

TABLE 1. Acreage Summary, Quay County, Projected 2004.

BUDGET AREA..... ARCH HURLEY CONSERVANCY DISTRICT, QUAY COUNTY			
FARM SIZE..... 600 ACRES			
IRRIGATION TYPE..... SPRINKLER			
NUMBER OF CROPS.... 3			
		WATER USE	
ACREAGE SUMMARY:	LAND USE (ACRES)	AC.IN. PER AC.	TOTAL AC.IN.
ALFALFA ESTABLISHMENT	25.00 *	6	150
ALFALFA	200.00	24	4,800
GRAIN SORGHUM	170.00	18	3,060
ARP	0.00		
FLEX IN GRAIN SORGHUM	30.00	12	360
WHEAT	170.00	12	2,040
ARP	0.00		
FLEX IN GRAIN SORGHUM	30.00	12	360
TOTAL	600.00		10,410
ACRE FEET PER ACRE OF WATER RIGHTS			1.45

* DOUBLE-CROPPED

TABLE 2. Basic cost information for the Arch Hurley Conservancy District, Quay County, Projected 2004.

Item			
Labor Wage Rate:			
Equipment operators	\$/hour		\$7.55
General & Irrigators	\$/hour		\$6.75
Purchased Inputs:			
Fertilizer:			
Nitrogen (N)	\$/pound		\$0.29
Phosphate (P205)	\$/pound		\$0.20
Seed:			
Alfalfa	\$/pound		\$2.80
Grain Sorghum	\$/pound		\$1.30
Wheat	\$/pound		\$0.18
Wire	\$/pound		\$0.38
Canal Water			
Assessment	\$/acre		\$6.00
Water	\$/acre foot		\$6.00
Energy:			
Diesel fuel	\$/gallon		\$1.50
Gasoline	\$/gallon		\$1.45
LP Gas	\$/gallon		\$1.21
Electricity (Farmers Elec Coop)	cents/KwHr		6.13
Employee Liability Insurance	\$/1,000 wages		\$20.00
Employee Benefits	percent/wages		18.00%
Labor Downtime	percent		25.00%
Financial Rates:			
Operating Capital Interest Rate	percent		6.50%
Land Interest Rate	percent		6.00%
Equipment Interest Rate	percent		6.50%
Real Interest Rate	percent		4.00%
Land Taxes	\$96.00 /acre (full value)		\$0.78
Personal Property Tax Rate	- NR	\$/1,000 (Assessed Value)	\$24.51
	- R		\$22.84
Supervision Factors			
Field Crop-Irrigation	\$/labor hour		\$1.00
Field Crop-Equipment & General	\$/labor hour		\$0.50
Management Rate	percent		7.00%

TABLE 3. Overhead cost information for the Arch Hurley Conservancy District, Quay County, Projected 2004.

Item			
Electricity (Domestic & Shop)		\$220.00 per month	\$2,640
Telephone		\$120.00 per month	\$1,440
Accounting & Legal			\$1,765
Misc. Supplies & Hand Tools			\$2,410
Pickup and Auto			
miles	20,600	@ \$0.365 per mile	\$7,519
Insurance			
- general liability (non-employee)			\$17,725
- fire/theft			\$1,395
Property Taxes			
- non-planted land			\$0
- other than land & machinery			\$630
Building repairs and maintenance			\$1,350
Dues, fees, publications			\$400
Farmstead Equipment			\$170
Total			\$37,444
Total per planted acre			\$62.41

TABLE 4. Pumping costs and data for irrigation wells, Arch Hurley Conservancy District, Quay County, Projected 2004.

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/KwHR
LP GAS	\$1.21	\$/GAL
DIESEL	\$1.50	\$/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		\$2.43
COST PER ACRE INCH		\$1.57

TABLE 5. Equipment summary for a 600 acre sprinkler-irrigated farm with above average management, Arch Hurley Conservancy District, Quay County, Projected 2004.

