

TABLE 1. Basic cost information for the Arch Hurley Conservancy District, Quay County, 2003.

Item			
Labor Wage Rate:			
Equipment operators	\$/hour		\$7.55
General & Irrigators	\$/hour		\$6.75
Purchased Inputs:			
Fertilizer:			
Nitrogen (N)	\$/pound		\$0.36
Phosphate (P205)	\$/pound		\$0.33
Seed:			
Alfalfa	\$/pound		\$3.00
Grain Sorghum	\$/pound		\$1.20
Wheat	\$/pound		\$0.13
Wire	\$/pound		\$0.39
Canal Water			
Assessment	\$/acre		\$7.00
Water	\$/acre foot		\$7.00
Energy:			
Diesel fuel	\$/gallon		\$1.30
Gasoline	\$/gallon		\$1.35
LP Gas	\$/gallon		\$1.21
Electricity (Farmers Elec Coop)	cents/KwHr		6.13
Employee Liability Insurance	\$/1,000 wages		\$20.00
Employee Benefits	percent/w ages		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	\$96.00 /acre (full value)		\$0.84
Personal Property Tax Rate - NR	\$/1,000 (Assessed Value)		\$26.16
- R			\$25.14
Supervision Factors			
Field Crop-Irrigation	\$/labor hour		\$1.00
Field Crop-Equipment & General	\$/labor hour		\$0.50
Management Rate	percent		7.00%

BUDGET AREA..... ARCH HURLEY CONSERVANCY DISTRICT, QUAY COUNTY, 2003.

FARM SIZE 600 ACRES
 IRRIGATION TYPE..... SPRINKLER
 NUMBER OF CROPS... 3

ACREAGE SUMMARY:	LAND USE (ACRES)	WATER USE	
		AC.IN. PER AC.	TOTAL AC.IN.
ALFALFA ESTABLISHMENT	25.0 *	6	150
ALFALFA	200.0	24	4,800
GRAIN SORGHUM	170.0	18	3,060
ARP	0.0		
FLEX IN GRAIN SORGHUM	30.0	12	360
WHEAT	170.0	12	2,040
ARP	0.0		
FLEX IN GRAIN SORGHUM	30.0	12	360
TOTAL	600.0		10,410
ACRE FEET PER ACRE OF WATER RIGHTS			1.45

* DOUBLE-CROPPED

TABLE 1a. Overhead cost information for the Arch Hurley Conservancy District, Quay County, 2003.

ITEM			
Electricity (Domestic & Shop)		\$215.00 per month	\$2,580
Telephone		\$115.00 per month	\$1,380
Accounting & Legal			\$1,715
Misc. Supplies & Hand Tools			\$2,340
Pickup and Auto			
miles	20,600 @	\$0.365 per mile	\$7,519
Insurance			
- general liability (non-employee)			\$1,725
- fire/theft			\$1,355
Property Taxes			
- non-planted land			\$0
- other than land & machinery			\$610
Building repairs and maintenance			\$1,310
Dues, fees, publications			\$390
Farmstead Equipment			\$165
Total			\$21,089
Total per planted acre			\$35.15

TABLE 2. Pumping costs and data for irrigation wells, Arch Hurley Conservancy District, Quay County, 2003.

INPUT DATA

DELIVERY PSI:
 SPRINKLER 35

GALLONS PER MINUTE (GPM)... 700
 WORK HORSEPOWER 14

EFFICIENCY FACTOR:

ELECTRICITY. 0.540
 LP GAS..... 0.154
 DIESEL..... 0.160

FUEL COST PER HOUR:

ELECTRICITY. 6.13 CENTS/K wHr
 LP GAS..... \$1.21 \$/GAL
 DIESEL..... \$1.30 \$/GAL

PUMPING COSTS

ELECTRIC:

COST PER HOUR..... \$ 1.24
 COST PER ACRE INCH\$ 0.80

LP GAS:

COST PER HOUR..... \$ 3.14
 COST PER ACRE INCH\$ 2.03

DIESEL:

COST PER HOUR..... \$ 2.11
 COST PER ACRE INCH\$ 1.37

TABLE 3. Equipment summary for a 600 acre sprinkler-irrigated farm with above average management, Arch Hurley Conservancy District, Quay County, 2003.

