

TABLE 1. Acreage Summary, San Juan County,  
Projected 2017

BUDGET AREA..... SAN JUAN COUNTY			
FARM SIZE..... 80 ACRES			
IRRIGATION TYPE..... FLOOD			
NUMBER OF CROPS... 3			
WATER USE			
ACREAGE SUMMARY:	LAND USE (ACRES)	AC. IN. PER AC.	TOTAL AC. IN.
ALFALFA ESTABLISHMENT	6.00	48	288
ALFALFA	34.00	60	2,040
PASTURE ESTABLISHMENT	1.00 *	21	21
PASTURE	20.00	62	1,240
CORN SILAGE	20.00	48	960
<b>TOTAL</b>	<b>80</b>		<b>4,549</b>
<b>ACRE FEET PER ACRE OF WATER RIGHTS</b>			<b>4.74</b>

\* DOUBLE-CROPPED

TABLE 2. Basic cost information for San Juan County,  
Projected 2017

Item			
<b>Labor Wage Rate:</b>			
Equipment operators		\$/hour	\$7.80
General & Irrigators		\$/hour	\$7.50
<b>Purchased Inputs:</b>			
<b>Fertilizer:</b>			
Nitrogen (N)		\$/pound	\$0.22
Phosphate (P205)		\$/pound	\$0.27
Anhydrous Ammonia (NH3)		\$/ton	\$717.00
<b>Seed:</b>			
Alfalfa		\$/pound	\$3.05
Oats		\$/pound	\$0.34
Pasture		\$/pound	\$2.60
Corn		\$/bag	\$300.00
Wire		\$/pound	\$1.32
Canal Water		\$/acre foot	\$30.50
<b>Energy:</b>			
Diesel fuel		\$/gallon	\$2.35
Gasoline		\$/gallon	\$2.10
Natural Gas		\$/MCF	\$4.00
LP Gas		\$/gallon	\$2.60
Electricity		cents/KwHr	12.31
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%
Land Taxes		\$253.00 /acre (full value)	\$2.44
Personal Property Tax Rate	- NR - R	\$/ \$1,000 (Assessed Value)	\$28.89 \$24.64
<b>Supervision Factors</b>			
Field Crop-Irrigation		\$/labor hour	\$1.00
Field Crop-Equipment & General		\$/labor hour	\$0.50
<b>Management Rate</b>		percent	<b>7.00%</b>

TABLE 3. Overhead cost information for San Juan County,  
Projected 2017

Item			
Electricity (Domestic & Shop)		\$127.05 per month	\$1,525
Telephone		\$84.70 per month	\$1,016
Accounting & Legal			\$538
Misc. Supplies & Hand Tools			\$908
Pickup and Auto			
miles	12,463	@ \$0.500 per mile	\$6,232
<b>Insurance</b>			
- general liability (non-employee)			\$1,125
- fire/theft			\$678
<b>Property Taxes</b>			
- non-planted land			\$0
- other than land & machinery			\$6,010
Building repairs and maintenance			\$563
Dues, fees, publications			\$278
Farmstead Equipment			\$182
<b>Total</b>			<b>\$19,054</b>
<b>Total per planted acre</b>			<b>\$257.48</b>

TABLE 4. Equipment summary for an 80-acre food-institution farm, San Juan County, Proposed 2017

EQUIPMENT	ITEM #	ANNUAL HOURS OF USE	VARIABLE COSTS				FIXED COSTS			
			TOTAL VALUE	FUEL, OIL, LUBRICANT	REPAIR PER HR	FUEL, OIL, REPAIR PER HR	DEPRECIATION	TAXES	TOTAL PER HR	
TRACTOR	40 HP	30	\$7,000	\$320	\$42	\$7.65	\$1.08	\$300	\$87	\$11.66
TRACTOR	80 HP	60	\$17,500	\$720	\$85	\$12.75	\$1.84	\$700	\$206	\$20.81
SWATHER	14 FT	17	\$5,000	\$156	\$10	\$7.65	\$0.54	\$1,400	\$140	\$11.99
BALE WAGON	2 ROW	23	\$1,500	\$33	\$3	\$1.50	\$0.15	\$300	\$37	\$46.60
BALWAGON PTD	12 FT	22	\$1,500	\$38	\$3	\$1.50	\$0.18	\$300	\$77	\$50.40
DISC	8	8	\$2,000	\$56	\$5	\$2.50	\$0.37	\$300	\$52	\$35.64
PLW	5-14 IN	18	\$3,000	\$75	\$7	\$1.65	\$0.22	\$447	\$32	\$26.47
SLAGE CHOPPER PTD	14	14	\$2,000	\$56	\$5	\$1.43	\$0.19	\$300	\$53	\$21.63
UNDRAWN WAGON	14	14	\$3,000	\$84	\$8	\$2.14	\$0.28	\$300	\$57	\$29.72
DISCHER	6	6	\$1,200	\$32	\$3	\$1.20	\$0.16	\$207	\$12	\$23.20
HARROW	12 FT	5	\$200	\$5	\$0	\$0.40	\$0.05	\$40	\$3	\$3.20
HARROW	12 FT	5	\$200	\$5	\$0	\$0.40	\$0.05	\$40	\$3	\$3.20
ORAL	12 FT	1	\$2,200	\$55	\$5	\$2.20	\$0.28	\$440	\$21	\$133.73
FLANER	14 ROW	5	\$2,400	\$63	\$6	\$2.40	\$0.30	\$360	\$13	\$117.50
CULTIVATOR	18 ROW	18	\$2,000	\$45	\$4	\$1.11	\$0.15	\$207	\$19	\$15.65
FERT SPREADER	DEALER FURNISHED	4	1							
			\$55,250	\$1,738	\$140			\$7,664	\$684	