EQUIPMENT		ANNUAL HOURS OF USE	NUMBER	TOTAL VALUE	VARIABLE COSTS				FIXED COSTS		
ITEM & SIZE					FUEL, OIL, LUBRICANT	REPAIR	FUEL, OIL PER HR	REPAIR PER HR	DEPRECIATION	TAXES	TOTAL PER HR
TRACTOR	70 HP	303	1	\$4,840	\$1,682	\$1,039	\$5.54	\$3.43	\$705	\$86	\$2.61
TRACTOR	165 HP	424	1	\$25,350	\$5,744	\$3,610	\$13.55	\$8.51	\$4,652	\$285	\$11.64
COMBINE	95 HP	76	1	\$1,200	\$657	\$1,165	\$8.64	\$15.32	\$900	\$55	\$12.57
GRAIN HEAD	18 FT	76	1	\$13,290		\$1,966		\$25.87	\$1,519	\$93	\$21.22
SWATHER	16 FT SP	88	1	\$21,350	\$494	\$446	\$5.62	\$5.07	\$3,621	\$296	\$44.50
TRUCK	2 TON	76	1	\$22,000	\$724	\$3,578	\$9.53	\$47.08	\$4,400	\$180	\$60.26
DISC	14 FT	122	1	\$3,000		\$206		\$1.68	\$400	\$25	\$3.47
ROD WEEDER	23 FT	18	1	\$625		\$9		\$0.49	\$83	\$5	\$4.81
CULTIVATOR	6 ROW	30	1	\$2,500		\$54		\$1.80	\$333	\$20	\$11.83
DRILL	13 FT	35	1	\$2,150		\$121		\$3.44	\$430	\$18	\$12.75
PLANTER	6 ROW	39	1	\$4,250		\$286		\$7.31	\$850	\$35	\$22.63
FLOAT	12 FT	89	1	\$500		\$16		\$0.18	\$53	\$3	\$0.63
SPRAYER TRACTOR M	16 FT	39	1	\$1,400		\$94		\$2.41	\$187	\$11	\$5.07
FERT SPREADER		31	1	\$2,300		\$91		\$2.90	\$307	\$19	\$10.41
BALER PTO	2 WIRE	168	1	\$1,600		\$0		\$0.00	\$385	\$31	\$2.48
SWEE	23 FT	34	1	\$4,350		\$106		\$3.13	\$580	\$36	\$18.10
BALE WAGON, PTO		160	1	\$1,500		\$947		\$5.92	\$800	\$65	\$5.41
CENTER PIVOT SPRINKLER		7,196	1	\$17,250	\$3,598	\$1,151	\$0.50	\$0.16	\$2,300	\$141	\$0.34
ELECTRIC BOOSTER PUMP		7,196	1	\$2,500	\$8,930	\$1,346	\$1.24	\$0.19	\$333	\$20	\$0.05
				\$131,955	\$21,829	\$16,231			\$22,839	\$1,425	

TABLE 6. Alfalfa establishment, sprinkler-irrigated, budgeted per acre costs and returns for a 600 acre farm, Arch Hurley Conservancy District, Quay Count
 Projected 2004.

