

TABLE 1. Acreage Summary, San Juan County,
Projected 2018

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
TOTAL	80		4,549
ACRE FEET PER ACRE OF WATER RIGHTS			4.74

* DOUBLE-CROPPED

TABLE 2. Basic cost information for San Juan County,
Projected 2018

Item		
Labor Wage Rate:		
Equipment operators	\$/hour	\$7.80
General & Irrigators	\$/hour	\$7.50
Purchased Inputs:		
Fertilizer:		
Nitrogen (N)	\$/pound	\$0.31
Phosphate (P205)	\$/pound	\$0.24
Anhydrous Ammonia (NH3)	\$/ton	\$420.00
Seed:		
Alfalfa	\$/pound	\$4.00
Oats	\$/pound	\$0.44
Pasture	\$/pound	\$3.25
Corn	\$/bag	\$240.00
Wire	\$/pound	\$1.32
Canal Water	\$/acre foot	\$30.50
Energy:		
Diesel fuel	\$/gallon	\$2.70
Gasoline	\$/gallon	\$2.40
Natural Gas	\$/MCF	\$4.00
LP Gas	\$/gallon	\$2.85
Electricity	cents/KwHr	12.31
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	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)	\$2.43
Personal Property Tax Rate	- NR \$/ \$1,000 (Assessed Value) - R	\$28.79 \$24.53
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 San Juan County,
Projected 2018

Item			
Electricity (Domestic & Shop)		\$133.35 per month	\$1,600
Telephone		\$88.90 per month	\$1,067
Accounting & Legal			\$565
Misc. Supplies & Hand Tools			\$953
Pickup and Auto			
miles	13,081	@ \$0.500 per mile	\$6,541
Insurance			
- general liability (non-employee)			\$1,181
- fire/theft			\$711
Property Taxes			
- non-planted land			\$0
- other than land & machinery			\$6,010
Building repairs and maintenance			\$591
Dues, fees, publications			\$292
Farmstead Equipment			\$191
Total			\$19,701
Total per planted acre			\$266.22

TABLE A. Equipment summary for an 80 acre flood irrigated farm, San Juan County, New Mexico.

EQUIPMENT	ANNUAL COSTS			VARIABLE COSTS				FIXED COSTS		
	ITEM #	SIZE	QTY	ANNUAL HOURS OF USE	FUEL, OIL, LUBRICANTS	REPAIR	FUEL, OIL, REPAIR PER HR	DEPRECIATION	TAXES	TOTAL PER HR
TRACTOR	40 HP		30	1	\$7,000	\$242	\$43	\$9.36	\$1.08	\$200
TRACTOR	95 HP		102	1	\$17,335	\$1,465	\$96	\$14.42	\$0.94	\$325
TRACTOR	14 FT		17	1	\$3,900	\$105	\$10	\$9.89	\$0.56	\$1,400
BALER PFD	2 WIRE		23	1	\$1,000	\$3	\$0.15	\$88	\$37	\$18.80
BALERS PFD			2	1	\$1,000					\$900
DISC	12 FT		6	1	\$2,200	\$36	\$2.79	\$300	\$22	\$30.00
PLOW	3-14 IN		18	1	\$3,000	\$71	\$4.15	\$447	\$32	\$26.47
SLAGE CHOPPER PFD			14	1	\$5,200	\$65	\$0.17	\$300	\$88	\$71.01
UNLOADING WAGON			14	1	\$3,800	\$9	\$0.62	\$300	\$30	\$26.71
DISCHER			1	1	\$2,000			\$107	\$12	\$29.25
HARROW	12 FT		5	1	\$300	\$0	\$0.01	\$40	\$2	\$8.36
DISCHER			12	1	\$2,000			\$46	\$21	\$10.86
PLANTER	4 ROW		5	1	\$3,400	\$45	\$1.63	\$88	\$23	\$137.04
CULTIVATOR	4 ROW		6	1	\$2,200	\$45	\$2.48	\$207	\$12	\$10.85
FERT SPREADER	DEALER FURNISHED		4	1						
					\$20,285	\$1,968	\$249			\$7.64
										\$61