EQUIPMENT ITEM & SIZE	ANNUAL		VARIABLE COSTS					FIXED COSTS		
	HOURS OF USE	NUMBER	TOTAL VALUE	FUEL, OIL LUBRICANT	REPAIR	FUEL,OIL PER HR	REPAIR PER HR	DEPRE- CIATION	TAXES	TOTAL PER HOUR
TRACTOR 70 HP	303	1	\$6,790	\$1,458	\$1,039	\$4.80	\$3.43	\$705	\$92	\$2.63
TRACTOR 165 HP	424	1	\$31,475	\$4,978	\$3,610	\$11.74	\$8.51	\$4,652	\$304	\$11.69
COMBINE 95 HP	76	1	\$38,150	\$569	\$9,834	\$7.49	\$129.40	\$7,600	\$497	\$106.54
GRAIN HEAD 18 FT	76	1	\$14,410		\$1,966		\$25.87	\$1,519	\$99	\$21.30
SWATHER 16 FT SP	88	1	\$24,740	\$428	\$446	\$4.87	\$5.07	\$3,621	\$316	\$44.73
TRUCK 2T	76	1	\$22,000	\$628	\$3,578	\$8.26	\$47.08	\$4,400	\$192	\$60.42
DISC 14 FT	122	1	\$3,000		\$206		\$1.68	\$400	\$26	\$3.48
ROD WEEDER 23 FT	18	1	\$625		\$9		\$0.49	\$83	\$5	\$4.83
CULTIVATOR 6-ROW	30	1	\$2,500		\$54		\$1.80	\$333	\$22	\$11.88
DRILL 13 FT	35	1	\$2,150		\$121		\$3.44	\$430	\$19	\$12.78
PLANTER 6-ROW	39	1	\$4,250		\$286		\$7.31	\$850	\$37	\$22.69
FLOAT 12 FT	89	1	\$500		\$16		\$0.18	\$53	\$3	\$0.64
SPRAYER TRACTOR MTD 16 FT	39	1	\$1,400		\$94		\$2.41	\$187	\$12	\$5.09
FERT SPREADER	31	1	\$2,300		\$91		\$2.90	\$307	\$20	\$10.46
BALER PTO 2-WIRE	168	1	\$1,500		\$0		\$0.00	\$385	\$34	\$2.49
SWEEP 23 FT	34	1	\$4,350		\$106		\$3.13	\$580	\$38	\$18.17
BALE WAGON, PTO	160	1	\$1,850		\$947		\$5.92	\$800	\$70	\$5.44
CENTER PIVOT SPRINKLER	7196	1	\$17,250	\$3,598	\$1,151	\$0.50	\$0.16	\$2,300	\$150	\$0.34
ELECTRIC BOOSTER PUMP	7196	1	\$2,500	\$8,930	\$1,346	\$1.24	\$0.19	\$333	\$22	\$0.05
			\$181,740	\$20,589	\$24,900			\$29,539	\$1,959	

TABLE 4. Alfalfa establishment, sprinkler-irrigated, budgeted per acre costs and returns for a 600 acre farm with above average management, Arch Hurley Conservancy District, Quay County, 2003.
Planting dates: August 1 - September 15