Planting dates: August 1 - September 15

ITEM	PRICE	QUANTITY	PURCHASED INPUTS					TOTAL
PURCHASE INPUTS								
SEED	\$2.80	16 LBS	\$44.80					\$44.80
OAT SEED	\$0.23	40 LBS	\$9.20					\$9.20
NITROGEN (N)	\$0.29	30 LBS	\$8.70					\$8.70
PHOSPHATE (P205)	\$0.20	60 LBS	\$12.00					\$12.00
CANAL WATER	\$6.00	6 AC. IN.	\$3.00					\$3.00
SUBTOTAL			\$77.70					\$77.70
PREHARVEST OPERATIONS								
	POWER UNIT	ACCOMPLISHMENT RATE	PURCHASED INPUTS	LABOR	FUEL & LUBE	REPAIRS	FIXED COST	TOTAL
CHISEL	145 HP	0.08 HR		\$0.60	\$1.08	\$0.93	\$2.38	\$5.00
DISC	145 HP	0.14 HR		\$1.06	\$1.90	\$1.43	\$2.12	\$6.50
FLOAT	145 HP	0.19 HR		\$1.43	\$2.57	\$1.65	\$2.33	\$7.99
FERT SPREADER	70 HP	0.05 HR		\$0.38	\$0.28	\$0.32	\$0.65	\$1.62
DRILL	70 HP	0.18 HR		\$1.36	\$1.00	\$1.24	\$2.76	\$6.36
IRRIGATE (3X)		0.30 HR		\$2.03	\$6.75	\$1.35	\$1.51	\$11.63
SUBTOTAL		0.94 HR	\$0.00	\$6.86	\$13.58	\$6.91	\$11.75	\$39.10
OVERHEAD EXPENSES								
DOWNTIME		0.24 HR		\$1.77				\$1.77
EMPLOYEE BENEFITS				\$1.23				\$1.23
INSURANCE			\$0.02					\$0.02
SUPERVISION AND MANAGEMENT				\$8.76				\$8.76
SUBTOTAL		0.24 HR	\$0.02	\$11.77				\$11.80
TOTAL OPERATING EXPENSES		1.18 HR	\$77.72	\$18.63	\$13.58	\$6.91	\$11.75	\$128.60

TABLE 7. 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 Projected 2004.
Harvesting dates: May 25 - October 15

ITEM	PRICE	YIELD						TOTAL	
GROSS RETURNS									
ALFALFA HAY	\$130.00	3.00 TONS (STACKED)						\$390.00	
GRAZING	\$48.00	1.00 ACRE						\$48.00	
TOTAL							\$438.00		
PURCHASED INPUTS									
PURCHASED INPUTS	PRICE	QUANTITY	PURCHASED INPUTS				FIXED COST	TOTAL	
PHOSPHATE (P205)	\$0.20	60 LBS	\$12.00					\$12.00	
WIRE	\$0.38	26 LBS	\$9.83					\$9.83	
ESTABLISHMENT: Principal		8 YEARS					\$16.07	\$16.07	
: Interest							\$4.58	\$4.58	
CANAL WATER: Assessment	\$6.00	1 ACRE	\$6.00					\$6.00	
Water	\$6.00	24 AC. IN.	\$12.00					\$12.00	
SUBTOTAL			\$39.83				\$20.66	\$60.49	
PREHARVEST OPERATIONS									
	POWER UNIT	ACCOMPLISHMENT RATE	PURCHASED INPUTS	LABOR	FUEL & LUBE	REPAIRS	FIXED COST	TOTAL	
FERT SPREADER	70 HP	0.05 HR		\$0.38	\$0.28	\$0.32	\$0.65	\$1.62	
IRRIGATE		1.20 HR		\$8.10	\$27.01	\$5.38	\$6.03	\$46.53	
SUBTOTAL		1.25 HR		\$8.48	\$27.29	\$5.70	\$6.68	\$48.15	
HARVEST OPERATIONS									
SWATHER (4X)	16 FT	0.44 HR		\$3.32	\$2.47	\$2.23	\$19.58	\$27.60	
BALER (4X)	70 HP	0.84 HR		\$6.34	\$4.66	\$2.88	\$4.27	\$18.15	
BALE WAGON, PTO (4X)	145 HP	0.80 HR		\$6.04	\$10.84	\$11.55	\$13.64	\$42.07	
SUBTOTAL		2.08 HR	\$0.00	\$15.70	\$17.97	\$16.66	\$37.50	\$87.82	
OVERHEAD EXPENSES									
DOWNTIME		0.83 HR		\$6.29				\$6.29	
EMPLOYEE BENEFITS				\$5.48				\$5.48	
INSURANCE			\$0.08					\$0.08	
LAND TAXES							\$0.78	\$0.78	
SUPERVISION AND MANAGEMENT				\$32.74				\$32.74	
OTHER EXPENSES			\$62.41					\$62.41	
SUBTOTAL		0.83 HR	\$62.49	\$44.51				\$0.78	\$107.78
TOTAL OPERATING EXPENSES		4.16 HR	\$102.32	\$68.69	\$45.26	\$22.36	\$65.62	\$304.25	
NET OPERATING PROFIT							\$133.75		
INTEREST ON OPERATING CAPITAL		(\$31.05	@	6.50%)		\$2.02	
INTEREST ON EQUIPMENT INVESTMENT								\$24.92	
RETURN TO LAND AND RISK							\$106.81		