EQUIPMENT LIST

ITEM	NEW VALUE	USED VALUE	YEARS LIFE	EQUP CODE	MAX HOURS	FUEL LINT/HR	LUBE COEF	ACUM HOURS	INTEREST AGE	EXPENSE
TRACTOR	40 HP	11975.00	7000.00	50.00	1.00	800.00	3.40	0.10	578.55	15.00
TRACTOR	95 HP	15715.00	13734.50	30.00	1.00	800.00	2.54	0.10	3296.80	23.00
TRACTOR	14 FT	2900.00	2390.00	20.00	2.00	800.00	3.12	0.30	241.92	14.00
BALERS PFD	2 WIRE	7000.00	1000.00	20.00	2.00	500.00			495.24	18.00
BALERS PFD		1000.00	1300.00	20.00	5.00	800.00			129.80	6.00
DISC	12 FT	6700.00	3300.00	15.00	3.00	300.00			289.44	16.00
PLOW	3-14 IN	16900.00	3300.00	20.00	2.00	100.00			149.80	14.00
SLAGE CHOPPER PFD		3700.00	3850.00	20.00	5.00	300.00			211.00	15.00
UNLOADING WAGON		2500.00	1200.00	10.00	4.00	300.00			91.50	8.00
DISCHER		12 FT	2000.00	10.00	4.00	200.00			82.08	16.00
HARROW	12 FT	4400.00	2200.00	10.00	8.00	100.00			19.11	13.00
PLANTER	4 ROW	4500.00	1500.00	10.00	8.00	100.00			67.00	13.00
CULTIVATOR	4 ROW	4000.00	2000.00	10.00	3.00	300.00			292.32	16.00
FERT SPREADER	DEALER FURNISHED					100.00				15.00

USAGE LIST

ALFALFA EST	ALFALFA EST	PASTURE PASTURE	CORN PLSG	ANNUAL FORAGE	ANNUAL FORAGE	PER ACRE TOTAL

0.31	0.10	0.31	1.34	2.37		
1.67	1.28	1.45	2.22	6.88		
0.15	0.48	0.00	0.00	0.64		
0.21	0.83	0.00	0.00	0.84		
0.20	0.00	0.00	0.00	0.80		
0.34	0.00	0.34	0.34	1.02		
0.17	0.00	0.17	0.00	0.17		
0.00	0.00	0.07	0.00	0.07		
0.00	0.00	0.00	0.71	0.71		
0.10	0.10	0.10	0.00	0.40		
0.10	0.00	0.10	0.00	0.47		
0.21	0.00	0.21	0.00	0.42		
0.00	0.00	0.00	0.00	0.26		
0.21	0.00	0.21	0.21	0.83	1.28	
0.05	0.05	0.00	0.00	0.25		

INTEREST PRODUCTION

DISC	ALFALFA EST	ALFALFA EST	ANNUAL PASTURE	ANNUAL PASTURE	CORN PLSG	FORAGE FORAGE	PER ACRE TOTAL

	3.31	2.08	3.31	17.77			
	7.95	5.45	0.21	6.35			
	7.25	21.15	0.00	0.00			
	1.05	5.88	0.00	0.00			
	4.00	12.20	0.00	0.80			
	4.08	0.00	0.00	4.98			
	6.42	0.00	0.00	6.42			
	0.00	0.00	0.00	25.30			
	0.00	0.00	0.00	10.58			
	1.13	1.13	0.00				
	0.81	0.00	0.00	0.81			
	17.29	0.00	0.00	0.00			
	6.28	0.00	0.00	9.28			
	1.26	0.00	0.00	1.26			
	0.00	0.00	0.00	3.79			
	0.00	0.00	0.00	0.00			

DISC

MACHINE	POWER UNIT	TIMES OVER	RATE	TOTAL	CUSTOM

FLOW	95 HP	1.00	0.47	0.47	
DISC (20)	95 HP	2.00	0.17	0.34	
HARROW	95 HP	1.00	0.19	0.19	
FERTILIZER	95 HP	1.00	0.05	0.05	
CORRIGATE	95 HP	1.00	0.21	0.21	
DISCHER (20)	40 HP	2.00	0.21	0.42	
BRIGATE (50)	40 HP	6.00	0.50	3.00	