EQUIPMENT LIST

ITEM	NEW VALUE	USED VALUE	YEARS LIFE	COST PER HOUR	FUEL CONSUMPTION	LUBE PER HOUR	ACCUM HOURS	INTEREST PER HOUR	AGE EXPENSE
TRACTOR	17975.00	17000.00	50.00	1.00	800.00	3.40	0.10	578.55	15.00
TRACTOR	16750.00	15750.00	30.00	1.00	800.00	3.54	0.10	2306.80	23.00
SWATHER	29000.00	39000.00	20.00	2.00	800.00	3.12	0.20	241.52	14.00
BALE WAGON	4000.00	1000.00	20.00	2.00	500.00	1.44	0.24	462.24	16.00
BALWAGON PTD	9000.00	1500.00	20.00	5.00	800.00	1.28	0.20	129.60	6.00
DISC	4000.00	2200.00	15.00	3.00	300.00	1.44	0.24	144.00	14.00
PLW	4700.00	2300.00	15.00	3.00	288.44	0.67	0.28	186.25	8.00
SLAGE CHOPPER PTD	16400.00	9300.00	20.00	10.00	100.00	1.40	0.20	100.00	14.00
UNDRAWN WAGON	7700.00	3800.00	20.00	5.00	300.00	1.19	0.20	211.79	15.00
DISCHER	2000.00	1200.00	15.00	4.00	300.00	0.50	0.10	15.00	15.00
HARROW	600.00	300.00	15.00	4.00	300.00	0.25	0.10	52.00	15.00
HARROW	12 FT	250.00	12.00	1.67	100.00	0.20	0.10	13.33	12.00
ORAL	4400.00	2200.00	15.00	8.00	100.00	1.11	0.20	127.00	15.00
FLANER	4800.00	2400.00	15.00	8.00	100.00	0.87	0.20	137.00	15.00
CULTIVATOR	4000.00	2000.00	15.00	3.00	300.00	292.32	0.20	18.00	115.00
FERT SPREADER	DEALER FURNISHED								

USAGE LIST

ITEM	ANNUAL HOURS					ANNUAL COSTS			CORN PER ACRE		
	ALFALFA	ALFALFA PASTURE	PASTURE	PERMANENT PASTURE	CORN FOR SLAGE	ANNUAL FUEL OIL REPAIR	INTEREST	AGE EXPENSE	BLDG	PER ACRE	TOTAL
TRACTOR	3.00	6.00	12.00	18.00	30.00	11.66	15.00	23.33	0.21	1.24	2.37
TRACTOR	6.00	12.00	24.00	36.00	60.00	20.81	23.00	46.60	0.21	1.34	2.37
SWATHER	1.67	3.33	6.67	10.00	17.00	11.99	14.00	23.99	0.00	0.00	0.64
BALE WAGON	1.00	2.00	4.00	6.00	10.00	46.60	16.00	21.75	0.00	0.00	0.84
BALWAGON PTD	0.90	1.80	3.60	5.40	9.00	50.40	6.00	48.00	0.00	0.00	0.80
DISC	0.25	0.50	1.00	1.50	2.50	35.64	14.00	21.75	0.00	0.00	1.00
PLW	0.22	0.44	0.88	1.32	2.22	26.47	8.00	34.47	0.00	0.00	0.87
SLAGE CHOPPER PTD	0.14	0.28	0.56	0.84	1.43	21.63	14.00	35.63	0.00	0.00	0.71
UNDRAWN WAGON	0.15	0.30	0.60	0.90	1.50	29.72	15.00	44.72	0.00	0.00	0.40
DISCHER	0.06	0.12	0.24	0.36	0.60	23.20	6.00	29.20	0.00	0.00	0.42
HARROW	0.05	0.10	0.20	0.30	0.50	3.20	15.00	18.20	0.00	0.00	0.28
HARROW	0.05	0.10	0.20	0.30	0.50	3.20	15.00	18.20	0.00	0.00	0.28
ORAL	0.07	0.14	0.28	0.42	0.71	133.73	15.00	148.73	0.00	0.00	1.26
FLANER	0.11	0.22	0.44	0.66	1.11	117.50	15.00	132.50	0.00	0.00	1.26
CULTIVATOR	0.21	0.42	0.84	1.26	2.10	15.65	15.00	30.65	0.00	0.00	0.28
FERT SPREADER	0.08	0.16	0.32	0.48	0.80				0.00	0.00	0.25

