

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, Actual 2018
Planting dates: September 1 - September 30

ITEM	PRICE	QUANTITY	PURCHASED INPUTS					TOTAL
PURCHASED INPUTS								
SEED	\$2.95	20 LBS		\$59.00				\$59.00
HERBICIDE	\$32.40	1 ACRE		\$32.40				\$32.40
PUMP WATER		8 AC. IN.						
SUBTOTAL				\$91.40				\$91.40
PREHARVEST OPERATIONS								
	POWER UNIT	ACCOMPLISHMENT RATE	PURCHASED INPUTS	LABOR	FUEL & LUBE	REPAIRS	FIXED COST	TOTAL
PLOW	145 HP	0.48 HR		\$3.46	\$12.08	\$3.89	\$4.95	\$24.38
DISC (2X)	145 HP	0.34 HR		\$2.45	\$8.55	\$2.29	\$3.18	\$16.47
PLANE (3X)	145 HP	0.57 HR		\$4.10	\$14.34	\$2.32	\$10.08	\$30.84
DISC	145 HP	0.17 HR		\$1.22	\$4.28	\$1.15	\$1.59	\$8.24
FLOAT (2X)	70 HP	0.32 HR		\$2.30	\$5.94	\$0.29	\$1.41	\$9.95
DRILL (2X)	65 HP	0.42 HR		\$3.02	\$5.76	\$0.97	\$7.17	\$16.92
IRRIGATE (2X)		1.00 HR		\$7.50	\$7.02	\$1.45	\$2.32	\$18.29
SUBTOTAL		3.30 HR		\$24.06	\$57.97	\$12.37	\$30.70	\$125.10
OVERHEAD EXPENSES								
DOWNTIME		0.46 HR		\$3.28				\$3.28
EMPLOYEE BENEFITS				\$4.33				\$4.33
INSURANCE			\$0.02					\$0.02
SUPERVISION AND MANAGEMENT				\$15.27				\$15.27
SUBTOTAL		0.46 HR	\$0.02	\$22.87				\$22.89
TOTAL OPERATING EXPENSES		3.76 HR	\$91.41	\$46.93	\$57.97	\$12.37	\$30.70	\$239.39

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, Actual 2018
Harvesting dates: May 5 - November 1

ITEM	PRICE	YIELD						TOTAL
GROSS RETURNS								
ALFALFA HAY	\$230.00	6.10 TONS (STACKED)						\$1,403.00
GRAZING	\$40.00							\$40.00
TOTAL							\$1,443.00	
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	\$0.03	52 LBS	\$1.36					\$1.36
DRYING AGENT (AGRI-DRY)	\$8.26	1 /TON	\$50.36					\$50.36
ESTABLISHMENT: Principal		5 YEARS					\$47.88	\$47.88
Interest							\$9.84	\$9.84
PUMP WATER*		50 AC. IN.						
SUBTOTAL			\$185.38				\$57.72	\$243.10
PREHARVEST OPERATIONS								
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	\$14.53	\$93.70
SUBTOTAL		3.50 HR		\$26.25	\$43.87	\$9.05	\$14.53	\$93.70
HARVEST OPERATIONS								
SWATHER (5X)	16 FT SP	0.55 HR		\$3.96	\$6.28	\$0.76	\$11.45	\$22.45
RAKE (5X)	40 HP	0.25 HR		\$1.80	\$2.64	\$0.49	\$2.76	\$7.69
BALER (5X)	96 HP	1.25 HR		\$9.00	\$23.22	\$1.32	\$3.41	\$36.94
BALE WAGON (5X)	SP	1.00 HR		\$7.20	\$21.86	\$16.75	\$7.09	\$52.91
SUBTOTAL		3.05 HR		\$21.96	\$53.99	\$19.32	\$24.72	\$119.99
OVERHEAD EXPENSES								
DOWNTIME		0.70 HR		\$5.04				\$5.04
EMPLOYEE BENEFITS				\$8.68				\$8.68
INSURANCE			\$0.03					\$0.03
LAND TAXES							\$1.79	\$1.79
SUPERVISION AND MANAGEMENT				\$101.30				\$101.30
OTHER EXPENSES			\$67.10					\$67.10
SUBTOTAL		0.70 HR	\$67.13	\$115.02			\$1.79	\$183.94
TOTAL OPERATING EXPENSES		7.25 HR	\$252.52	\$163.23	\$97.87	\$28.37	\$98.75	\$640.73
NET OPERATING PROFIT								
							\$802.27	
INTEREST ON OPERATING CAPITAL		(\$112.03	@	7.50%)	\$8.40	
INTEREST ON EQUIPMENT INVESTMENT							\$20.88	
RETURN TO LAND AND RISK							\$772.99	