SWATHER	14 FT	1.00	0.16	0.16	
BALER	95 HP	1.00	0.21	0.21	
BALE WAGON	95 HP	1.00	0.20	0.20	

ALFALFA MEY

MACHINE	POWER UNIT	TIMES OVER	RATE	TOTAL	CUSTOM

FLOW	95 HP	1.00	0.47	0.47	
DISC (20)	95 HP	2.00	0.17	0.34	
HARROW	95 HP	1.00	0.19	0.19	
FERTILIZER	95 HP	1.00	0.05	0.05	
CORRIGATE	95 HP	1.00	0.21	0.21	
DISCHER (20)	40 HP	2.00	0.21	0.42	
BRIGATE (100)	40 HP	10.00	0.50	5.00	

SWATHER (20)	14 FT	3.00	0.16	0.48	
BALER (20)	95 HP	3.00	0.21	0.63	
BALE WAGON (20)	95 HP	3.00	0.20	0.60	

PERMANENT PASTURE EST.

MACHINE	POWER UNIT	TIMES OVER	RATE	TOTAL	CUSTOM

FLOW	95 HP	1.00	0.47	0.47	
DISC (20)	95 HP	2.00	0.17	0.34	
HARROW	95 HP	1.00	0.19	0.19	
FERTILIZER	95 HP	1.00	0.05	0.05	
CORRIGATE	40 HP	1.00	0.21	0.21	
DISCHER (20)	40 HP	2.00	0.21	0.42	
BRIGATE (100)	40 HP	11.00	0.50	5.50	

PERMANENT PASTURE

MACHINE	POWER UNIT	TIMES OVER	RATE	TOTAL	CUSTOM

FERTILIZER	95 HP	1.00	0.05	0.05	
DISCHER (20)	40 HP	2.00	0.21	0.42	
BRIGATE (100)	40 HP	11.00	0.50	5.50	

FLOW	95 HP	1.00	0.47	0.47	
DISC (20)	95 HP	2.00	0.17	0.34	
FERTILIZER	95 HP	1.00	0.05	0.05	
CORRIGATE	40 HP	1.00	0.21	0.21	
PLANTER	95 HP	1.00	0.75	0.75	
CULTIVATOR (20)	40 HP	2.00	0.21	0.42	

ANNUAL REPAIR COSTS AS A PERCENT OF NEW VALUE

Years of Use	1	2	3	4	5	6	7	8	9
0	0.00000	0.00020	0.00040	0.00060	0.00080	0.00140	0.00240	0.00340	0.00440
10	0.00060	0.00120	0.00180	0.00240	0.00300	0.00400	0.00500	0.00600	0.00700
100	0.00020	0.00040	0.00060	0.00080	0.00140	0.00240	0.00340	0.00440	0.00540
1000	0.00020	0.00040	0.00060	0.00080	0.00140	0.00240	0.00340	0.00440	0.00540
300	0.00020	0.00040	0.00060	0.00080	0.00140	0.00240	0.00340	0.00440	0.00540
500	0.00020	0.00040	0.00060	0.00080	0.00140	0.00240	0.00340	0.00440	0.00540
700	0.00020	0.00040	0.00060	0.00080	0.00140	0.00240	0.00340	0.00440	0.00540
900	0.00020	0.00040	0.00060	0.00080	0.00140	0.00240	0.00340	0.00440	0.00540
1000	0.00020	0.00040	0.00060	0.00080	0.00140	0.00240	0.00340	0.00440	0.00540
1200	0.00020	0.00040	0.00060	0.00080	0.00140	0.00240	0.00340	0.00440	0.00540
1400	0.00020	0.00040	0.00060	0.00080	0.00140	0.00240	0.00340	0.00440	0.00540
1600	0.00020	0.00040	0.00060	0.00080	0.00140	0.00240	0.00340	0.00440	0.00540
1800	0.00020	0.00040	0.00060	0.00080	0.00140	0.00240	0.00340	0.00440	0.00540
2000	0.00020	0.00040	0.00060	0.00080	0.00140	0.00240	0.00340	0.00440	0.00540
2500	0.00020	0.00040	0.00060	0.00080	0.00140	0.00240	0.00340	0.00440	0.00540
3000	0.00020	0.00040	0.00060	0.00080	0.00140	0.00240	0.00340	0.00440	0.00540
4000	0.00020	0.00040	0.00060	0.00080	0.00140	0.00240	0.00340	0.00440	0.00540
5000	0.00020	0.00040	0.00060	0.00080	0.00140	0.00240	0.00340	0.00440	0.00540
6000	0.00020	0.00040	0.00060	0.00080	0.00140	0.00240	0.00340	0.00440	0.00540
7000	0.00020	0.00040	0.00060	0.00080	0.00140	0.00240	0.00340	0.00440	0.00540
8000	0.00020	0.00040	0.00060	0.00080	0.00140	0.00240	0.00340	0.00440	0.00540