INTEREST PROGNOSIS

DATE	ALFALFA PASTURE	ANNUAL COST	CORN PER ACRE
1/1/17	3.00	11.11	1.17
2/1/17	3.45	12.45	1.33
3/1/17	4.05	14.05	1.51
4/1/17	4.80	16.80	1.78
5/1/17	5.70	19.65	2.15
6/1/17	6.75	23.63	2.62
7/1/17	7.95	28.83	3.21
8/1/17	9.30	35.25	3.94
9/1/17	10.80	42.90	4.83
10/1/17	12.45	51.75	5.88
11/1/17	14.25	61.88	7.10
12/1/17	16.20	73.20	8.50
1/1/18	18.30	85.70	10.00
2/1/18	20.55	99.45	11.60
3/1/18	22.95	114.45	13.40
4/1/18	25.50	130.75	15.40
5/1/18	28.20	148.40	17.60
6/1/18	31.05	167.35	20.00
7/1/18	34.05	187.65	22.60
8/1/18	37.20	209.40	25.40
9/1/18	40.50	232.65	28.40
10/1/18	43.95	257.40	31.70
11/1/18	47.55	283.65	35.20
12/1/18	51.30	311.40	39.00
1/1/19	55.20	340.65	43.10
2/1/19	59.25	371.40	47.50
3/1/19	63.45	403.65	52.10
4/1/19	67.80	437.40	57.00
5/1/19	72.30	472.65	62.10
6/1/19	76.95	509.40	67.50
7/1/19	81.75	547.65	73.20
8/1/19	86.70	587.40	79.20
9/1/19	91.80	628.65	85.50
10/1/19	97.05	671.40	92.10
11/1/19	102.45	715.65	99.00
12/1/19	108.00	761.40	106.20
1/1/20	113.70	808.65	113.70
2/1/20	119.55	857.40	121.50
3/1/20	125.55	907.65	129.60
4/1/20	131.70	959.40	138.00
5/1/20	138.00	1012.65	146.70
6/1/20	144.45	1067.40	155.70
7/1/20	151.05	1123.65	165.00
8/1/20	157.80	1181.40	174.60
9/1/20	164.70	1240.65	184.50
10/1/20	171.75	1301.40	194.70
11/1/20	178.95	1363.65	205.20
12/1/20	186.30	1427.40	216.00
1/1/21	193.80	1492.65	227.10
2/1/21	201.45	1559.40	238.50
3/1/21	209.25	1627.65	250.20
4/1/21	217.20	1697.40	262.20
5/1/21	225.30	1768.65	274.50
6/1/21	233.55	1841.40	287.10
7/1/21	241.95	1915.65	299.90
8/1/21	250.50	1991.40	312.90
9/1/21	259.20	2068.65	326.10
10/1/21	268.05	2147.40	339.60
11/1/21	277.05	2227.65	353.30
12/1/21	286.20	2309.40	367.20
1/1/22	295.50	2392.65	381.30
2/1/22	304.95	2477.40	395.60
3/1/22	314.55	2563.65	410.10
4/1/22	324.30	2651.40	424.80
5/1/22	334.20	2740.65	439.70
6/1/22	344.25	2831.40	454.80
7/1/22	354.45	2923.65	470.10
8/1/22	364.80	3017.40	485.60
9/1/22	375.30	3112.65	501.30
10/1/22	385.95	3209.40	517.20
11/1/22	396.75	3307.65	533.30
12/1/22	407.70	3407.40	549.60
1/1/23	418.80	3508.65	566.10
2/1/23	429.95	3611.40	582.80
3/1/23	441.25	3715.65	599.70
4/1/23	452.70	3821.40	616.80
5/1/23	464.30	3928.65	634.10
6/1/23	476.05	4037.40	651.60
7/1/23	487.95	4147.65	669.30
8/1/23	499.95	4259.40	687.20
9/1/23	512.10	4372.65	705.30
10/1/23	524.40	4487.40	723.60
11/1/23	536.85	4603.65	742.10
12/1/23	549.45	4721.40	760.80
1/1/24	562.20	4840.65	779.70
2/1/24	575.10	4961.40	798.80
3/1/24	588.15	5083.65	818.10
4/1/24	601.35	5207.40	837.60
5/1/24	614.70	5332.65	857.30
6/1/24	628.20	5459.40	877.20
7/1/24	641.85	5587.65	897.30
8/1/24	655.65	5717.40	917.60
9/1/24	669.60	5848.65	938.10
10/1/24	683.70	5981.40	958.80
11/1/24	697.95	6115.65	979.70
12/1/24	712.35	6251.40	1000.80
1/1/25	726.90	6388.65	1022.10
2/1/25	741.60	6527.40	1043.60
3/1/25	756.45	6667.65	1065.30
4/1/25	771.45	6809.40	1087.20
5/1/25	786.60	6952.65	1109.30
6/1/25	801.90	7097.40	1131.60
7/1/25	817.35	7243.65	1154.10
8/1/25	832.95	7391.40	1176.80
9/1/25	848.70	7540.65	1199.70
10/1/25	864.60	7691.40	1222.80
11/1/25	880.65		

TABLE 5. Alfalfa establishment, flood-irrigated, budgeted per acre costs and returns for an 80 acre farm, San Juan County, Projected 2017  
 Planting dates: April 15 - June 1  
 Harvest dates: June 1 - July 31

