

TABLE 1. Acreage Summary, Quay County,  
Projected 2019

BUDGET AREA.....SOUTHERN QUAY COUNTY			
FARM SIZE.....1,000 ACRES			
IRRIGATION TYPE.....SPRINKLER/DRYLAND			
NUMBER OF CROPS.....2			
ACREAGE SUMMARY:	LAND USE (ACRES)	WATER USE	
		AC.IN. PER AC.	TOTAL AC.IN.
WHEAT	607.75	0	0
ARP	0.00		
FLEX IN GRAIN SORGHUM	107.25	0	0
GRAIN SORGHUM	212.50	12	2,550
ARP	0.00		
FLEX IN GRAIN SORGHUM	37.50	12	450
ROADS, HOMESTEAD, FALLOW	35.00		
<b>TOTAL</b>	<b>1,000.00</b>		<b>3,000</b>

TABLE 2. Basic cost information for Southern Quay County,  
Projected 2019

Item		
<b>Labor Wage Rate:</b>		
Equipment operators	\$/hour	\$8.55
General & Irrigators	\$/hour	\$7.50
<b>Purchased Inputs:</b>		
<b>Fertilizer:</b>		
Nitrogen (N)	\$/pound	\$0.42
Phosphate (P205)	\$/pound	\$0.49
<b>Seed:</b>		
Wheat	\$/pound	\$0.40
Grain Sorghum	\$/pound	\$2.05
<b>Energy Costs:</b>		
Diesel fuel	\$/gallon	\$2.65
Gasoline	\$/gallon	\$2.35
Electricity (Farmers Elec Coop)	cents/KwHr	8.27
LP Gas	\$/gallon	\$2.75
Employee Liability Insurance	\$/ \$1,000 wages	\$20.00
Employee Benefits	percent/wages	18.00%
Labor Downtime	percent	25.00%
<b>Financial Rates:</b>		
Operating Capital Interest Rate	percent	5.50%
Land Interest Rate	percent	5.00%
Equipment Interest Rate	percent	5.50%
Real Interest Rate	percent	3.00%
<b>Land Taxes</b>		
Irrigated	\$96.00 /acre (full value)	\$0.82
Dryland	\$38.00 /acre (full value)	\$0.33
Personal Property Tax Rate	- NR - R	-\$1,000 (Assessed Value) \$25.77 \$20.18
<b>Supervision Factors</b>		
Field Crop-Irrigation	\$/acre	\$1.00
Field Crop-Equipment & General	\$/acre	\$0.50
Management Rate	percent	7.00%

TABLE 3. Overhead cost information for Southern Quay County,  
Projected 2019

Item		
Electricity (Domestic & Shop)	\$256.00	per month \$3,072
Telephone	\$128.00	per month \$1,536
Accounting & Legal		\$1,882
Misc. Supplies & Hand Tools		\$2,822
Pickup and Auto		
miles	26,368	@ \$0.500 per mile \$13,184
<b>Insurance</b>		
- general liability (non-employee)		\$2,022
- fire/theft		\$1,600
<b>Property Taxes</b>		
- non-planted land		\$0
- other than land & machinery		\$6,010
Building repairs and maintenance		\$1,536
Dues, fees, publications		\$461
Farmstead Equipment		\$192
<b>Total</b>		<b>\$34,317</b>
	Total per planted acre	\$35.56
	Total per dryland acre	\$19.21

TABLE 6. Wheat, dryland, budgeted per acre costs and returns for a 1,000 acre farm with above average management, Southern Quay County, Projected 2019  
 Planting dates: August 20 - September 15  
 Harvesting dates: June 15 - July 10