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

BUDGET SUMMARY

GROSS RETURN		\$1,443.00	
VARIABLE OPERATING EXPENSES	\$378.75		
RETURN OVER VARIABLE EXPENSES		\$1,064.25	(GROSS MARGIN)
FIXED EXPENSES	\$98.75		
NET FARM INCOME		\$965.50	(RETURN TO CAPITAL, LABOR, LAND & RISK)
LABOR AND MANAGEMENT COST	\$163.23		
NET OPERATING PROFIT		\$802.27	(RETURN TO CAPITAL, LAND & RISK)
CAPITAL COSTS	\$29.28		
RETURN TO LAND AND RISK		\$772.99	

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

ITEM	PRICE	YIELD						TOTAL
GROSS RETURNS								
BARLEY	\$6.22	35.00 CWT						\$217.70
DIRECT PAYMENT	\$0.00	35.00 CWT						\$0.00
COUNTER CYCLICAL PAYMENT	\$0.00							\$0.00
GRAZING	\$40.00							\$40.00
TOTAL								\$257.70
PURCHASED INPUTS								
PURCHASED INPUTS	PRICE	QUANTITY	PURCHASED INPUTS					TOTAL
SEED	\$0.45	110 LBS	\$49.50				\$49.50	
NITROGEN (N)	\$0.42	150 LBS	\$63.00				\$63.00	
INSECTICIDE (CUSTOM)	\$20.01	1 ACRE	\$20.01				\$20.01	
PUMP WATER*		28 AC. IN.						
CROP INSURANCE	\$2.94		\$2.94				\$2.94	
SUBTOTAL			\$135.45				\$135.45	
PREHARVEST OPERATIONS								
PREHARVEST OPERATIONS	POWER UNIT	ACCOMPLISHMENT RATE	PURCHASED INPUTS	LABOR	FUEL & LUBE	REPAIRS	FIXED COST	TOTAL
PLOW	145 HP	0.48 HR		\$3.46	\$12.08	\$3.89	\$4.95	\$24.38
DISC	145 HP	0.17 HR		\$1.22	\$4.28	\$1.15	\$1.59	\$8.24
FLOAT	70 HP	0.16 HR		\$1.15	\$2.97	\$0.15	\$0.70	\$4.97
FERTILIZE	DEALER APPLIED							
DRILL	70 HP	0.21 HR		\$1.51	\$3.90	\$0.41	\$3.88	\$9.71
IRRIGATE (4X)		2.00 HR		\$15.00	\$24.57	\$5.07	\$8.13	\$52.77
SUBTOTAL		3.02 HR		\$22.34	\$47.79	\$10.67	\$19.27	\$100.07
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						\$1.79		\$1.79
SUPERVISION AND MANAGEMENT				\$18.18				\$18.18
OTHER EXPENSES			\$67.10					\$67.10
SUBTOTAL		0.22 HR	\$67.11	\$23.75			\$1.79	\$92.65
TOTAL OPERATING EXPENSES		3.24 HR	\$227.47	\$46.09	\$47.79	\$10.67	\$21.05	\$353.08
NET OPERATING PROFIT								(\$95.38)
INTEREST ON OPERATING CAPITAL		(\$84.42 @ 7.50%)						\$6.33
INTEREST ON EQUIPMENT INVESTMENT								\$8.29
RETURN TO LAND AND RISK								(\$109.99)