ITEM	PRICE	YIELD						TOTAL
<b>GROSS RETURNS</b>								
OAT HAY	#####	2.25 TONS (STACKED)						\$337.50
GRAZING	\$10.00	1.00 AUM						\$10.00
<b>TOTAL</b>							<b>\$347.50</b>	
<b>PURCHASED INPUTS</b>								
PURCHASED INPUTS	PRICE	QUANTITY	PURCHASED INPUTS				FIXED COST	TOTAL
ALFALFA SEED	\$3.05	20 LBS	\$61.00					\$61.00
OAT SEED	\$0.34	45 LBS	\$15.30					\$15.30
PHOSPHATE (P2O5)	\$0.27	45 LBS	\$12.15					\$12.15
WIRE	\$1.32	19 LBS	\$25.45					\$25.45
CANAL WATER		48 AC. IN.					\$122.00	\$122.00
CANAL WATER (MAINTENANCE)		1 ACRE					\$8.00	\$8.00
<b>SUBTOTAL</b>			<b>\$113.90</b>				<b>\$130.00</b>	<b>\$243.90</b>
<b>PREHARVEST OPERATIONS</b>								
PREHARVEST OPERATIONS	POWER UNIT	ACCOMPLISHMENT RATE	PURCHASED INPUTS	LABOR	FUEL & LUBE	REPAIRS	FIXED COST	TOTAL
PLow	96 HP	0.67 HR		\$5.23	\$8.57	\$3.42	\$21.70	\$38.91
DISC (2X)	96 HP	0.34 HR		\$2.65	\$4.35	\$1.27	\$13.92	\$22.19
HARROW	96 HP	0.19 HR		\$1.48	\$2.43	\$0.18	\$2.71	\$6.80
FERTILIZE	96 HP	0.05 HR		\$0.39	\$0.64	\$0.05	\$0.30	\$1.37
CORRUGATE	40 HP	0.21 HR		\$1.64	\$1.65	\$0.75	\$5.72	\$9.75
DRILL	96 HP	0.21 HR		\$1.64	\$2.69	\$0.42	\$67.12	\$71.87
DITCHER (2X)	40 HP	0.10 HR		\$0.78	\$0.79	\$0.11	\$4.09	\$5.76
IRRIGATE (6X)		3.00 HR		\$22.50				\$22.50
<b>SUBTOTAL</b>		<b>4.77 HR</b>		<b>\$36.31</b>	<b>\$21.11</b>	<b>\$6.19</b>	<b>\$115.55</b>	<b>\$179.16</b>
<b>HARVEST OPERATIONS</b>								
SWATHER	14 FT	0.16 HR		\$1.25	\$1.26	\$0.09	\$14.72	\$17.32
BALER	96 HP	0.21 HR		\$1.64	\$2.69	\$0.23	\$5.15	\$9.70
BALE WAGON	96 HP	0.20 HR		\$1.56	\$2.56	\$0.44	\$9.30	\$13.86
<b>SUBTOTAL</b>		<b>0.57 HR</b>		<b>\$4.45</b>	<b>\$6.50</b>	<b>\$0.77</b>	<b>\$29.17</b>	<b>\$40.89</b>
<b>OVERHEAD EXPENSES</b>								
DOWNTIME		2.16 HR		\$16.87				\$16.87
EMPLOYEE BENEFITS				\$7.34				\$7.34
INSURANCE			\$0.82					\$0.82
LAND TAXES							\$2.44	\$2.44
SUPERVISION AND MANAGEMENT				\$33.78				\$33.78
<b>SUBTOTAL</b>		<b>2.16 HR</b>	<b>\$0.82</b>	<b>\$57.99</b>			<b>\$2.44</b>	<b>\$61.24</b>
<b>TOTAL OPERATING EXPENSES</b>		<b>7.50 HR</b>	<b>\$114.72</b>	<b>\$98.74</b>	<b>\$27.61</b>	<b>\$6.96</b>	<b>\$277.16</b>	<b>\$525.18</b>
<b>NET OPERATING PROFIT</b>							<b>(\$177.68)</b>	
INTEREST ON OPERATING CAPITAL		(	\$64.38	@	5.50%	)	\$3.54	
INTEREST ON EQUIPMENT INVESTMENT							\$57.05	
<b>RETURN TO LAND AND RISK</b>							<b>(\$238.28)</b>	

TABLE 6. Alfalfa hay, flood-irrigated, budgeted per acre costs and returns for an 80 acre farm, San Juan County, Projected 2017  
Harvesting dates: June 1 - October 15