BUDGET SUMMARY

GROSS RETURN		\$438.00	
VARIABLE OPERATING EXPENSES	\$169.94		
RETURN OVER VARIABLE EXPENSES		\$268.06	(GROSS MARGIN)
FIXED EXPENSES	\$65.62		
NET FARM INCOME		\$202.45	(RETURN TO CAPITAL, LABOR, LAND & RISK)
LABOR AND MANAGEMENT COST	\$68.69		
NET OPERATING PROFIT		\$133.75	(RETURN TO CAPITAL, LAND & RISK)
CAPITAL COSTS	\$26.94		
RETURN TO LAND AND RISK		\$106.81	

TABLE 8. Grain sorghum, sprinkler-irrigated, budgeted per acre costs and returns for a 600 acre farm with above average management, Arch Hurley Conservancy District, Quay Cc Projected 2004.

Planting dates: May 15 - July 1

Harvesting dates: October 15 - December 15

ITEM	PRICE	YIELD	BASE	TOTAL
GROSS RETURNS				
GRAIN SORGHUM	\$4.03	27.00 CWT		\$108.81
DIRECT PAYMENT	\$0.35	27.00 CWT	0.85	\$8.03
COUNTER CYCLICAL PAYMENT	\$0.00	0.00 CWT		\$0.00
GRAZING	\$48.00	1.00 ACRE		\$48.00
TOTAL				\$164.84

PURCHASED INPUTS	PRICE	QUANTITY	PURCHASED INPUTS	FIXED COST	TOTAL
SEED	\$1.30	7.00 LBS	\$9.10		\$9.10
NITROGEN (N)	\$0.29	80.00 LBS	\$23.20		\$23.20
PHOSPHATE (P205)	\$0.20	20.00 LBS	\$4.00		\$4.00
HERBICIDE (CUSTOM)	\$15.07	1.00 ACRE	\$15.07		\$15.07
CANAL WATER: Assessment	\$6.00	1.00 ACRE	\$6.00		\$6.00
Water	\$6.00	18.00 AC. IN.	\$9.00		\$9.00
CROP INSURANCE	\$0.22		\$0.22		\$0.22
SUBTOTAL			\$66.58		\$66.58

PREHARVEST OPERATIONS	POWER UNIT	ACCOMPLISHMENT RATE	PURCHASED INPUTS	LABOR	FUEL & LUBE	REPAIRS	FIXED COST	TOTAL
SWEEP	145 HP	0.08 HR		\$0.60	\$1.08	\$0.93	\$2.38	\$5.00
DISC	145 HP	0.14 HR		\$1.06	\$1.90	\$1.43	\$2.12	\$6.50
FLOAT	145 HP	0.19 HR		\$1.43	\$2.57	\$1.65	\$2.33	\$7.99
DISC & SPRAY	145 HP	0.17 HR		\$1.28	\$2.30	\$2.14	\$3.43	\$9.16
FERT SPREADER	70 HP	0.05 HR		\$0.38	\$0.28	\$0.32	\$0.65	\$1.62
ROD WEED	145 HP	0.08 HR		\$0.60	\$1.08	\$0.72	\$1.32	\$3.72
PLANTER	70 HP	0.17 HR		\$1.28	\$0.94	\$1.83	\$4.29	\$8.34
CULTIVATOR	70 HP	0.13 HR		\$0.98	\$0.72	\$0.68	\$1.88	\$4.26
IRRIGATE (12X)		1.20 HR		\$8.10	\$20.26	\$4.04	\$4.52	\$36.92
SUBTOTAL		2.21 HR		\$15.73	\$31.14	\$13.73	\$22.91	\$83.51
HARVEST OPERATIONS								
COMBINE	18 FT	0.19 HR		\$1.43	\$1.64	\$7.83	\$6.42	\$17.32
HAUL	2T	0.19 HR		\$1.43	\$1.81	\$8.95	\$11.45	\$23.64
SUBTOTAL		0.38 HR		\$2.87	\$3.45	\$16.77	\$17.87	\$40.96
OVERHEAD EXPENSES								
DOWNTIME		0.65 HR		\$4.89				\$4.89
EMPLOYEE BENEFITS				\$4.23				\$4.23
INSURANCE			\$0.08					\$0.08
LAND TAXES							\$0.78	\$0.78
SUPERVISION AND MANAGEMENT				\$13.48				\$13.48
OTHER EXPENSES			\$62.41					\$62.41
SUBTOTAL		0.65 HR	\$62.48	\$22.60			\$0.78	\$85.87
TOTAL OPERATING EXPENSES		3.89 HR	\$129.07	\$41.19	\$34.59	\$30.50	\$41.57	\$276.92
NET OPERATING PROFIT								(\$112.08)
INTEREST ON OPERATING CAPITAL		(\$46.20 @	6.50%)				\$3.00
INTEREST ON EQUIPMENT INVESTMENT								\$16.86
RETURN TO LAND AND RISK								(\$131.94)

