.34	\$1.00	\$11.07
HAND HOE (CUSTOM)				\$20.00					\$20.00
IRRIGATE (3X)		1.50	HR		\$10.05	\$16.30	\$4.07	\$13.19	\$43.61
SUBTOTAL		4.83 HR		\$20.00	\$33.91	\$44.83	\$20.58	\$44.92	\$164.24
HARVEST OPERATIONS									
COTTON PICKER (2X)	2-ROW	0.74	HR		\$5.40	\$5.82	\$35.98	\$106.35	\$153.55
HAUL (2X)	65 HP	1.00	HR		\$7.30	\$6.56	\$1.27	\$8.58	\$23.71
GIN COTTON (CUSTOM)				\$104.30					\$104.30
SUBTOTAL		1.74 HR		\$104.30	\$12.70	\$12.38	\$37.24	\$114.94	\$281.57
POSTHARVEST OPERATIONS									
SHREDDER	70 HP	0.14	HR		\$1.02	\$0.67	\$0.44	\$2.36	\$4.50
SUBTOTAL		0.14 HR			\$1.02	\$0.67	\$0.44	\$2.36	\$4.50
OVERHEAD EXPENSES									
DOWNTIME		0.95	HR		\$6.92				\$6.92
EMPLOYEE BENEFITS					\$8.57				\$8.57
INSURANCE				\$0.95					\$0.95
LAND TAXES							\$1.75		\$1.75
SUPERVISION AND MANAGEMENT					\$45.50				\$45.50
OTHER EXPENSES				\$49.84					\$49.84
SUBTOTAL		0.95 HR		\$50.79	\$60.99			\$1.75	\$113.54
TOTAL OPERATING EXPENSES		7.66 HR		\$306.54	\$108.62	\$57.88	\$58.26	\$163.97	\$695.28
NET OPERATING PROFIT								(\$104.48)	
INTEREST ON OPERATING CAPITAL	(	86.49	@	8.00%	)				\$6.92
INTEREST ON EQUIPMENT INVESTMENT									\$98.96
RETURN TO LAND AND RISK								(\$210.37)	

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

BUDGET SUMMARY

GROSS RETURN		\$590.80	
VARIABLE OPERATING EXPENSES	\$422.69		
RETURN OVER VARIABLE EXPENSES		\$168.11	(GROSS MARGIN)
FIXED EXPENSES	\$163.97		
NET FARM INCOME		\$4.14	(RETURN TO CAPITAL, LABOR, LAND & RISK)
LABOR AND MANAGEMENT COST	\$108.62		
NET OPERATING PROFIT		(\$104.48)	(RETURN TO CAPITAL, LAND & RISK)
CAPITAL COSTS	\$105.88		
RETURN TO LAND AND RISK		(\$210.37)	

TABLE 9. Upland cotton (stripper), flood-irrigated, budgeted per acre costs and returns for a 500 acre farm with above average management, Artesia-Lake Arthur area, 2003.