ITEM	PRICE	YIELD						TOTAL
<b>GROSS RETURNS</b>								
ALFALFA HAY	\$175.00	5.00	TONS (STACKED)					\$875.00
GRAZING	\$10.00	2.00	AUM					\$20.00
<b>TOTAL</b>								<b>\$895.00</b>
<b>PURCHASED INPUTS</b>								
PURCHASED INPUTS	PRICE	QUANTITY	PURCHASED INPUTS				FIXED COST	TOTAL
PHOSPHATE (P2O5)	\$0.27	45 LBS	\$12.15					\$12.15
INSECTICIDE (AERIAL)	\$17.25	1 ACRE	\$17.25					\$17.25
WIRE	\$1.32	43 LBS	\$56.56					\$56.56
ESTABLISHMENT: Principal		6 YEARS					\$39.71	\$39.71
: Interest							\$17.27	\$17.27
LIVESTOCK FAC & EQUIP							\$5.00	\$5.00
CANAL WATER		60 AC. IN.					\$152.50	\$152.50
CANAL WATER (MAINTENANCE)		1 ACRE					\$8.00	\$8.00
<b>SUBTOTAL</b>			<b>\$85.97</b>				<b>\$222.49</b>	<b>\$308.45</b>
<b>PREHARVEST OPERATIONS</b>								
PREHARVEST OPERATIONS	POWER UNIT	ACCOMPLISHMENT RATE	PURCHASED INPUTS	LABOR	FUEL & LUBE	REPAIRS	FIXED COST	TOTAL
FERTILIZE	96 HP	0.05 HR		\$0.39	\$0.64	\$0.05	\$0.30	\$1.37
DITCHER (2X)	40 HP	0.10 HR		\$0.78	\$0.79	\$0.11	\$4.09	\$5.76
IRRIGATE (10X)		5.00 HR		\$37.50				\$37.50
<b>SUBTOTAL</b>		<b>5.15 HR</b>		<b>\$38.67</b>	<b>\$1.42</b>	<b>\$0.16</b>	<b>\$4.38</b>	<b>\$44.64</b>
<b>HARVEST OPERATIONS</b>								
SWATHER (3X)	14 FT	0.48 HR		\$3.74	\$3.77	\$0.28	\$44.16	\$51.95
BALER (3X)	96 HP	0.63 HR		\$4.91	\$8.06	\$0.69	\$15.45	\$29.11
BALE WAGON (3X)	96 HP	0.60 HR		\$4.68	\$7.67	\$1.33	\$27.91	\$41.59
<b>SUBTOTAL</b>		<b>1.71 HR</b>		<b>\$13.34</b>	<b>\$19.50</b>	<b>\$2.30</b>	<b>\$87.51</b>	<b>\$122.66</b>
<b>OVERHEAD EXPENSES</b>								
DOWNTIME		0.44 HR		\$3.43				\$3.43
EMPLOYEE BENEFITS				\$9.36				\$9.36
INSURANCE			\$1.04					\$1.04
LAND TAXES							\$2.44	\$2.44
SUPERVISION AND MANAGEMENT				\$68.53				\$68.53
OTHER EXPENSES			\$257.48					\$257.48
<b>SUBTOTAL</b>		<b>0.44 HR</b>	<b>\$258.52</b>	<b>\$81.32</b>			<b>\$2.44</b>	<b>\$342.28</b>
<b>TOTAL OPERATING EXPENSES</b>		<b>7.30 HR</b>	<b>\$344.49</b>	<b>\$133.33</b>	<b>\$20.93</b>	<b>\$2.46</b>	<b>\$316.81</b>	<b>\$818.03</b>
<b>NET OPERATING PROFIT</b>								<b>\$76.97</b>
INTEREST ON OPERATING CAPITAL		(	\$45.20	@	5.50%	)		\$2.49
INTEREST ON EQUIPMENT INVESTMENT								\$48.12
<b>RETURN TO LAND AND RISK</b>								<b>\$26.37</b>
<b>BUDGET SUMMARY</b>								
GROSS RETURN		\$895.00						
VARIABLE OPERATING EXPENSES	\$367.88							
RETURN OVER VARIABLE EXPENSES	\$527.12	(GROSS MARGIN)						
FIXED EXPENSES	\$316.81							
NET FARM INCOME	\$210.30	(RETURN TO CAPITAL, LABOR, LAND & RISK)						
LABOR AND MANAGEMENT COST	\$133.33							
NET OPERATING PROFIT	\$76.97	(RETURN TO CAPITAL, LAND & RISK)						
CAPITAL COSTS	\$50.60							
<b>RETURN TO LAND AND RISK</b>		<b>\$26.37</b>						

TABLE 7. Permanent pasture establishment, flood-irrigated, budgeted per acre costs and returns for an 80 acre farm, San Juan County,  
 Projected 2017  
 Planting dates: August 15 - September 15

PURCHASED INPUTS	PRICE	QUANTITY	PURCHASED INPUTS				FIXED COST	TOTAL
SEED	\$2.60	14 LBS	\$36.40					\$36.40
NITROGEN (N)	\$0.22	20 LBS	\$4.40					\$4.40
PHOSPHATE (P205)	\$0.27	50 LBS	\$13.50					\$13.50
CANAL WATER		21 AC. IN.					\$53.38	\$53.38
CANAL WATER (MAINTENANCE)							\$8.00	\$8.00
SUBTOTAL			\$54.30				\$53.38	\$107.68

  