BUDGET SUMMARY

GROSS RETURN	\$164.84	
VARIABLE OPERATING EXPENSES	\$194.17	
RETURN OVER VARIABLE EXPENSES	(\$29.32)	(GROSS MARGIN)
FIXED EXPENSES	\$41.57	
NET FARM INCOME	(\$70.89)	(RETURN TO CAPITAL, LABOR, LAND & RISK)
LABOR AND MANAGEMENT COST	\$41.19	
NET OPERATING PROFIT	(\$112.08)	(RETURN TO CAPITAL, LAND & RISK)
CAPITAL COSTS	\$19.86	
RETURN TO LAND AND RISK	(\$131.94)	

TABLE 9. Wheat, sprinkler-irrigated, budgeted per acre costs and returns for a 600 acre farm with above average management, Arch Hurley Conservancy District, Quay County Projected 2004.
 Planting dates: August 15 - September 15
 Harvesting dates: June 15 - July 10

ITEM	PRICE	YIELD	BASE	TOTAL
GROSS RETURNS				
WHEAT	\$3.75	25.00 BUSHELS		\$93.75
DIRECT PAYMENT	\$0.52	25.00 BUSHELS	0.85	\$11.05
COUNTER CYCLICAL PAYMENT	\$0.00			\$0.00
GRAZING	\$48.00	1.00 ACRE		\$48.00
TOTAL				\$152.80

PURCHASED INPUTS	PRICE	QUANTITY	PURCHASED INPUTS	FIXED COST	TOTAL
SEED	\$0.18	60.00 LBS	\$10.80		\$10.80
NITROGEN (N)	\$0.29	80.00 LBS	\$23.20		\$23.20
PHOSPHATE (P205)	\$0.20	20.00 LBS	\$4.00		\$4.00
HERBICIDE	\$15.07	1.00 ACRE	\$15.07		\$15.07
CANAL WATER: Assessment	\$6.00	1.00 ACRE	\$6.00		\$6.00
Water	\$6.00	12.00 AC. IN.	\$6.00		\$6.00
CROP INSURANCE	\$0.29		\$0.29		\$0.29
SUBTOTAL			\$65.36		\$65.36