Planting dates: April 15 - May 15

Harvesting dates: October 15 - January 15

ITEM	PRICE	YIELD							TOTAL
GROSS RETURNS									
COTTON LINT	\$0.520	700	LBS						\$364.00
COTTON SEED	\$0.08	1,120	LBS						\$84.00
DIRECT PAYMENT	\$0.0667	700	LBS						\$46.69
COUNTER CYCLICAL PAYMENT	\$0.1373	700	LBS						\$96.11
TOTAL									\$590.80
PURCHASED INPUTS									
PURCHASED INPUTS	PRICE	QUANTITY		PURCHASED INPUTS					TOTAL
SEED	\$0.51	20	LBS	\$10.20					\$10.20
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									\$99.50
PREHARVEST OPERATIONS									
	POWER UNIT	ACCOMPLISHMENT RATE		PURCHASED INPUTS	LABOR	FUEL & LUBE	REPAIRS	FIXED COST	TOTAL
DISC	145 HP	0.17	HR		\$1.24	\$2.00	\$1.50	\$2.44	\$7.17
PLOW	145 HP	0.48	HR		\$3.50	\$5.64	\$3.62	\$7.67	\$20.43
DISC (2X)	145 HP	0.34	HR		\$2.48	\$3.99	\$2.99	\$4.88	\$14.34
FLOAT	145 HP	0.16	HR		\$1.17	\$1.88	\$1.23	\$2.12	\$6.40
LIST	145 HP	0.18	HR		\$1.31	\$2.11	\$1.55	\$3.27	\$8.25
PRE-IRRIGATE		0.75	HR		\$5.03	\$5.43	\$1.36	\$4.40	\$16.21
CULTIVATOR	65 HP	0.21	HR		\$1.53	\$1.38	\$0.45	\$0.33	\$3.69
PLANTER	70 HP	0.26	HR		\$1.90	\$1.25	\$2.18	\$4.64	\$9.97
SLED	70 HP	0.15	HR		\$1.10	\$0.72	\$0.30	\$0.99	\$3.11
CULTIVATOR (3X)	65 HP	0.63	HR		\$4.60	\$4.14	\$1.34	\$1.00	\$11.07
HAND HOE (CUSTOM)				\$20.00					\$20.00
IRRIGATE (3X)		1.50	HR		\$10.05	\$16.30	\$4.07	\$13.19	\$43.61
SUBTOTAL		4.83	HR	\$20.00	\$33.91	\$44.83	\$20.58	\$44.92	\$164.24
HARVEST OPERATIONS									
COTTON STRIPPER	70 HP	0.62	HR		\$4.53	\$2.98	\$3.07	\$14.71	\$25.28
HAUL	65 HP	0.75	HR		\$5.48	\$4.92	\$0.95	\$6.44	\$17.79
GIN COTTON (CUSTOM)				\$134.89					\$134.89
SUBTOTAL		1.37	HR	\$134.89	\$10.00	\$7.90	\$4.02	\$21.14	\$177.96
POSTHARVEST OPERATIONS									
SHREDDER	70 HP	0.14	HR		\$0.56	\$0.67	\$0.44	\$2.36	\$4.03
SUBTOTAL		0.14	HR		\$0.56	\$0.67	\$0.44	\$2.36	\$4.03
OVERHEAD EXPENSES									
DOWNTIME		0.89	HR		\$6.52				\$6.52
EMPLOYEE BENEFITS					\$8.00				\$8.00
INSURANCE				\$0.89					\$0.89
LAND TAXES							\$1.75		\$1.75
SUPERVISION AND MANAGEMENT					\$44.57				\$44.57
OTHER EXPENSES				\$49.84					\$49.84
SUBTOTAL		0.89	HR	\$50.73	\$59.09				\$111.57
TOTAL OPERATING EXPENSES		7.23	HR	\$305.12	\$103.56	\$53.40	\$25.04	\$70.18	\$557.30
NET OPERATING PROFIT									\$33.50
INTEREST ON OPERATING CAPITAL	(	67.37	@	8.00%					\$5.39
INTEREST ON EQUIPMENT INVESTMENT									\$29.62
RETURN TO LAND AND RISK									(\$1.50)

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

BUDGET SUMMARY

GROSS RETURN		\$590.80	
VARIABLE OPERATING EXPENSES	\$383.56		
RETURN OVER VARIABLE EXPENSES		\$207.24	(GROSS MARGIN)
FIXED EXPENSES	\$70.18		
NET FARM INCOME		\$137.06	(RETURN TO CAPITAL, LABOR, LAND & RISK)
LABOR AND MANAGEMENT COST	\$103.56		
NET OPERATING PROFIT		\$33.50	(RETURN TO CAPITAL, LAND & RISK)
CAPITAL COSTS	\$35.01		
RETURN TO LAND AND RISK		(\$1.50)	

TABLE 10. Red chile, flood-irrigated, budgeted per acre costs and returns for a 500 acre farm with above average management, Artesia-Lake Arthur area, 2003.
 Planting dates: April 1 - April 15
 Harvesting dates: September 1 - October 30