PREHARVEST OPERATIONS	POWER UNIT	ACCOMPLISHMENT RATE	PURCHASED INPUTS	LABOR	FUEL & LUBE	REPAIRS	FIXED COST	TOTAL
PLOW	96 HP	0.67 HR		\$5.23	\$8.57	\$3.42	\$21.70	\$38.91
DISC (2X)	96 HP	0.34 HR		\$2.65	\$4.35	\$1.27	\$13.92	\$22.19
HARROW	96 HP	0.19 HR		\$1.48	\$2.43	\$0.18	\$2.71	\$6.80
FERTILIZE	96 HP	0.05 HR		\$0.39	\$0.64	\$0.05	\$0.30	\$1.37
CORRUGATE	40 HP	0.21 HR		\$1.64	\$1.65	\$0.75	\$5.72	\$9.75
DRILL	96 HP	0.21 HR		\$1.64	\$2.69	\$0.42	\$67.12	\$71.87
DITCHER (2X)	40 HP	0.10 HR		\$0.78	\$0.79	\$0.11	\$4.09	\$5.76
IRRIGATE (3X)		1.50 HR		\$11.25				\$11.25
SUBTOTAL		3.27 HR		\$25.06	\$21.11	\$6.19	\$115.55	\$167.91

  

OVERHEAD EXPENSES								
DOWNTIME		0.44 HR		\$3.45				\$3.45
EMPLOYEE BENEFITS				\$4.51				\$4.51
INSURANCE			\$0.50					\$0.50
SUPERVISION AND MANAGEMENT				\$21.68				\$21.68
SUBTOTAL		0.44 HR	\$0.50	\$29.64				\$30.14

  

TOTAL OPERATING EXPENSES		3.71 HR	\$54.80	\$54.69	\$21.11	\$6.19	\$168.93	\$305.72
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TABLE 8. Permanent pasture, flood-irrigated, budgeted per acre costs and returns for an 80 acre farm, San Juan County,  
 Projected 2017  
 Harvesting dates: Year Round

ITEM	PRICE	YIELD						TOTAL
<b>GROSS RETURNS</b>								
PASTURE	\$12.00	12.00 AUMS						\$144.00
<b>TOTAL</b>							<b>\$144.00</b>	
<b>PURCHASED INPUTS</b>								
	PRICE	QUANTITY	PURCHASED INPUTS				FIXED COST	TOTAL
NITROGEN (N)	\$0.22	100 LBS	\$22.00					\$22.00
LIVESTOCK FAC & EQUIP ESTABLISHMENT: Principal		15 YEARS					\$5.00	\$5.00
: Interest							\$20.38	\$20.38
CANAL WATER		62 AC. IN.					\$4.51	\$4.51
CANAL WATER (MAINTENANCE)		1 ACRE					\$157.58	\$157.58
							\$8.00	\$8.00
<b>SUBTOTAL</b>			<b>\$22.00</b>				<b>\$195.47</b>	<b>\$217.47</b>
<b>PREHARVEST OPERATIONS</b>								
	POWER UNIT	ACCOMPLISHMENT RATE	PURCHASED INPUTS	LABOR	FUEL & LUBE	REPAIRS	FIXED COST	TOTAL
FERTILIZE	96 HP	0.05 HR		\$0.39	\$0.64	\$0.05	\$0.30	\$1.37
CORRUGATE	40 HP	0.21 HR		\$1.64	\$1.65	\$0.75	\$5.72	\$9.75
DITCHER (2X)	40 HP	0.10 HR		\$0.78	\$0.79	\$0.11	\$4.09	\$5.76
IRRIGATE (11X)		5.50 HR		\$41.25				\$41.25
<b>SUBTOTAL</b>		<b>5.86 HR</b>		<b>\$44.06</b>	<b>\$3.07</b>	<b>\$0.91</b>	<b>\$10.10</b>	<b>\$58.14</b>
<b>OVERHEAD EXPENSES</b>								
DOWNTIME		0.09 HR		\$0.70				\$0.70
EMPLOYEE BENEFITS				\$7.93				\$7.93
INSURANCE			\$0.88					\$0.88
LAND TAXES							\$2.44	\$2.44
SUPERVISION AND MANAGEMENT				\$15.76				\$15.76
OTHER EXPENSES			\$257.48					\$257.48
<b>SUBTOTAL</b>		<b>0.09 HR</b>	<b>\$258.36</b>	<b>\$24.39</b>			<b>\$2.44</b>	<b>\$285.19</b>
<b>TOTAL OPERATING EXPENSES</b>		<b>5.95 HR</b>	<b>\$280.36</b>	<b>\$68.45</b>	<b>\$3.07</b>	<b>\$0.91</b>	<b>\$208.01</b>	<b>\$560.80</b>
<b>NET OPERATING PROFIT</b>							<b>(\$416.80)</b>	
INTEREST ON OPERATING CAPITAL		( \$12.00 @	5.50%	)				\$0.66
INTEREST ON EQUIPMENT INVESTMENT								\$6.58
<b>RETURN TO LAND AND RISK</b>							<b>(\$424.04)</b>	
<b>BUDGET SUMMARY</b>								
GROSS RETURN			\$144.00					
VARIABLE OPERATING EXPENSES	\$284.35							
RETURN OVER VARIABLE EXPENSES		(\$140.35)	(GROSS MARGIN)					
FIXED EXPENSES	\$208.01							
NET FARM INCOME		(\$348.35)	(RETURN TO CAPITAL, LABOR, LAND & RISK)					
LABOR AND MANAGEMENT COST	\$68.45							
NET OPERATING PROFIT		(\$416.80)	(RETURN TO CAPITAL, LAND & RISK)					
CAPITAL COSTS	\$7.24							
RETURN TO LAND AND RISK		(\$424.04)						