ITEM	PRICE	YIELD	BASE						TOTAL
<b>GROSS RETURNS</b>									
WHEAT	\$5.10	20.00 BUSHELS							\$102.00
PROGRAM PAYMENT	\$0.00	20.00 BUSHELS	0.85						\$0.00
PLC PAYMENT	\$0.00								\$0.00
GRAZING	\$40.00	1.00 ACRE							\$40.00
<b>TOTAL</b>									<b>\$142.00</b>
<b>PURCHASED INPUTS</b>									
	PRICE	QUANTITY	PURCHASED INPUTS				FIXED COST		TOTAL
SEED	\$0.40	25 LBS	\$10.00						\$10.00
CROP INSURANCE	\$0.08		\$0.08						\$0.08
<b>SUBTOTAL</b>			<b>\$10.08</b>						<b>\$10.08</b>
<b>PREHARVEST OPERATIONS</b>									
	POWER UNIT	ACCOMPLISHMENT RATE	PURCHASED INPUTS	LABOR	FUEL & LUBE	REPAIRS	FIXED COST		TOTAL
SWEEP (2X)	185 HP	0.16 HR		\$1.37	\$4.39	\$1.76	\$3.73		\$11.26
STUBBLE MULCHER	185 HP	0.08 HR		\$0.68	\$2.20	\$1.21	\$3.26		\$7.35
RODWEED (2X)	126 HP	0.16 HR		\$1.37	\$3.50	\$0.76	\$1.73		\$7.35
DRILL	126 HP	0.12 HR		\$1.03	\$2.62	\$0.79	\$3.12		\$7.56
<b>SUBTOTAL</b>		<b>0.52 HR</b>		<b>\$4.45</b>	<b>\$12.71</b>	<b>\$4.52</b>	<b>\$11.85</b>		<b>\$33.52</b>
<b>HARVEST OPERATIONS</b>									
COMBINE	22 FT	0.14 HR		\$1.20	\$3.06	\$0.58	\$3.40		\$8.23
HAUL	2 TON	0.14 HR		\$1.20	\$2.36	\$0.90	\$4.72		\$9.18
<b>SUBTOTAL</b>		<b>0.28 HR</b>		<b>\$2.39</b>	<b>\$5.42</b>	<b>\$1.48</b>	<b>\$8.12</b>		<b>\$17.41</b>
<b>OVERHEAD EXPENSES</b>									
DOWNTIME		0.20 HR		\$1.71					\$1.71
EMPLOYEE BENEFITS				\$1.23					\$1.23
INSURANCE			\$0.14						\$0.14
LAND TAXES							\$0.33		\$0.33
SUPERVISION AND MANAGEMENT				\$10.94					\$10.94
OTHER EXPENSES			\$19.21						\$19.21
<b>SUBTOTAL</b>		<b>0.20 HR</b>	<b>\$19.35</b>	<b>\$13.88</b>			<b>\$0.33</b>		<b>\$33.56</b>
<b>TOTAL OPERATING EXPENSES</b>		<b>1.00 HR</b>	<b>\$29.43</b>	<b>\$20.72</b>	<b>\$18.13</b>	<b>\$6.00</b>	<b>\$20.30</b>		<b>\$94.57</b>
<b>NET OPERATING PROFIT</b>									<b>\$47.43</b>
INTEREST ON OPERATING CAPITAL		( \$9.92 @ 5.50% )							\$0.55
INTEREST ON EQUIPMENT INVESTMENT									\$8.26
<b>RETURN TO LAND AND RISK</b>									<b>\$38.62</b>
<b>BUDGET SUMMARY</b>									
GROSS RETURN			\$142.00						
VARIABLE OPERATING EXPENSES	\$53.55								
RETURN OVER VARIABLE EXPENSES		\$88.45		(GROSS MARGIN)					
FIXED EXPENSES	\$20.30								
NET FARM INCOME		\$68.15		(RETURN TO CAPITAL, LABOR, LAND & RISK)					
LABOR AND MANAGEMENT COST	\$20.72								
NET OPERATING PROFIT		\$47.43		(RETURN TO CAPITAL, LAND & RISK)					
CAPITAL COSTS	\$8.81								
<b>RETURN TO LAND AND RISK</b>			<b>\$38.62</b>						

TABLE 7. Grain sorghum, sprinkler-irrigated, budgeted per acre costs and returns for a 1,000 acre farm with above average management, Southern Quay County, Projected 2019  
Planting dates: June 15 - July 15  
Harvesting dates: September 20 - October 30