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

BUDGET SUMMARY

GROSS RETURN		\$257.70	
VARIABLE OPERATING EXPENSES	\$285.93		
RETURN OVER VARIABLE EXPENSES		(\$28.23)	(GROSS MARGIN)
FIXED EXPENSES	\$21.05		
NET FARM INCOME		(\$49.28)	(RETURN TO CAPITAL, LABOR, LAND & RISK)
LABOR AND MANAGEMENT COST	\$46.09		
NET OPERATING PROFIT		(\$95.38)	(RETURN TO CAPITAL, LAND & RISK)
CAPITAL COSTS	\$14.62		
RETURN TO LAND AND RISK		(\$109.99)	

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, Actual 2018
 Planting dates: February 1 - February 28
 Harvesting dates: June 1 - June 30

ITEM	PRICE	YIELD						TOTAL
GROSS RETURNS								
OAT HAY	\$160.00	3.50 TONS (STACKED)						\$560.00
TOTAL							\$560.00	
PURCHASED INPUTS								
PURCHASED INPUTS	PRICE	QUANTITY	PURCHASED INPUTS					TOTAL
SEED	\$0.37	100 LBS	\$37.00					\$37.00
FERTILIZER (16-20-0)	\$0.17	150 LBS	\$25.50					\$25.50
PUMP WATER*		28 AC. IN.						
SUBTOTAL			\$62.50					\$62.50
PREHARVEST OPERATIONS								
	POWER UNIT	ACCOMPLISHMENT RATE	PURCHASED INPUTS	LABOR	FUEL & LUBE	REPAIRS	FIXED COST	TOTAL
PLOW	145 HP	0.48 HR		\$3.46	\$12.08	\$3.89	\$4.95	\$24.38
DISC	145 HP	0.34 HR		\$2.45	\$8.55	\$2.29	\$3.18	\$16.47
FLOAT	70 HP	0.16 HR		\$1.15	\$2.97	\$0.15	\$0.70	\$4.97
FERTILIZE (CUSTOM)			\$0.00					\$0.00
DRILL	70 HP	0.21 HR		\$1.51	\$3.90	\$0.41	\$3.88	\$9.71
IRRIGATE (4X)		2.00 HR		\$15.00	\$24.57	\$5.07	\$8.13	\$52.77
SUBTOTAL	3.19 HR			\$23.57	\$52.07	\$11.81	\$20.85	\$108.31
HARVEST OPERATIONS								
SWATHER	16 FT	0.11 HR		\$0.79	\$1.26	\$0.15	\$2.29	\$4.49
BALER	126 HP	0.25 HR		\$1.80	\$6.29	\$1.03	\$2.00	\$11.12
BALE WAGON	S. P.	0.20 HR		\$1.44	\$4.37	\$3.35	\$1.42	\$10.58
SUBTOTAL	0.56 HR			\$4.03	\$11.92	\$4.53	\$5.71	\$26.19
OVERHEAD EXPENSES								
DOWNTIME		0.40 HR		\$2.86				\$2.86
EMPLOYEE BENEFITS				\$4.97				\$4.97
INSURANCE			\$0.02					\$0.02
LAND TAXES							\$1.79	\$1.79
SUPERVISION AND MANAGEMENT				\$39.37				\$39.37
OTHER EXPENSES			\$67.10					\$67.10
SUBTOTAL	0.40 HR		\$67.12	\$47.20			\$1.79	\$116.10
TOTAL OPERATING EXPENSES	4.15 HR		\$129.62	\$74.80	\$63.99	\$16.35	\$28.35	\$313.10
NET OPERATING PROFIT							\$246.90	
INTEREST ON OPERATING CAPITAL		(\$48.59 @ 7.50%)					\$3.64	
INTEREST ON EQUIPMENT INVESTMENT							\$13.79	
RETURN TO LAND AND RISK							\$229.46	