Based on unpublished data of D. R. Hill, Department of Agricultural Engineering, University of Illinois.

** Based on "Agricultural Machinery Data" by Agricultural Engineers Yearbook, 1950.

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TABLE 5. Alfalfa establishment, flood-irrigated, budgeted per acre costs and returns for an 80 acre farm, San Juan County, Projected 2018
 Planting dates: April 15 - June 1
 Harvest dates: June 1 - July 31

ITEM	PRICE	YIELD						TOTAL
GROSS RETURNS								
OAT HAY	#####	2.25 TONS (STACKED)						\$360.00
GRAZING	\$10.00	1.00 AUM						\$10.00
TOTAL							\$370.00	
PURCHASED INPUTS								
PURCHASED INPUTS	PRICE	QUANTITY	PURCHASED INPUTS				FIXED COST	TOTAL
ALFALFA SEED	\$4.00	20 LBS	\$80.00					\$80.00
OAT SEED	\$0.44	45 LBS	\$19.80					\$19.80
PHOSPHATE (P2O5)	\$0.24	45 LBS	\$10.80					\$10.80
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
SUBTOTAL			\$136.05				\$130.00	\$266.05
PREHARVEST OPERATIONS								
	POWER UNIT	ACCOMPLISHMENT RATE	PURCHASED INPUTS	LABOR	FUEL & LUBE	REPAIRS	FIXED COST	TOTAL
PLOW	96 HP	0.67 HR		\$5.23	\$9.79	\$3.42	\$21.69	\$40.12
DISC (2X)	96 HP	0.34 HR		\$2.65	\$4.97	\$1.27	\$13.92	\$22.81
HARROW	96 HP	0.19 HR		\$1.48	\$2.78	\$0.18	\$2.71	\$7.15
FERTILIZE	96 HP	0.05 HR		\$0.39	\$0.73	\$0.05	\$0.30	\$1.46
CORRUGATE	40 HP	0.21 HR		\$1.64	\$1.88	\$0.75	\$5.71	\$9.98
DRILL	96 HP	0.21 HR		\$1.64	\$3.07	\$0.42	\$67.11	\$72.24
DITCHER (2X)	40 HP	0.10 HR		\$0.78	\$0.90	\$0.11	\$4.08	\$5.88
IRRIGATE (6X)		3.00 HR		\$22.50				\$22.50
SUBTOTAL		4.77 HR		\$36.31	\$24.12	\$6.19	\$115.53	\$182.15
HARVEST OPERATIONS								
SWATHER	14 FT	0.16 HR		\$1.25	\$1.44	\$0.09	\$14.71	\$17.49
BALER	96 HP	0.21 HR		\$1.64	\$3.07	\$0.23	\$5.15	\$10.08
BALE WAGON	96 HP	0.20 HR		\$1.56	\$2.92	\$0.44	\$9.30	\$14.23
SUBTOTAL		0.57 HR		\$4.45	\$7.43	\$0.77	\$29.16	\$41.80
OVERHEAD EXPENSES								
DOWNTIME		2.16 HR		\$16.87				\$16.87
EMPLOYEE BENEFITS				\$7.34				\$7.34
INSURANCE			\$0.82					\$0.82
LAND TAXES							\$2.43	\$2.43
SUPERVISION AND MANAGEMENT				\$35.54				\$35.54
SUBTOTAL		2.16 HR	\$0.82	\$59.75			\$2.43	\$62.99
TOTAL OPERATING EXPENSES		7.50 HR	\$136.87	\$100.50	\$31.55	\$6.96	\$277.11	\$552.99
NET OPERATING PROFIT							(\$182.99)	
INTEREST ON OPERATING CAPITAL		(\$76.29	@	5.50%)	\$4.20	
INTEREST ON EQUIPMENT INVESTMENT							\$57.05	
RETURN TO LAND AND RISK							(\$244.24)	