PREHARVEST OPERATIONS	POWER UNIT	ACCOMPLISHMENT RATE	PURCHASED INPUTS	LABOR	FUEL & LUBE	REPAIRS	FIXED COST	TOTAL
CHISEL	145 HP	0.08 HR		\$0.60	\$1.08	\$0.93	\$2.38	\$5.00
DISC (2X)	145 HP	0.28 HR		\$2.11	\$3.79	\$2.85	\$4.23	\$12.99
FLOAT	145 HP	0.24 HR		\$1.81	\$3.25	\$2.09	\$2.95	\$10.10
FERT SPREADER	70 HP	0.05 HR		\$0.38	\$0.28	\$0.32	\$0.65	\$1.62
DRILL	70 HP	0.18 HR		\$1.36	\$1.00	\$1.24	\$2.76	\$6.36
IRRIGATE (8X)		0.80 HR		\$5.40	\$13.51	\$2.69	\$3.01	\$24.61
SUBTOTAL		1.63 HR		\$11.67	\$22.91	\$10.12	\$15.99	\$60.68

HARVEST OPERATIONS	POWER UNIT	ACCOMPLISHMENT RATE	PURCHASED INPUTS	LABOR	FUEL & LUBE	REPAIRS	FIXED COST	TOTAL
COMBINE	18 FT	0.19 HR		\$1.43	\$1.64	\$7.83	\$6.42	\$17.32
HAUL	2T	0.19 HR		\$1.43	\$1.81	\$8.95	\$11.45	\$23.64
SUBTOTAL		0.38 HR		\$2.87	\$3.45	\$16.77	\$17.87	\$40.96

OVERHEAD EXPENSES	ACCOMPLISHMENT RATE	PURCHASED INPUTS	LABOR	FUEL & LUBE	REPAIRS	FIXED COST	TOTAL
DOWNTIME	0.50 HR		\$1.88				\$1.88
EMPLOYEE BENEFITS			\$2.18				\$2.18
INSURANCE		\$0.05				\$0.78	\$0.78
LAND TAXES						\$0.78	\$0.78
SUPERVISION AND MANAGEMENT			\$7.64				\$7.64
OTHER EXPENSES		\$62.41					\$62.41
SUBTOTAL	0.50 HR	\$62.46	\$11.70			\$0.78	\$74.94

TOTAL OPERATING EXPENSES 2.51 HR \$127.82 \$26.24 \$26.36 \$26.89 \$34.64 \$241.94

NET OPERATING PROFIT (\$89.14)

INTEREST ON OPERATING CAPITAL (\$42.62 @ 6.50%) \$2.77
 INTEREST ON EQUIPMENT INVESTMENT \$13.78

RETURN TO LAND AND RISK (\$105.69)

BUDGET SUMMARY

GROSS RETURN	\$152.80		
VARIABLE OPERATING EXPENSES	\$181.07		
RETURN OVER VARIABLE EXPENSES		(\$28.27)	(GROSS MARGIN)
FIXED EXPENSES	\$34.64		
NET FARM INCOME		(\$62.91)	(RETURN TO CAPITAL, LABOR, LAND & RISK)
LABOR AND MANAGEMENT COST	\$26.24		
NET OPERATING PROFIT		(\$89.14)	(RETURN TO CAPITAL, LAND & RISK)
CAPITAL COSTS	\$16.55		
RETURN TO LAND AND RISK		(\$105.69)	

TABLE 10. Summary of per acre costs and returns for a 600 acre farm, Arch Hurley Conservancy District, Quay County, Projected 2004.