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

BUDGET SUMMARY

GROSS RETURN		\$560.00	
VARIABLE OPERATING EXPENSES	\$209.95		
RETURN OVER VARIABLE EXPENSES	\$350.05		(GROSS MARGIN)
FIXED EXPENSES	\$28.35		
NET FARM INCOME	\$321.70		(RETURN TO CAPITAL, LABOR, LAND & RISK)
LABOR AND MANAGEMENT COST	\$74.80		
NET OPERATING PROFIT	\$246.90		(RETURN TO CAPITAL, LAND & RISK)
CAPITAL COSTS	\$17.44		
RETURN TO LAND AND RISK	\$229.46		

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	\$0.717	1,328 LBS							\$952.18
COTTON SEED	\$0.075	2,125 LBS							\$159.36
DIRECT PAYMENT	\$0.000	1,328 LBS							\$0.00
COUNTER CYCLICAL PAYMENT	\$0.087	1,328 LBS							\$115.93
TOTAL									\$1,227.47
PURCHASED INPUTS									
PURCHASED INPUTS	PRICE	QUANTITY	PURCHASED INPUTS						TOTAL
SEED	\$8.45	15 LBS	\$126.75						\$126.75
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			\$249.80						\$249.80
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	\$4.28	\$1.15	\$1.59	\$8.24	
PLOW	145 HP	0.48 HR		\$3.46	\$12.08	\$3.89	\$4.95	\$24.38	
DISC (2X)	145 HP	0.34 HR		\$2.45	\$8.55	\$2.29	\$3.18	\$16.47	
FLOAT	145 HP	0.16 HR		\$1.15	\$4.03	\$0.64	\$1.32	\$7.14	
LISTER	145 HP	0.18 HR		\$1.30	\$4.53	\$1.07	\$2.36	\$9.26	
PRE-IRRIGATE		0.75 HR		\$5.63	\$6.58	\$1.36	\$2.18	\$15.74	
CULTIVATOR	65 HP	0.21 HR		\$1.51	\$2.88	\$0.47	\$1.14	\$6.00	
PLANTER	70 HP	0.26 HR		\$1.87	\$4.83	\$0.66	\$4.28	\$11.64	
SLED	70 HP	0.15 HR		\$1.08	\$2.79	\$0.18	\$0.79	\$4.83	
CULTIVATOR (3X)	65 HP	0.63 HR		\$4.54	\$8.64	\$1.42	\$3.42	\$18.01	
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	\$78.92	\$17.20	\$31.74	\$183.31	
HARVEST OPERATIONS									
COTTON PICKER (2X)	2-ROW	0.74 HR		\$5.33	\$13.65	\$11.56	\$144.32	\$174.85	
HAUL (2X)	65 HP	1.00 HR		\$7.20	\$13.71	\$1.28	\$5.27	\$27.46	
GIN COTTON (CUSTOM)			\$197.87					\$197.87	
SUBTOTAL		1.74 HR	\$197.87	\$12.53	\$27.36	\$12.83	\$149.59	\$400.19	
POSTHARVEST OPERATIONS									
SHREDDER	70 HP	0.14 HR		\$1.01	\$2.60	\$0.18	\$2.16	\$5.95	
SUBTOTAL		0.14 HR		\$1.01	\$2.60	\$0.18	\$2.16	\$5.95	
OVERHEAD EXPENSES									
DOWNTIME		0.95 HR		\$6.82				\$6.82	
EMPLOYEE BENEFITS				\$8.82				\$8.82	
INSURANCE			\$0.04					\$0.04	
LAND TAXES							\$1.79	\$1.79	
SUPERVISION AND MANAGEMENT				\$86.17				\$86.17	
OTHER EXPENSES			\$67.10					\$67.10	
SUBTOTAL		0.95 HR	\$67.13	\$101.81			\$1.79	\$170.72	
TOTAL OPERATING EXPENSES		7.66 HR	\$534.80	\$150.79	\$108.88	\$30.21	\$185.28	\$1,009.97	
NET OPERATING PROFIT								\$217.50	
INTEREST ON OPERATING CAPITAL		(\$152.97	@	7.50%)		\$11.47	
INTEREST ON EQUIPMENT INVESTMENT								\$98.34	
RETURN TO LAND AND RISK								\$107.69	