ITEM	PRICE	YIELD							TOTAL
GROSS RETURNS									
RED CHILE	\$0.68	3200	LBS						\$2,176.00
TOTAL									\$2,176.00
PURCHASED INPUTS	PRICE	QUANTITY		PURCHASED INPUTS					TOTAL
SEED	\$18.00	8	LBS	\$144.00					\$144.00
NITROGEN (N)	\$0.36	120	LBS	\$43.20					\$43.20
PHOSPHATE (P205)	\$0.33	70	LBS	\$23.31					\$23.31
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
PUMP WATER*		48	AC. IN.						
SUBTOTAL				\$305.98					\$305.98
PREHARVEST OPERATIONS	POWER UNIT	ACCOMPLISHMENT RATE		PURCHASED INPUTS	LABOR	FUEL & LUBE	REPAIRS	FIXED COST	TOTAL
PLOW	145 HP	0.48	HR		\$3.50	\$5.64	\$3.62	\$7.67	\$20.43
DISC (2X)	145 HP	0.34	HR		\$2.48	\$3.99	\$2.99	\$4.88	\$14.34
PLANE	145 HP	0.16	HR		\$1.17	\$1.88	\$1.31	\$3.64	\$8.00
FERTILIZE	DEALER APPLIED								
LIST	145 HP	0.18	HR		\$1.31	\$2.11	\$1.55	\$3.27	\$8.25
PRE-IRRIGATE		0.75	HR		\$5.03	\$4.35	\$1.09	\$3.52	\$13.97
CULTIVATOR	65 HP	0.21	HR		\$1.53	\$1.38	\$0.45	\$0.33	\$3.69
PLANTER	70 HP	0.26	HR		\$1.90	\$1.25	\$2.18	\$4.64	\$9.97
CULTIVATOR (5X)	65 HP	1.05	HR		\$7.67	\$6.89	\$2.23	\$1.66	\$18.44
THIN (CUSTOM)				\$45.00					\$45.00
IRRIGATE (7X)		3.50	HR		\$23.45	\$30.42	\$7.60	\$24.61	\$86.09
HAND HOE (CUSTOM)				\$20.00					\$20.00
SUBTOTAL		6.93	HR	65.00	\$48.04	\$57.91	\$23.02	\$54.22	\$248.18
HARVEST OPERATIONS									
HAND PICK (CUSTOM)				\$640.00					\$640.00
FIELD HAUL	145 HP	0.90	HR		\$6.57	\$10.57	\$7.06	\$15.00	\$39.20
HAUL (CUSTOM)				\$96.00					\$96.00
SUBTOTAL		0.90	HR	736.00	\$6.57	\$10.57	\$7.06	\$15.00	\$775.20
POSTHARVEST OPERATIONS									
SHREDDER	70 HP	0.14	HR		\$1.02	\$0.67	\$0.44	\$2.36	\$4.50
SUBTOTAL		0.14	HR		\$1.02	\$0.67	\$0.44	\$2.36	\$4.50
OVERHEAD EXPENSES									
DOWNTIME		0.93	HR		\$6.79				\$6.79
EMPLOYEE BENEFITS					\$10.01				\$10.01
INSURANCE				\$1.11					\$1.11
LAND TAXES								\$1.75	\$1.75
SUPERVISION AND MANAGEMENT					\$158.43				\$158.43
OTHER EXPENSES				\$49.84					\$49.84
SUBTOTAL		0.93	HR	\$50.95	\$175.23			\$1.75	\$227.94
TOTAL OPERATING EXPENSES		8.90	HR	\$1,157.93	\$230.86	\$69.15	\$30.52	\$73.33	\$1,561.79
NET OPERATING PROFIT									\$614.21
INTEREST ON OPERATING CAPITAL	(	174.97	@	8.00%	)				\$14.00
INTEREST ON EQUIPMENT INVESTMENT									\$24.89
RETURN TO LAND AND RISK									\$575.31

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

BUDGET SUMMARY

GROSS RETURN		\$2,176.00	
VARIABLE OPERATING EXPENSES	\$1,257.60		
RETURN OVER VARIABLE EXPENSES		\$918.40	(GROSS MARGIN)
FIXED EXPENSES	\$73.33		
NET FARM INCOME		\$845.07	(RETURN TO CAPITAL, LABOR, LAND & RISK)
LABOR AND MANAGEMENT COST	\$230.86		
NET OPERATING PROFIT		\$614.21	(RETURN TO CAPITAL, LAND & RISK)
CAPITAL COSTS	\$38.89		
RETURN TO LAND AND RISK		\$575.31	

TABLE 11. Summary of per acre costs and returns for a 500 acre farm with above average management, Artesia-Lake Arthur area, 2003.