TABLE 9. Corn for silage, flood-irrigated, budgeted per acre costs and returns for an 80 acre farm, San Juan County,  
 Projected 2017  
 Planting dates: May 1 - May 20  
 Harvesting dates: September 1 - September 30

ITEM	PRICE	YIELD	TOTAL
GROSS RETURNS			
CORN SILAGE	\$35.00	21.00 TONS (HAULED)	\$735.00
<b>TOTAL</b>			<b>\$735.00</b>

PURCHASED INPUTS	PRICE	QUANTITY	PURCHASED INPUTS	FIXED COST	TOTAL
SEED	\$3.75	30 000	\$112.50		\$112.50
ANHYDROUS AMMONIA (NH3)	\$0.36	225 LBS	\$80.66		\$80.66
HERBICIDE	\$16.00	1 ACRE	\$16.00		\$16.00
CANAL WATER		48 AC. IN.		\$122.00	\$122.00
CANAL WATER (MAINTENANCE)		1 ACRE		\$8.00	\$8.00
<b>SUBTOTAL</b>			<b>\$209.16</b>	<b>\$130.00</b>	<b>\$339.16</b>

PREHARVEST OPERATIONS	POWER UNIT	ACCOMPLISHMENT RATE	PURCHASED INPUTS	LABOR	FUEL & LUBE	REPAIRS	FIXED COST	TOTAL
FLOW	96 HP	0.67 HR		\$5.23	\$8.57	\$3.42	\$21.70	\$38.91
DISC (2X)	96 HP	0.34 HR		\$2.65	\$4.35	\$1.27	\$13.92	\$22.19
HARROW	96 HP	0.19 HR		\$1.48	\$2.43	\$0.18	\$2.71	\$6.80
FERTILIZE	96 HP	0.05 HR		\$0.39	\$0.64	\$0.05	\$0.30	\$1.37
CORRUGATE	40 HP	0.21 HR		\$1.64	\$1.65	\$0.75	\$5.72	\$9.75
PRE-IRRIGATE		0.75 HR		\$5.63				\$5.63
PLANTER	96 HP	0.26 HR		\$2.03	\$3.32	\$0.67	\$37.17	\$43.20
CULTIVATOR (2X)	40 HP	0.42 HR		\$3.28	\$3.30	\$1.49	\$11.43	\$19.50
IRRIGATE (9X)		4.50 HR		\$33.75				\$33.75
<b>SUBTOTAL</b>		<b>7.39 HR</b>		<b>\$56.07</b>	<b>\$24.26</b>	<b>\$7.83</b>	<b>\$92.94</b>	<b>\$181.09</b>

HARVEST OPERATIONS	POWER UNIT	ACCOMPLISHMENT RATE	PURCHASED INPUTS	LABOR	FUEL & LUBE	REPAIRS	FIXED COST	TOTAL
SILAGE CHOPPER, PTO	96 HP	0.71 HR		\$5.54	\$9.08	\$0.93	\$54.62	\$70.17
LOAD & HAUL	40 HP	0.71 HR		\$5.54	\$5.58	\$1.20	\$29.31	\$41.63
<b>SUBTOTAL</b>		<b>1.42 HR</b>		<b>\$11.08</b>	<b>\$14.66</b>	<b>\$2.13</b>	<b>\$83.94</b>	<b>\$111.81</b>

OVERHEAD EXPENSES	ACCOMPLISHMENT RATE	PURCHASED INPUTS	LABOR	FUEL & LUBE	REPAIRS	FIXED COST	TOTAL
DOWNTIME	0.89 HR		\$6.94				\$6.94
EMPLOYEE BENEFITS			\$12.09				\$12.09
INSURANCE		\$1.34					\$1.34
LAND TAXES						\$2.44	\$2.44
SUPERVISION AND MANAGEMENT			\$57.73				\$57.73
OTHER EXPENSES		\$257.48					\$257.48
<b>SUBTOTAL</b>	<b>0.89 HR</b>	<b>\$258.83</b>	<b>\$76.76</b>			<b>\$2.44</b>	<b>\$338.02</b>

<b>TOTAL OPERATING EXPENSES</b>	<b>9.70 HR</b>	<b>\$467.99</b>	<b>\$143.90</b>	<b>\$38.91</b>	<b>\$9.96</b>	<b>\$309.32</b>	<b>\$970.08</b>
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<b>NET OPERATING PROFIT</b>							<b>(\$235.08)</b>
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INTEREST ON OPERATING CAPITAL	(	\$114.00	@	5.50%	)		\$6.27
INTEREST ON EQUIPMENT INVESTMENT							\$87.68

<b>RETURN TO LAND AND RISK</b>							<b>(\$329.03)</b>
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BUDGET SUMMARY	
GROSS RETURN	\$735.00
VARIABLE OPERATING EXPENSES	\$516.86
RETURN OVER VARIABLE EXPENSES	\$218.14 (GROSS MARGIN)
FIXED EXPENSES	\$309.32
NET FARM INCOME	(\$91.18) (RETURN TO CAPITAL, LABOR, LAND & RISK)
LABOR AND MANAGEMENT COST	\$143.90
NET OPERATING PROFIT	(\$235.08) (RETURN TO CAPITAL, LAND & RISK)
CAPITAL COSTS	\$93.95
<b>RETURN TO LAND AND RISK</b>	<b>(\$329.03)</b>