ITEM	PRICE	QUANTITY	PURCHASED INPUTS					TOTAL
<u>PURCHASE INPUTS</u>								
SEED	\$3.00	16 LBS		\$48.00				\$48.00
OAT SEED	\$0.23	40 LBS		\$9.20				\$9.20
NITROGEN (N)	\$0.36	30 LBS		\$10.80				\$10.80
PHOSPHATE (P205)	\$0.33	60 LBS		\$19.80				\$19.80
CANAL WATER	\$7.00	6 AC. IN.		\$3.50				\$3.50
SUBTOTAL				\$91.30				\$91.30
<u>PREHARVEST OPERATIONS</u>								
	POWER UNIT	ACCOMPLISHMENT RATE	PURCHASED INPUTS	LABOR	FUEL & OIL	REPAIRS	FIXED COST	TOTAL
CHISEL	145 HP	0.08 HR		\$0.60	\$0.94	\$0.93	\$2.39	\$4.86
DISC	145 HP	0.14 HR		\$1.06	\$1.64	\$1.43	\$2.12	\$6.25
FLOAT	145 HP	0.19 HR		\$1.43	\$2.23	\$1.65	\$2.34	\$7.66
FERT SPREADER	70 HP	0.05 HR		\$0.38	\$0.24	\$0.32	\$0.65	\$1.59
DRILL	70 HP	0.18 HR		\$1.36	\$0.86	\$1.24	\$2.77	\$6.23
IRRIGATE (3X)		0.30 HR		\$2.03	\$6.75	\$1.35	\$1.51	\$11.64
SUBTOTAL		0.94 HR	\$0.00	\$6.86	\$12.67	\$6.91	\$11.80	\$38.23
<u>OVERHEAD EXPENSES</u>								
DOWNTIME		0.24 HR		\$1.77				\$1.77
EMPLOYEE BENEFITS				\$1.23				\$1.23
INSURANCE			\$0.02					\$0.02
SUPERVISION AND MANAGEMENT				\$9.65				\$9.65
SUBTOTAL		0.24 HR	\$0.02	\$12.66				\$12.69
<u>TOTAL OPERATING EXPENSES</u>		1.18 HR	\$91.32	\$19.52	\$12.67	\$6.91	\$11.80	\$142.22

TABLE 5. Alfalfa hay, sprinkler-irrigated, budgeted per acre costs and returns for a 600 acre farm with above average management, Arch Hurley Conservancy District, Quay County, 2003.
Harvesting dates: May 25 - October 15

ITEM	PRICE	YIELD						TOTAL
GROSS RETURNS								
ALFALFA HAY	\$140.00	4.50 TONS (STACKED)						\$630.00
GRAZING	\$48.00	1.00 ACRE						\$48.00
TOTAL								\$678.00
PURCHASED INPUTS								
PURCHASED INPUTS	PRICE	QUANTITY	PURCHASED INPUTS				FIXED COST	TOTAL
PHOSPHATE (P205)	\$0.33	60 LBS	\$19.80					\$19.80
WIRE	\$0.39	39 LBS	\$15.04					\$15.04
ESTABLISHMENT: Principal		8 YEARS					\$17.78	\$17.78
: Interest							\$6.39	\$6.39
CANAL WATER: Assessment	\$7.00	1 ACRE	\$7.00					\$7.00
Water	\$7.00	24 AC. IN.	\$14.00					\$14.00
SUBTOTAL			\$55.84				\$24.17	\$80.01
PREHARVEST OPERATIONS								
PREHARVEST OPERATIONS	POWER UNIT	ACCOMPLISHMENT RATE	PURCHASED INPUTS	LABOR	FUEL & OIL	REPAIRS	FIXED COST	TOTAL
FERT SPREADER	70 HP	0.05 HR		\$0.38	\$0.24	\$0.32	\$0.65	\$1.59
IRRIGATE		1.20 HR		\$8.10	\$27.01	\$5.38	\$6.05	\$46.55
SUBTOTAL		1.25 HR		\$8.48	\$27.25	\$5.70	\$6.70	\$48.14
HARVEST OPERATIONS								
SWATHER (4X)	16 FT	0.44 HR		\$3.32	\$2.14	\$2.23	\$19.68	\$27.37
BALER (4X)	70 HP	0.84 HR		\$6.34	\$4.04	\$2.88	\$4.30	\$17.56
BALE WAGON, PTO (4X)	145 HP	0.80 HR		\$6.04	\$9.39	\$11.55	\$13.70	\$40.68
SUBTOTAL		2.08 HR	\$0.00	\$15.70	\$15.57	\$16.66	\$37.68	\$85.61
OVERHEAD EXPENSES								
DOWNTIME		0.83 HR		\$6.29				\$6.29
EMPLOYEE BENEFITS				\$5.48				\$5.48
INSURANCE			\$0.08					\$0.08
LAND TAXES							\$0.84	\$0.84
SUPERVISION AND MANAGEMENT				\$49.54				\$49.54
OTHER EXPENSES			\$35.15					\$35.15
SUBTOTAL		0.83 HR	\$35.23	\$61.31			\$0.84	\$97.38
TOTAL OPERATING EXPENSES		4.16 HR	\$91.07	\$85.49	\$42.82	\$22.36	\$69.39	\$311.14
NET OPERATING PROFIT								\$366.86
INTEREST ON OPERATING CAPITAL	(\$38.84	@	8.00%)			\$3.11
INTEREST ON EQUIPMENT INVESTMENT								\$30.67
RETURN TO LAND AND RISK								\$333.08