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

GROSS RETURN		\$1,227.47	
VARIABLE OPERATING EXPENSES	\$673.90		
RETURN OVER VARIABLE EXPENSES	\$553.57	(GROSS MARGIN)	
FIXED EXPENSES	\$185.28		
NET FARM INCOME	\$368.29	(RETURN TO CAPITAL, LABOR, LAND & RISK)	
LABOR AND MANAGEMENT COST	\$150.79		
NET OPERATING PROFIT	\$217.50	(RETURN TO CAPITAL, LAND & RISK)	
CAPITAL COSTS	\$109.81		
RETURN TO LAND AND RISK	\$107.69		

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, Actual 2018
Planting dates: April 15 - May 15
Harvesting dates: October 15 - January 15

ITEM	PRICE	YIELD						TOTAL	
GROSS RETURNS									
COTTON LINT	\$0.670	1,228 LBS						\$822.76	
COTTON SEED	\$0.075	1,965 LBS						\$147.36	
DIRECT PAYMENT	\$0.000	1,228 LBS						\$0.00	
COUNTER CYCLICAL PAYMENT	\$0.137	1,228 LBS						\$168.60	
TOTAL								\$1,138.72	
PURCHASED INPUTS									
PURCHASED INPUTS	PRICE	QUANTITY	PURCHASED INPUTS						TOTAL
SEED	\$8.45	20 LBS	\$169.00						\$169.00
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			\$258.30						\$258.30
PREHARVEST OPERATIONS									
	POWER UNIT	ACCOMPLISHMENT RATE	PURCHASED INPUTS	LABOR	FUEL & LUBE	REPAIRS	FIXED COST	TOTAL	
DISC	145 HP	0.17 HR		\$1.22	\$4.28	\$1.15	\$1.59	\$8.24	
PLOW	145 HP	0.48 HR		\$3.46	\$12.08	\$3.89	\$4.95	\$24.38	
DISC (2X)	145 HP	0.34 HR		\$2.45	\$8.55	\$2.29	\$3.18	\$16.47	
FLOAT	145 HP	0.16 HR		\$1.15	\$4.03	\$0.64	\$1.32	\$7.14	
LIST	145 HP	0.18 HR		\$1.30	\$4.53	\$1.07	\$2.36	\$9.26	
PRE-IRRIGATE		0.75 HR		\$5.63	\$6.58	\$1.36	\$2.18	\$15.74	
CULTIVATOR	65 HP	0.21 HR		\$1.51	\$2.88	\$0.47	\$1.14	\$6.00	
PLANTER	70 HP	0.26 HR		\$1.87	\$4.83	\$0.66	\$4.28	\$11.64	
SLED	70 HP	0.15 HR		\$1.08	\$2.79	\$0.18	\$0.79	\$4.83	
CULTIVATOR (3X)	65 HP	0.63 HR		\$4.54	\$8.64	\$1.42	\$3.42	\$18.01	
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	\$78.92	\$17.20	\$31.74	\$183.31	
HARVEST OPERATIONS									
COTTON STRIPPER	70 HP	0.62 HR		\$4.46	\$11.52	\$3.46	\$62.35	\$81.79	
HAUL	65 HP	0.75 HR		\$5.40	\$10.28	\$0.96	\$3.95	\$20.60	
GIN COTTON (CUSTOM)			\$236.64					\$236.64	
SUBTOTAL		1.37 HR	\$236.64	\$9.86	\$21.80	\$4.42	\$66.30	\$339.02	
POSTHARVEST OPERATIONS									
SHREDDER	70 HP	0.14 HR		\$0.56	\$2.60	\$0.18	\$2.16	\$5.51	
SUBTOTAL		0.14 HR		\$0.56	\$2.60	\$0.18	\$2.16	\$5.51	
OVERHEAD EXPENSES									
DOWNTIME		0.89 HR		\$6.43				\$6.43	
EMPLOYEE BENEFITS				\$8.26				\$8.26	
INSURANCE			\$0.03					\$0.03	
LAND TAXES						\$1.79		\$1.79	
SUPERVISION AND MANAGEMENT				\$79.90				\$79.90	
OTHER EXPENSES			\$67.10					\$67.10	
SUBTOTAL		0.89 HR	\$67.13	\$94.58		\$1.79		\$163.50	
TOTAL OPERATING EXPENSES		7.23 HR	\$582.06	\$140.46	\$103.32	\$21.80	\$101.99	\$949.63	
NET OPERATING PROFIT								\$189.09	
INTEREST ON OPERATING CAPITAL		(\$156.06 @ 7.50%)						\$11.70	
INTEREST ON EQUIPMENT INVESTMENT								\$54.86	
RETURN TO LAND AND RISK								\$122.53	