	ALFALFA ESTABLISHMENT	ALFALFA HAY	BARLEY	OAT HAY	PICKER COTTON	STRIPPER COTTON	RED CHILE
		-----FLOOD-----					
		TONS	CWT	TONS	LBS	LBS	LBS
PRIMARY YIELD		6.50	35.00	3.50	700.00	700.00	3200.00
PRIMARY PRICE		140.00	3.30	100.00	0.57	0.52	0.68
GOVERNMENT PAYMENTS		0.00	8.40	0.00	107.80	142.80	0.00
SECOND INCOME		40.00	40.00	0.00	84.00	84.00	0.00
GROSS RETURN		\$950.00	\$163.90	\$350.00	\$590.80	\$590.80	\$2,176.00
CASH OPERATING EXPENSES							
SEED	\$60.00		\$33.00	\$40.00	\$8.40	\$10.20	\$144.00
FERTILIZER		\$42.00	\$54.00	\$25.50	\$4.80	\$4.80	\$66.51
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		\$80.08					
CANAL WATER							
FUEL, OIL & LUBRICANTS-EQUIPMENT	\$22.61	\$25.70	\$9.41	\$16.97	\$36.15	\$31.67	\$34.38
FUEL-IRRIGATION	\$5.80	\$36.22	\$20.28	\$20.28	\$21.73	\$21.73	\$34.77
REPAIRS	\$16.61	\$42.74	\$11.50	\$20.30	\$58.26	\$25.04	\$30.52
CUSTOM CHARGES			\$24.91		\$124.30	\$154.89	\$801.00
LAND TAXES		\$1.75	\$1.75	\$1.75	\$1.75	\$1.75	\$1.75
OTHER EXPENSES	\$0.47	\$50.75	\$50.26	\$50.36	\$50.79	\$50.73	\$50.95
TOTAL CASH EXPENSES	\$137.88	\$365.66	\$228.06	\$175.17	\$424.44	\$385.32	\$1,259.35
RETURN OVER CASH EXPENSES	(\$137.88)	\$584.34	(\$64.16)	\$174.83	\$166.36	\$205.48	\$916.65
FIXED EXPENSES	\$41.16	\$120.20	\$31.62	\$42.75	\$162.22	\$68.42	\$71.58
TOTAL EXPENSES	\$179.04	\$485.87	\$259.68	\$217.92	\$586.66	\$453.74	\$1,331
NET FARM INCOME	(\$179.04)	\$464.13	(\$95.78)	\$132.08	\$4.14	\$137.06	\$845.07
LABOR AND MANAGEMENT COSTS	\$47.09	\$130.58	\$40.07	\$61.16	\$108.62	\$103.56	\$230.86
NET OPERATING PROFIT	(\$226.13)	\$333.55	(\$135.85)	\$70.92	(\$104.48)	\$33.50	\$614.21
CAPITAL COSTS							
INTEREST ON OPERATING CAPITAL		\$9.64	\$5.39	\$3.60	\$6.92	\$5.39	\$14.00
INTEREST ON EQUIPMENT INVESTMENT		\$29.56	\$10.00	\$16.97	\$98.96	\$29.62	\$24.89
TOTAL CAPITAL COSTS	\$0.00	\$39.20	\$15.39	\$20.57	\$105.88	\$35.01	\$38.89
RETURN TO LAND AND RISK	(\$226.13)	\$294.36	(\$151.24)	\$50.35	(\$210.37)	(\$1.50)	\$575.31

TABLE 12. Whole farm summary, Artesia-Lake Arthur area, 2003.

GROSS RETURNS		
ALFALFA HAY	260 ACRES	
CROP		\$247,000
BARLEY	17 ACRES	
CROP		\$2,644
DIRECT PAYMENT		\$143
COUNTER CYCLICAL PAYMENT		\$0
OAT HAY	20 ACRES	
CROP		\$7,000
PICKER COTTON	95 ACRES	
COTTON LINT		\$37,905
COTTON SEED		\$7,980
DIRECT PAYMENT		\$3,175
COUNTER CYCLICAL PAYMENT		\$5,805
STRIPPER COTTON	68 ACRES	
COTTON LINT		\$24,752
COTTON SEED		\$5,712
DIRECT PAYMENT		\$3,175
COUNTER CYCLICAL PAYMENT		\$6,535
RED CHILE	40 ACRES	
CROP		\$87,040
GROSS RETURN		<u>\$438,866</u>
CASH OPERATING EXPENSES		
SEED		\$11,733
FERTILIZER		\$15,791
CHEMICALS		\$44,390
CROP INSURANCE		\$950
OTHER PURCHASED INPUTS		\$20,821
CANAL WATER		\$0
FUEL, OIL & LUBRICANTS-EQUIPMENT		\$15,320
FUEL-IRRIGATION		\$15,402
REPAIRS		\$21,037
CUSTOM CHARGES		\$54,804
LAND TAXES		\$877
OTHER EXPENSES		\$25,395
TOTAL CASH EXPENSES		<u>\$226,520</u>
RETURN OVER CASH EXPENSES		\$212,346
FIXED EXPENSES		\$45,954
TOTAL EXPENSES		<u>\$272,474</u>
NET FARM INCOME		\$166,392
LABOR AND MANAGEMENT COSTS		\$64,899
NET OPERATING PROFIT		\$101,493
CAPITAL COSTS		
INTEREST ON OPERATING CAPITAL		\$4,254
INTEREST ON EQUIPMENT INVESTMENT		\$20,606
TOTAL CAPITAL COSTS		<u>\$24,860</u>
RETURN TO LAND AND RISK		<u>\$76,633</u>
LAND VALUE	RETURN TO RISK*	RETURN ON INVESTMENT**
\$1,000 /ACRE	\$56,633	12.94%
\$2,500 /ACRE	\$26,633	6.61%
\$4,000 /ACRE	(\$3,367)	4.44%
\$5,500 /ACRE	(\$33,367)	3.34%

* 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)