BUDGET SUMMARY

GROSS RETURN		\$678.00	
VARIABLE OPERATING EXPENSES	\$156.25		
RETURN OVER VARIABLE EXPENSES		\$521.75	(GROSS MARGIN)
FIXED EXPENSES	\$69.39		
NET FARM INCOME		\$452.35	(RETURN TO CAPITAL, LABOR, LAND & RISK)
LABOR AND MANAGEMENT COST	\$85.49		
NET OPERATING PROFIT		\$366.86	(RETURN TO CAPITAL, LAND & RISK)
CAPITAL COSTS	\$33.78		
RETURN TO LAND AND RISK		\$333.08	

TABLE 6. Grain sorghum, sprinkler-irrigated, budgeted per acre costs and returns for a 600 acre farm with above average management, Arch Hurley Conservancy District, Quay County, 2003.

Planting dates: May 15 - July 1

Harvesting dates: October 15 - December 15

ITEM	PRICE	YIELD	TOTAL					
GROSS RETURNS								
GRAIN SORGHUM	\$3.95	45.00 CWT	\$177.75					
DIRECT PAYMENT	\$0.625	45.00 CWT	\$28.13					
COUNTER CYCLICAL PAYMENT	\$0.00	0.00 CWT	\$0.00					
GRAZING	\$48.00	1.00 ACRE	\$48.00					
TOTAL			\$253.88					
PURCHASED INPUTS								
PURCHASED INPUTS	PRICE	QUANTITY	PURCHASED INPUTS	TOTAL				
SEED	\$1.20	7 LBS	\$8.40	\$8.40				
NITROGEN (N)	\$0.36	80 LBS	\$28.80	\$28.80				
PHOSPHATE (P205)	\$0.33	20 LBS	\$6.60	\$6.60				
HERBICIDE (CUSTOM)	\$15.07	1 ACRE	\$15.07	\$15.07				
CANAL WATER: Assessment	\$7.00	1 ACRE	\$7.00	\$7.00				
Water	\$7.00	18 AC. IN.	\$10.50	\$10.50				
CROP INSURANCE	\$0.22		\$0.22	\$0.22				
SUBTOTAL			\$76.58	\$76.58				
PREHARVEST OPERATIONS								
PREHARVEST OPERATIONS	POWER UNIT	ACCOMPLISHMENT RATE	PURCHASED INPUTS	LABOR	FUEL & OIL	REPAIRS	FIXED COST	TOTAL
SWEEP	145 HP	0.08 HR		\$0.60	\$0.94	\$0.93	\$2.39	\$4.86
DISC	145 HP	0.14 HR		\$1.06	\$1.64	\$1.43	\$2.12	\$6.25
FLOAT	145 HP	0.19 HR		\$1.43	\$2.23	\$1.65	\$2.34	\$7.66
DISC & SPRAY	145 HP	0.17 HR		\$1.28	\$2.00	\$2.14	\$3.44	\$8.87
FERT SPREADER	70 HP	0.05 HR		\$0.38	\$0.24	\$0.32	\$0.65	\$1.59