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

BUDGET SUMMARY

GROSS RETURN		\$1,138.72	
VARIABLE OPERATING EXPENSES	\$707.18		
RETURN OVER VARIABLE EXPENSES		\$431.55	(GROSS MARGIN)
FIXED EXPENSES	\$101.99		
NET FARM INCOME		\$329.55	(RETURN TO CAPITAL, LABOR, LAND & RISK)
LABOR AND MANAGEMENT COST	\$140.46		
NET OPERATING PROFIT		\$189.09	(RETURN TO CAPITAL, LAND & RISK)
CAPITAL COSTS	\$66.57		
RETURN TO LAND AND RISK		\$122.53	

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, Actual 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									
	PRICE	QUANTITY	PURCHASED INPUTS						TOTAL
SEED	\$21.00	8 LBS	\$168.00						\$168.00
NITROGEN (N)	\$0.42	120 LBS	\$50.40						\$50.40
PHOSPHATE (P205)	\$0.49	70 LBS	\$34.30						\$34.30
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			\$348.17						\$348.17
PREHARVEST OPERATIONS									
	POWER UNIT	ACCOMPLISHMENT RATE	PURCHASED INPUTS	LABOR	FUEL & LUBE	REPAIRS	FIXED COST	TOTAL	
PLOW	145 HP	0.48 HR		\$3.46	\$12.08	\$3.89	\$4.95	\$24.38	
DISC (2X)	145 HP	0.34 HR		\$2.45	\$8.55	\$2.29	\$3.18	\$16.47	
PLANE	145 HP	0.16 HR		\$1.15	\$4.03	\$0.65	\$2.83	\$8.66	
FERTILIZE LIST	DEALER APPLIED 145 HP	0.18 HR		\$1.30	\$4.53	\$1.07	\$2.36	\$9.26	
PRE-IRRIGATE		0.75 HR		\$5.63	\$5.26	\$1.09	\$1.74	\$13.72	
CULTIVATOR	65 HP	0.21 HR		\$1.51	\$2.88	\$0.47	\$1.14	\$6.00	
PLANTER	70 HP	0.26 HR		\$1.87	\$4.83	\$0.66	\$4.28	\$11.64	
CULTIVATOR (5X)	65 HP	1.05 HR		\$7.56	\$14.40	\$2.36	\$5.70	\$30.02	
THIN (CUSTOM)			\$45.00						\$45.00
IRRIGATE (7X)		3.50 HR		\$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	\$93.41	\$20.09	\$38.38	\$268.05	
HARVEST OPERATIONS									
HAND PICK (CUSTOM)			\$640.00						\$640.00
FIELD HAUL	145 HP	0.90 HR		\$6.48	\$22.64	\$3.59	\$8.14	\$40.86	
HAUL (CUSTOM)			\$96.00						\$96.00
SUBTOTAL	0.90 HR		\$736.00	\$6.48	\$22.64	\$3.59	\$8.14	\$776.86	
POSTHARVEST OPERATIONS									
SHREDDER	70 HP	0.14 HR		\$1.01	\$2.60	\$0.18	\$2.16	\$5.95	
SUBTOTAL	0.14 HR			\$1.01	\$2.60	\$0.18	\$2.16	\$5.95	
OVERHEAD EXPENSES									
DOWNTIME		0.93 HR		\$6.70					\$6.70
EMPLOYEE BENEFITS				\$10.56					\$10.56
INSURANCE			\$0.04					\$0.04	
LAND TAXES							\$1.79	\$1.79	
SUPERVISION AND MANAGEMENT				\$134.76					\$134.76
OTHER EXPENSES			\$67.10					\$67.10	
SUBTOTAL	0.93 HR		\$67.14	\$152.01				\$1.79	\$220.94
TOTAL OPERATING EXPENSES	8.90 HR		\$1,216.31	\$210.67	\$118.65	\$23.86	\$50.47	\$1,619.97	
NET OPERATING PROFIT								\$300.03	
INTEREST ON OPERATING CAPITAL		(\$205.34 @	7.50%)					\$15.40
INTEREST ON EQUIPMENT INVESTMENT								\$25.37	
RETURN TO LAND AND RISK								\$259.27	