	ALFALFA ESTABLISHMENT	ALFALFA HAY	GRAIN SORGHUM	WHEAT
		TONS	CWT	BU
PRIMARY YIELD		3.00	27.00	25.00
PRIMARY PRICE		\$130.00	\$4.03	\$3.75
GOVERNMENT PAYMENTS		\$0.00	\$8.03	\$11.05
SECOND INCOME		\$48.00	\$48.00	\$48.00
GROSS RETURN		\$438.00	\$164.84	\$152.80
CASH OPERATING EXPENSES				
SEED	\$54.00		\$9.10	\$10.80
FERTILIZER	\$20.70	\$12.00	\$27.20	\$27.20
CHEMICALS			\$15.07	\$15.07
CROP INSURANCE			\$0.22	\$0.29
OTHER PURCHASED INPUTS		\$9.92	\$0.08	\$0.05
CANAL WATER	\$3.00	\$18.00	\$15.00	\$12.00
FUEL, OIL & LUBRICANTS-EQUIPMENT	\$6.83	\$18.24	\$14.33	\$12.86
FUEL-IRRIGATION	\$6.75	\$27.01	\$20.26	\$13.51
REPAIRS	\$6.91	\$22.36	\$30.50	\$26.89
CUSTOM CHARGES		\$0.00		
LAND TAXES		\$0.78	\$0.78	\$0.78
OTHER EXPENSES	\$0.02	\$62.41	\$62.41	\$62.41
TOTAL CASH EXPENSES	\$98.22	\$170.72	\$194.95	\$181.85
RETURN OVER CASH EXPENSES	-\$98.22	\$267.28	-\$30.11	-\$29.05
FIXED EXPENSES	\$11.75	\$64.83	\$40.78	\$33.86
TOTAL EXPENSES	\$109.97	\$235.55	\$235.73	\$215.71
NET FARM INCOME	-\$109.97	\$202.45	-\$70.89	-\$62.91
LABOR AND MANAGEMENT COSTS	\$18.63	\$68.69	\$41.19	\$26.24
NET OPERATING PROFIT	-\$128.60	\$133.75	-\$112.08	-\$89.14
CAPITAL COSTS				
INTEREST ON OPERATING CAPITAL		\$2.02	\$3.00	\$2.77
INTEREST ON EQUIPMENT INVESTMENT		\$24.92	\$16.86	\$13.78
TOTAL CAPITAL COSTS	\$0.00	\$26.94	\$19.86	\$16.55
RETURN TO LAND AND RISK	-\$128.60	\$106.81	-\$131.94	-\$105.69

TABLE 11. Whole farm summary, Arch Hurley Conservancy District, Quay County, Projected 2004.

GROSS RETURNS		
ALFALFA HAY	200.00 ACRES	
CROP		\$78,000
GRAZING		\$9,600
GRAIN SORGHUM	230.00 ACRES	
CROP		\$25,026
GRAZING		\$11,040
DIRECT PAYMENT		\$1,847
COUNTER CYCLICAL PAYMENT		\$0
WHEAT	170.00 ACRES	
CROP		\$15,938
GRAZING		\$8,160
DIRECT PAYMENT		\$1,216
COUNTER CYCLICAL PAYMENT		\$0
GROSS RETURN		<u>\$150,827</u>
CASH OPERATING EXPENSES		
SEED		\$5,279
FERTILIZER		\$13,798
CHEMICALS		\$6,026
CROP INSURANCE		\$100
OTHER PURCHASED INPUTS		\$2,010
CANAL WATER		\$9,165
FUEL, OIL & LUBRICANTS-EQUIPMENT		\$9,301
FUEL-IRRIGATION		\$12,528
REPAIRS		\$16,231
CUSTOM CHARGES		\$0
LAND TAXES		\$471
OTHER EXPENSES		\$37,445
TOTAL CASH EXPENSES		<u>\$112,353</u>
RETURN OVER CASH EXPENSES		\$38,474
FIXED EXPENSES		\$25,181
TOTAL EXPENSES		\$137,533
NET FARM INCOME		\$13,293
LABOR AND MANAGEMENT COSTS		\$28,138
NET OPERATING PROFIT		(\$14,845)
CAPITAL COSTS		
INTEREST ON OPERATING CAPITAL		\$1,565
INTEREST ON EQUIPMENT INVESTMENT		\$11,203
TOTAL CAPITAL COSTS		<u>\$12,768</u>
RETURN TO LAND AND RISK		<u>(\$27,613)</u>

LAND VALUE	RETURN TO RISK*	RETURN ON INVESTMENT**
\$200 /ACRE	(\$32,413)	-5.89%
\$400 /ACRE	(\$37,213)	-3.99%
\$600 /ACRE	(\$42,013)	-3.02%
\$800 /ACRE	(\$46,813)	-2.43%
\$1,000 /ACRE	(\$51,613)	-2.03%
\$1,200 /ACRE	(\$56,413)	-1.74%

* 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)