ROD WEED	145 HP	0.08 HR		\$0.60	\$0.94	\$0.72	\$1.32	\$3.58
PLANTER	70 HP	0.17 HR		\$1.28	\$0.82	\$1.83	\$4.30	\$8.23
CULTIVATOR	70 HP	0.13 HR		\$0.98	\$0.62	\$0.68	\$1.89	\$4.17
IRRIGATE (12X)		1.20 HR		\$8.10	\$20.26	\$4.04	\$4.54	\$36.94
SUBTOTAL		2.21 HR		\$15.73	\$29.69	\$13.73	\$23.00	\$82.15
HARVEST OPERATIONS								
COMBINE	18 FT	0.19 HR		\$1.43	\$1.42	\$29.50	\$24.29	\$56.65
HAUL	2T	0.19 HR		\$1.43	\$1.57	\$8.95	\$11.48	\$23.43
SUBTOTAL		0.38 HR		\$2.87	\$2.99	\$38.45	\$35.77	\$80.08
OVERHEAD EXPENSES								
DOWNTIME		0.65 HR		\$4.89				\$4.89
EMPLOYEE BENEFITS				\$4.23				\$4.23
INSURANCE			\$0.08					\$0.08
LAND TAXES						\$0.84		\$0.84
SUPERVISION AND MANAGEMENT				\$19.71				\$19.71
OTHER EXPENSES			\$35.15					\$35.15
SUBTOTAL		0.65 HR	\$35.23	\$28.83		\$0.84		\$64.89
TOTAL OPERATING EXPENSES		3.89 HR	\$111.81	\$47.42	\$32.68	\$52.18	\$59.61	\$303.70
NET OPERATING PROFIT								(\$49.83)
INTEREST ON OPERATING CAPITAL	(\$52.60	@	8.00%)			\$4.21
INTEREST ON EQUIPMENT INVESTMENT								\$30.80
RETURN TO LAND AND RISK								(\$84.83)
BUDGET SUMMARY								
GROSS RETURN		\$253.88						
VARIABLE OPERATING EXPENSES	\$196.67							
RETURN OVER VARIABLE EXPENSES		\$57.20	(GROSS MARGIN)					
FIXED EXPENSES	\$59.61							
NET FARM INCOME		(\$2.40)	(RETURN TO CAPITAL, LABOR, LAND & RISK)					
LABOR AND MANAGEMENT COST	\$47.42							
NET OPERATING PROFIT		(\$49.83)	(RETURN TO CAPITAL, LAND & RISK)					
CAPITAL COSTS	\$35.00							
RETURN TO LAND AND RISK		(\$84.83)						

TABLE 7. Wheat, sprinkler-irrigated, budgeted per acre costs and returns for a 600 acre farm with above average management, Arch Hurley Conservancy District, Quay County, 2003.
 Planting dates: August 15 - September 15
 Harvesting dates: June 15 - July 10