* 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		\$561.18	(GROSS MARGIN)
FIXED EXPENSES	\$50.47		
NET FARM INCOME		\$510.70	(RETURN TO CAPITAL, LABOR, LAND & RISK)
LABOR AND MANAGEMENT COST	\$210.67		
NET OPERATING PROFIT		\$300.03	(RETURN TO CAPITAL, LAND & RISK)
CAPITAL COSTS	\$40.77		
RETURN TO LAND AND RISK		\$259.27	

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

	ALFALFA ESTABLISHMENT	ALFALFA HAY	BARLEY	OAT HAY	PICKER COTTON	STRIPPER COTTON	RED CHILE
		TONS	CWT	TONS	LBS	LBS	LBS
PRIMARY YIELD		6.10	35.00	3.50	1328.00	1228.00	3200.00
PRIMARY PRICE		\$230.00	\$6.22	\$160.00	\$0.72	\$0.67	\$0.60
GOVERNMENT PAYMENTS		\$0.00	\$0.00	\$0.00	\$115.93	\$168.60	\$0.00
SECOND INCOME		\$40.00	\$40.00	\$0.00	\$159.36	\$147.36	\$0.00
GROSS RETURN		\$1,443.00	\$257.70	\$560.00	\$1,227.47	\$1,138.72	\$1,920.00
CASH OPERATING EXPENSES							
SEED	\$59.00		\$49.50	\$37.00	\$126.75	\$169.00	\$168.00
FERTILIZER		\$42.00	\$63.00	\$25.50	\$4.80	\$4.80	\$84.70
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		\$56.97					
CANAL WATER							
FUEL, OIL & LUBRICANTS-EQUIPMENT	\$50.95	\$53.99	\$23.23	\$39.42	\$82.56	\$76.99	\$76.53
FUEL-IRRIGATION	\$7.02	\$43.87	\$24.57	\$24.57	\$26.32	\$26.32	\$42.12
REPAIRS	\$12.37	\$28.37	\$10.67	\$16.35	\$30.21	\$21.80	\$23.86
CUSTOM CHARGES			\$24.91		\$217.87	\$256.64	\$801.00
LAND TAXES		\$1.79	\$1.79	\$1.79	\$1.79	\$1.79	\$1.79
OTHER EXPENSES	\$0.02	\$67.13	\$67.11	\$67.12	\$67.13	\$67.13	\$67.14
TOTAL CASH EXPENSES	\$161.75	\$380.54	\$287.72	\$211.74	\$675.68	\$708.96	\$1,360.61
RETURN OVER CASH EXPENSES	(\$161.75)	\$1,062.46	(\$30.02)	\$348.26	\$551.79	\$429.76	\$559.39
FIXED EXPENSES	\$30.70	\$96.96	\$19.27	\$26.56	\$183.50	\$100.21	\$48.69
TOTAL EXPENSES	\$192.45	\$477.50	\$306.98	\$238.30	\$859.18	\$809.17	\$1,409.30
NET FARM INCOME	(\$192.45)	\$965.50	(\$49.28)	\$321.70	\$368.29	\$329.55	\$510.70
LABOR AND MANAGEMENT COSTS	\$46.93	\$163.23	\$46.09	\$74.80	\$150.79	\$140.46	\$210.67
NET OPERATING PROFIT	(\$239.39)	\$802.27	(\$95.38)	\$246.90	\$217.50	\$189.09	\$300.03
CAPITAL COSTS							
INTEREST ON OPERATING CAPITAL		\$8.40	\$6.33	\$3.64	\$11.47	\$11.70	\$15.40
INTEREST ON EQUIPMENT INVESTMENT		\$20.88	\$8.29	\$13.79	\$98.34	\$54.86	\$25.37
TOTAL CAPITAL COSTS	\$0.00	\$29.28	\$14.62	\$17.44	\$109.81	\$66.57	\$40.77
RETURN TO LAND AND RISK	(\$239.39)	\$772.99	(\$109.99)	\$229.46	\$107.69	\$122.53	\$259.27