ITEM	PRICE	YIELD	BASE						TOTAL
<b>GROSS RETURNS</b>									
GRAIN SORGHUM	\$6.33	50.00 CWT							\$316.25
PROGRAM PAYMENT	\$0.00	0.00 CWT							\$0.00
PLC PAYMENT	\$0.00	50.00 CWT	0.85						\$0.00
<b>TOTAL</b>									<b>\$316.25</b>
<b>PURCHASED INPUTS</b>									
PURCHASED INPUTS	PRICE	QUANTITY	PURCHASED INPUTS					FIXED COST	TOTAL
SEED	\$2.05	5 LBS	\$10.25						\$10.25
NITROGEN (N)	\$0.42	80 LBS	\$33.60						\$33.60
PHOSPHATE (P205)	\$0.49	40 LBS	\$19.60						\$19.60
HERBICIDE	\$16.99	1 ACRE	\$16.99						\$16.99
PUMP WATER		12 AC. IN.							
CROP INSURANCE	\$0.14		\$0.14						\$0.14
<b>SUBTOTAL</b>			<b>\$80.58</b>						<b>\$80.58</b>
<b>PREHARVEST OPERATIONS</b>									
PURCHASED INPUTS	POWER UNIT	ACCOMPLISHMENT RATE	PURCHASED INPUTS	LABOR	FUEL & LUBE	REPAIRS	FIXED COST	TOTAL	
SWEEP	185 HP	0.08 HR		\$0.68	\$2.20	\$0.88	\$1.87	\$5.63	
DISC (2X)	185 HP	0.22 HR		\$1.88	\$6.04	\$3.28	\$7.04	\$18.24	
SPRAYER	126 HP	0.06 HR		\$0.51	\$1.31	\$0.28	\$1.17	\$3.28	
LISTER	185 HP	0.12 HR		\$1.03	\$3.29	\$0.99	\$3.07	\$8.38	
ROD WEED & PLANTER	185 HP	0.18 HR		\$1.54	\$4.94	\$1.52	\$5.90	\$13.90	
CULTIVATOR (2X)	126 HP	0.26 HR		\$2.22	\$5.68	\$2.00	\$3.86	\$13.77	
IRRIGATE (12X)		1.20 HR		\$9.00	\$49.98	\$0.00	\$10.32	\$69.30	
<b>SUBTOTAL</b>		<b>2.12 HR</b>		<b>\$16.87</b>	<b>\$73.44</b>	<b>\$8.95</b>	<b>\$33.23</b>	<b>\$132.49</b>	
<b>HARVEST OPERATIONS</b>									
COMBINE	22 FT	0.16		\$1.37	\$3.50	\$0.66	\$3.89	\$9.41	
HAUL	2 TON	0.16		\$1.37	\$2.69	\$1.03	\$5.40	\$10.49	
<b>SUBTOTAL</b>		<b>0.32 HR</b>		<b>\$2.74</b>	<b>\$6.19</b>	<b>\$1.69</b>	<b>\$9.28</b>	<b>\$19.90</b>	
<b>OVERHEAD EXPENSES</b>									
DOWNTIME		0.61 HR		\$5.22				\$5.22	
EMPLOYEE BENEFITS				\$3.53				\$3.53	
INSURANCE			\$0.39					\$0.39	
LAND TAXES							\$0.82	\$0.82	
SUPERVISION AND MANAGEMENT				\$23.14				\$23.14	
OTHER EXPENSES			\$35.56					\$35.56	
<b>SUBTOTAL</b>		<b>0.61 HR</b>		<b>\$35.95</b>	<b>\$31.88</b>		<b>\$0.82</b>	<b>\$68.66</b>	
<b>TOTAL OPERATING EXPENSES</b>		<b>2.73 HR</b>		<b>\$116.53</b>	<b>\$51.48</b>	<b>\$79.63</b>	<b>\$10.64</b>	<b>\$43.34</b>	<b>\$301.62</b>
<b>NET OPERATING PROFIT</b>									<b>\$14.63</b>
INTEREST ON OPERATING CAPITAL		( \$61.54 @	5.50%	)					\$3.38
INTEREST ON EQUIPMENT INVESTMENT									\$17.84
<b>RETURN TO LAND AND RISK</b>									<b>(\$6.60)</b>

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

**BUDGET SUMMARY**

GROSS RETURN		\$316.25	
VARIABLE OPERATING EXPENSES	\$206.80		
RETURN OVER VARIABLE EXPENSES	\$109.45	(GROSS MARGIN)	
FIXED EXPENSES	\$43.34		
NET FARM INCOME	\$66.11	(RETURN TO CAPITAL, LABOR, LAND & RISK)	
LABOR AND MANAGEMENT COST	\$51.48		
NET OPERATING PROFIT	\$14.63	(RETURN TO CAPITAL, LAND & RISK)	
CAPITAL COSTS	\$21.23		
RETURN TO LAND AND RISK		(\$6.60)	