ITEM	PRICE	YIELD							TOTAL	
GROSS RETURNS										
WHEAT	\$4.50	40.00	BUSHEL						\$180.00	
DIRECT PAYMENT	\$0.52	40.00	BUSHEL						\$20.80	
COUNTER CYCLICAL PAYMENT	\$0.00								\$0.00	
GRAZING	\$48.00	1.00	ACRE						\$48.00	
TOTAL									\$248.80	
PURCHASED INPUTS										
PURCHASED INPUTS	PRICE	QUANTITY	PURCHASED INPUTS							TOTAL
SEED	\$0.13	60	LBS	\$7.80						\$7.80
NITROGEN (N)	\$0.36	80	LBS	\$28.80						\$28.80
PHOSPHATE (P205)	\$0.33	20	LBS	\$6.60						\$6.60
HERBICIDE	\$15.07	1	ACRE	\$15.07						\$15.07
CANAL WATER: Assessment	\$7.00	1	ACRE	\$7.00						\$7.00
Water	\$7.00	12	AC. IN.	\$7.00						\$7.00
CROP INSURANCE	\$0.29			\$0.29						\$0.29
SUBTOTAL				\$72.56						\$72.56
PREHARVEST OPERATIONS										
PREHARVEST OPERATIONS	POWER UNIT	ACCOMPLISHMENT RATE		PURCHASED INPUTS	LABOR	FUEL & OIL	REPAIRS	FIXED COST	TOTAL	
CHISEL	145 HP	0.08	HR		\$0.60	\$0.94	\$0.93	\$2.39	\$4.86	
DISC (2X)	145 HP	0.28	HR		\$2.11	\$3.29	\$2.85	\$4.25	\$12.50	
FLOAT	145 HP	0.24	HR		\$1.81	\$2.82	\$2.09	\$2.96	\$9.68	
FERT SPREADER	70 HP	0.05	HR		\$0.38	\$0.24	\$0.32	\$0.65	\$1.59	
DRILL	70 HP	0.18	HR		\$1.36	\$0.86	\$1.24	\$2.77	\$6.23	
IRRIGATE (8X)		0.80	HR		\$5.40	\$13.51	\$2.69	\$3.02	\$24.62	
SUBTOTAL		1.63	HR		\$11.67	\$21.66	\$10.12	\$16.05	\$59.49	
HARVEST OPERATIONS										
COMBINE	18 FT	0.19	HR		\$1.43	\$1.42	\$29.50	\$24.29	\$56.65	
HAUL	2T	0.19	HR		\$1.43	\$1.57	\$8.95	\$11.48	\$23.43	
SUBTOTAL		0.38	HR		\$2.87	\$2.99	\$38.45	\$35.77	\$80.08	
OVERHEAD EXPENSES										
DOWNTIME		0.50	HR		\$1.88				\$1.88	
EMPLOYEE BENEFITS					\$2.18				\$2.18	
INSURANCE				\$0.05					\$0.05	
LAND TAXES							\$0.84		\$0.84	
SUPERVISION AND MANAGEMENT					\$12.44				\$12.44	
OTHER EXPENSES				\$35.15					\$35.15	
SUBTOTAL		0.50	HR		\$35.20	\$16.50		\$0.84	\$52.54	
TOTAL OPERATING EXPENSES		2.51	HR		\$107.76	\$31.04	\$24.65	\$48.56	\$52.66	
NET OPERATING PROFIT									(\$15.86)	
INTEREST ON OPERATING CAPITAL	(\$47.68	@	8.00%)					\$3.81
INTEREST ON EQUIPMENT INVESTMENT									\$27.00	
RETURN TO LAND AND RISK									(\$46.68)	

BUDGET SUMMARY

GROSS RETURN		\$248.80	
VARIABLE OPERATING EXPENSES	\$180.97		
RETURN OVER VARIABLE EXPENSES		\$67.83	(GROSS MARGIN)
FIXED EXPENSES	\$52.66		
NET FARM INCOME		\$15.18	(RETURN TO CAPITAL, LABOR, LAND & RISK)
LABOR AND MANAGEMENT COST	\$31.04		
NET OPERATING PROFIT		(\$15.86)	(RETURN TO CAPITAL, LAND & RISK)
CAPITAL COSTS	\$30.82		
RETURN TO LAND AND RISK		(\$46.68)	

TABLE 8. Summary of per acre costs and returns for a 600 acre farm with above average management, Arch Hurley Conservancy District, Quay County, 2003.