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

GROSS RETURNS		
ALFALFA HAY	260 ACRES	
CROP		\$375,180
BARLEY	17 ACRES	
CROP		\$4,381
DIRECT PAYMENT		\$0
COUNTER CYCLICAL PAYMENT		\$0
OAT HAY	20 ACRES	
CROP		\$11,200
PICKER COTTON	95 ACRES	
COTTON LINT		\$90,457
COTTON SEED		\$15,139
DIRECT PAYMENT		\$0
COUNTER CYCLICAL PAYMENT		\$11,014
STRIPPER COTTON	68 ACRES	
COTTON LINT		\$55,948
COTTON SEED		\$10,020
DIRECT PAYMENT		\$0
COUNTER CYCLICAL PAYMENT		\$11,465
RED CHILE	40 ACRES	
CROP		\$76,800
GROSS RETURN		<u>\$661,604</u>
CASH OPERATING EXPENSES		
SEED		\$34,903
FERTILIZER		\$16,671
CHEMICALS		\$44,390
CROP INSURANCE		\$950
OTHER PURCHASED INPUTS		\$14,812
CANAL WATER		\$0
FUEL, OIL & LUBRICANTS-EQUIPMENT		\$34,011
FUEL-IRRIGATION		\$18,656
REPAIRS		\$13,834
CUSTOM CHARGES		\$70,613
LAND TAXES		\$893
OTHER EXPENSES		\$33,567
TOTAL CASH EXPENSES		<u>\$283,300</u>
RETURN OVER CASH EXPENSES		\$378,304
FIXED EXPENSES		\$41,412
TOTAL EXPENSES		\$324,712
NET FARM INCOME		\$336,892
LABOR AND MANAGEMENT COSTS		\$79,463
NET OPERATING PROFIT		\$257,429
CAPITAL COSTS		
INTEREST ON OPERATING CAPITAL		\$4,867
INTEREST ON EQUIPMENT INVESTMENT		\$19,933
TOTAL CAPITAL COSTS		<u>\$24,800</u>
RETURN TO LAND AND RISK		<u>\$232,628</u>
LAND VALUE	RETURN TO RISK*	RETURN ON INVESTMENT**
\$1,000 /ACRE	\$197,628	37.25%
\$2,500 /ACRE	\$145,128	17.86%
\$4,000 /ACRE	\$92,628	11.75%
\$5,500 /ACRE	\$40,128	8.75%

* 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)