TABLE 8. Summary of per acre costs and returns for a 1,000 acre farm, Southern Quay County, Projected 2019

	WHEAT (Dryland)	GRAIN SORGHUM (Sprinkler)
	BU	CWT
PRIMARY YIELD	20.00	50.00
PRIMARY PRICE	\$5.10	\$6.33
GOVERNMENT PAYMENTS	\$0.00	\$0.00
SECOND INCOME	\$40.00	\$0.00
GROSS RETURN	\$142.00	\$316.25
CASH OPERATING EXPENSES		
SEED	\$10.00	\$10.25
FERTILIZER		\$53.20
CHEMICALS		\$16.99
CROP INSURANCE	\$0.08	\$0.14
OTHER PURCHASED INPUTS		
CANAL WATER		
FUEL, OIL & LUBRICANTS-EQUIPMENT	\$18.13	\$29.66
FUEL-IRRIGATION		\$49.98
REPAIRS	\$6.00	\$10.64
CUSTOM CHARGES		
LAND TAXES	\$0.33	\$0.82
OTHER EXPENSES	\$19.35	\$35.95
TOTAL CASH EXPENSES	\$53.88	\$207.62
RETURN OVER CASH EXPENSES	\$88.12	\$108.63
FIXED EXPENSES	\$19.97	\$42.51
TOTAL EXPENSES	\$73.85	\$250.14
NET FARM INCOME	\$68.15	\$66.11
LABOR AND MANAGEMENT COSTS	\$20.72	\$51.48
NET OPERATING PROFIT	\$47.43	\$14.63
CAPITAL COSTS		
INTEREST ON OPERATING CAPITAL	\$0.55	\$3.38
INTEREST ON EQUIPMENT INVESTMENT	\$8.26	\$17.84
TOTAL CAPITAL COSTS	\$8.81	\$21.23
RETURN TO LAND AND RISK	\$38.62	(\$6.60)

TABLE 9. Whole farm summary, Southern Quay County,  
Projected 2019

GROSS RETURNS		
WHEAT	607.75 ACRES	
CROP		\$61,991
GRAZING		\$24,310
PROGRAM PAYMENT		\$0
PLC PAYMENT		\$0
GRAIN SORGHUM	357.25 ACRES	
CROP		\$112,980
PROGRAM PAYMENT		\$0
PLC PAYMENT		\$0
GROSS RETURN		<u>\$199,281</u>
CASH OPERATING EXPENSES		
SEED		\$9,739
FERTILIZER		\$19,006
CHEMICALS		\$6,068
CROP INSURANCE		\$100
OTHER PURCHASED INPUTS		\$0
CANAL WATER		\$0
FUEL, OIL & LUBRICANTS-EQUIPMENT		\$21,611
FUEL-IRRIGATION		\$17,854
REPAIRS		\$7,444
CUSTOM CHARGES		\$0
LAND TAXES		\$493
OTHER EXPENSES		\$24,604
TOTAL CASH EXPENSES		<u>\$106,919</u>
RETURN OVER CASH EXPENSES		\$92,362
FIXED EXPENSES		\$27,326
TOTAL EXPENSES		\$134,245
NET FARM INCOME		\$65,036
LABOR AND MANAGEMENT COSTS		\$30,986
NET OPERATING PROFIT		\$34,051
CAPITAL COSTS		
INTEREST ON OPERATING CAPITAL		\$1,541
INTEREST ON EQUIPMENT INVESTMENT		\$11,397
TOTAL CAPITAL COSTS		<u>\$12,938</u>
RETURN TO LAND AND RISK		<u>\$21,113</u>

LAND VALUE	RETURN TO RISK*	RETURN ON INVESTMENT**
\$150 /ACRE	\$16,613	9.59%
\$300 /ACRE	\$12,113	6.74%
\$450 /ACRE	\$7,613	5.20%
\$600 /ACRE	\$3,113	4.23%
\$750 /ACRE	(\$1,387)	3.56%
\$900 /ACRE	(\$5,887)	3.08%

\* 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)