	ALFALFA ESTABLISHMENT	ALFALFA HAY -----SPRINKLER-----	GRAIN SORGHUM	WHEAT
		TONS	CWT	BU
PRIMARY YIELD		4.50	45.00	40.00
PRIMARY PRICE		140.00	3.95	4.50
GOVERNMENT PAYMENTS		0.00	28.13	20.80
SECOND INCOME		48.00	48.00	48.00
GROSS RETURN		\$678.00	\$253.88	\$248.80
CASH OPERATING EXPENSES				
SEED	\$57.20		\$8.40	\$7.80
FERTILIZER	\$30.60	\$19.80	\$35.40	\$35.40
CHEMICALS			\$15.07	\$15.07
CROP INSURANCE			\$0.22	\$0.29
OTHER PURCHASED INPUTS		\$15.12	\$0.08	\$0.05
CANAL WATER	\$3.50	\$21.00	\$17.50	\$14.00
FUEL, OIL & LUBRICANTS-EQUIPMENT	\$5.92	\$15.81	\$12.42	\$11.14
FUEL-IRRIGATION	\$6.75	\$27.01	\$20.26	\$13.51
REPAIRS	\$6.91	\$22.36	\$52.18	\$48.56
CUSTOM CHARGES		\$0.00		
LAND TAXES		\$0.84	\$0.84	\$0.84
OTHER EXPENSES	\$0.02	\$35.15	\$35.15	\$35.15
TOTAL CASH EXPENSES	\$110.91	\$157.09	\$197.51	\$181.81
RETURN OVER CASH EXPENSES	(\$110.91)	\$520.91	\$56.37	\$66.99
FIXED EXPENSES	\$11.80	\$68.56	\$58.77	\$51.82
TOTAL EXPENSES	\$122.70	\$225.65	\$256.28	\$233.62
NET FARM INCOME	(\$122.70)	\$452.35	(\$2.40)	\$15.18
LABOR AND MANAGEMENT COSTS	\$19.52	\$85.49	\$47.42	\$31.04
NET OPERATING PROFIT	(\$142.22)	\$366.86	(\$49.83)	(\$15.86)
CAPITAL COSTS				
INTEREST ON OPERATING CAPITAL		\$3.11	\$4.21	\$3.81
INTEREST ON EQUIPMENT INVESTMENT		\$30.67	\$30.80	\$27.00
TOTAL CAPITAL COSTS	\$0.00	\$33.78	\$35.00	\$30.82
RETURN TO LAND AND RISK	(\$142.22)	\$333.08	(\$84.83)	(\$46.68)
Flex Computation			\$4.74	\$32.14

TABLE 9. Whole farm summary, Arch Hurley Conservancy District,
Quay County, 2003.

GROSS RETURNS		
ALFALFA HAY	200 ACRES	
CROP		\$126,000
GRAZING		\$9,600
GRAIN SORGHUM	230 ACRES	
CROP		\$40,883
GRAZING		\$11,040
DIRECT PAYMENT		\$6,469
COUNTER CYCLICAL PAYMENT		\$0
WHEAT	170 ACRES	
CROP		\$30,600
GRAZING		\$8,160
DIRECT PAYMENT		\$2,288
COUNTER CYCLICAL PAYMENT		\$0
GROSS RETURN		<u>\$235,039</u>
CASH OPERATING EXPENSES		
SEED		\$4,688
FERTILIZER		\$18,885
CHEMICALS		\$6,026
CROP INSURANCE		\$100
OTHER PURCHASED INPUTS		\$3,051
CANAL WATER		\$10,693
FUEL, OIL & LUBRICANTS-EQUIPMENT		\$8,061
FUEL-IRRIGATION		\$12,528
REPAIRS		\$24,900
CUSTOM CHARGES		\$0
LAND TAXES		\$502
OTHER EXPENSES		\$21,090
TOTAL CASH EXPENSES		<u>\$110,524</u>
RETURN OVER CASH EXPENSES		\$124,515
FIXED EXPENSES		\$32,777
TOTAL EXPENSES		\$143,301
NET FARM INCOME		\$91,738
LABOR AND MANAGEMENT COSTS		\$33,770
NET OPERATING PROFIT		\$57,968
CAPITAL COSTS		
INTEREST ON OPERATING CAPITAL		\$2,238
INTEREST ON EQUIPMENT INVESTMENT		\$17,808
TOTAL CAPITAL COSTS		<u>\$20,046</u>
RETURN TO LAND AND RISK		<u>\$37,922</u>

LAND VALUE	RETURN TO RISK*	RETURN ON INVESTMENT**
\$200 /ACRE	\$33,122	19.21%
\$400 /ACRE	\$28,322	13.75%
\$600 /ACRE	\$23,522	10.70%
\$800 /ACRE	\$18,722	8.76%
\$1,000 /ACRE	\$13,922	7.42%
\$1,200 /ACRE	\$9,122	6.43%

* 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)