TABLE 10. Summary of per acre costs and returns for an 80 acre farm, San Juan County,  
Projected 2017

	ALFALFA ESTABLISHMENT	ALFALFA HAY	ANNUAL PASTURE ESTABLISHMENT	ANNUAL PASTURE	CORN FOR SILAGE
	TONS	TONS		AUMS	TONS
PRIMARY YIELD	2.25	5.00		12.00	21.00
PRIMARY PRICE	\$150.00	\$175.00		\$12.00	\$35.00
GOVERNMENT PAYMENTS	\$0.00	\$0.00		\$0.00	\$0.00
SECOND INCOME	\$10.00	\$20.00		\$0.00	\$0.00
GROSS RETURN	\$347.50	\$895.00		\$144.00	\$735.00
CASH OPERATING EXPENSES					
SEED	\$76.30		\$36.40		\$112.50
FERTILIZER	\$12.15	\$12.15	\$17.90	\$22.00	\$80.66
CHEMICALS		\$17.25			\$16.00
CROP INSURANCE					
OTHER PURCHASED INPUTS	\$25.45	\$56.56	\$0.00	\$0.00	\$0.00
CANAL WATER					
FUEL, OIL & LUBRICANTS-EQUIPMENT	\$27.61	\$20.93	\$21.11	\$3.07	\$38.91
FUEL-IRRIGATION					
REPAIRS	\$6.96	\$2.46	\$6.19	\$0.91	\$9.96
CUSTOM CHARGES					
LAND TAXES	\$2.44	\$2.44		\$2.44	\$2.44
OTHER EXPENSES	\$0.82	\$258.52	\$0.50	\$258.36	\$258.83
TOTAL CASH EXPENSES	\$151.72	\$370.32	\$82.10	\$286.78	\$519.30
RETURN OVER CASH EXPENSES	\$195.78	\$524.68	(\$82.10)	(\$142.78)	\$215.70
FIXED EXPENSES	\$274.72	\$314.38	\$168.93	\$205.57	\$306.88
TOTAL EXPENSES	\$426.44	\$684.70	\$251.03	\$492.35	\$826.18
NET FARM INCOME	(\$78.94)	\$210.30	(\$251.03)	(\$348.35)	(\$91.18)
LABOR AND MANAGEMENT COSTS	\$98.74	\$133.33	\$54.69	\$68.45	\$143.90
NET OPERATING PROFIT	(\$177.68)	\$76.97	(\$305.72)	(\$416.80)	(\$235.08)
CAPITAL COSTS					
INTEREST ON OPERATING CAPITAL	\$3.54	\$2.49		\$0.66	\$6.27
INTEREST ON EQUIPMENT INVESTMENT	\$57.05	\$48.12		\$6.58	\$87.68
TOTAL CAPITAL COSTS	\$60.59	\$50.60	\$0.00	\$7.24	\$93.95
RETURN TO LAND AND RISK	(\$238.28)	\$26.37	(\$305.72)	(\$424.04)	(\$329.03)



TABLE 11. Whole farm summary, San Juan County,  
Projected 2017

GROSS RETURNS		
OAT HAY	6.00 ACRES	
CROP		\$2,025
GRAZING		\$60
ALFALFA HAY	34.00 ACRES	
CROP		\$29,750
GRAZING		\$680
PASTURE	20.00 ACRES	
GRAZING		\$2,880
CORN FOR SILAGE	20.00 ACRES	
CROP		\$14,700
GROSS RETURN		<u>\$50,095</u>
CASH OPERATING EXPENSES		
SEED		\$2,744
FERTILIZER		\$2,557
CHEMICALS		\$907
CROP INSURANCE		\$0
OTHER PURCHASED INPUTS		\$2,076
CANAL WATER		\$0
FUEL, OIL & LUBRICANTS-EQUIPMENT		\$1,738
FUEL-IRRIGATION		\$0
REPAIRS		\$349
CUSTOM CHARGES		\$0
LAND TAXES		\$195
OTHER EXPENSES		\$19,139
TOTAL CASH EXPENSES		<u>\$29,705</u>
RETURN OVER CASH EXPENSES		\$20,390
FIXED EXPENSES		\$20,997
TOTAL EXPENSES		\$50,702
NET FARM INCOME		(\$607)
LABOR AND MANAGEMENT COSTS		\$9,427
NET OPERATING PROFIT		(\$10,035)
CAPITAL COSTS		
INTEREST ON OPERATING CAPITAL		\$244
INTEREST ON EQUIPMENT INVESTMENT		\$3,863
TOTAL CAPITAL COSTS		<u>\$4,108</u>
RETURN TO LAND AND RISK		<u>(\$14,142)</u>

LAND VALUE	RETURN TO RISK*	RETURN ON INVESTMENT**
\$1,000 /ACRE	(\$16,542)	-7.42%
\$2,500 /ACRE	(\$20,142)	-3.93%
\$4,000 /ACRE	(\$23,742)	-2.67%
\$5,500 /ACRE	(\$27,342)	-2.03%
\$7,000 /ACRE	(\$30,942)	-1.63%
\$8,500 /ACRE	(\$34,542)	-1.36%

\* 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)