TABLE 6. Alfalfa hay, flood-irrigated, budgeted per acre costs and returns for an 80 acre farm, San Juan County, Projected 2018
Harvesting dates: June 1 - October 15

ITEM	PRICE	YIELD	TOTAL
GROSS RETURNS			
ALFALFA HAY	\$185.00	5.00 TONS (STACKED)	\$925.00
GRAZING	\$10.00	2.00 AUM	\$20.00
TOTAL			\$945.00

PURCHASED INPUTS	PRICE	QUANTITY	PURCHASED INPUTS	FIXED COST	TOTAL
PHOSPHATE (P2O5)	\$0.24	45 LBS	\$10.80		\$10.80
INSECTICIDE (AERIAL)	\$17.25	1 ACRE	\$17.25		\$17.25
WIRE	\$1.32	43 LBS	\$56.56		\$56.56
ESTABLISHMENT: Principal		6 YEARS		\$40.71	\$40.71
: Interest				\$17.47	\$17.47
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
SUBTOTAL			\$84.62	\$223.68	\$308.30

PREHARVEST OPERATIONS	POWER UNIT	ACCOMPLISHMENT RATE	PURCHASED INPUTS	LABOR	FUEL & LUBE	REPAIRS	FIXED COST	TOTAL
FERTILIZE	96 HP	0.05 HR		\$0.39	\$0.73	\$0.05	\$0.30	\$1.46
DITCHER (2X)	40 HP	0.10 HR		\$0.78	\$0.90	\$0.11	\$4.08	\$5.88
IRRIGATE (10X)		5.00 HR		\$37.50				\$37.50
SUBTOTAL		5.15 HR		\$38.67	\$1.63	\$0.16	\$4.38	\$44.84

HARVEST OPERATIONS	POWER UNIT	ACCOMPLISHMENT RATE	PURCHASED INPUTS	LABOR	FUEL & LUBE	REPAIRS	FIXED COST	TOTAL
SWATHER (3X)	14 FT	0.48 HR		\$3.74	\$4.31	\$0.28	\$44.14	\$52.48
BALER (3X)	96 HP	0.63 HR		\$4.91	\$9.21	\$0.69	\$15.44	\$30.25
BALE WAGON (3X)	96 HP	0.60 HR		\$4.68	\$8.77	\$1.33	\$27.90	\$42.68
SUBTOTAL		1.71 HR		\$13.34	\$22.29	\$2.30	\$87.48	\$125.41

OVERHEAD EXPENSES	ACCOMPLISHMENT RATE	PURCHASED INPUTS	LABOR	FUEL & LUBE	REPAIRS	FIXED COST	TOTAL
DOWNTIME	0.44 HR		\$3.43				\$3.43
EMPLOYEE BENEFITS			\$9.36				\$9.36
INSURANCE		\$1.04					\$1.04
LAND TAXES						\$2.43	\$2.43
SUPERVISION AND MANAGEMENT			\$72.03				\$72.03
OTHER EXPENSES		\$266.22					\$266.22
SUBTOTAL	0.44 HR	\$267.26	\$84.82			\$2.43	\$354.52

TOTAL OPERATING EXPENSES	7.30 HR	\$351.88	\$136.83	\$23.92	\$2.46	\$317.97	\$833.06
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NET OPERATING PROFIT							\$111.94
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INTEREST ON OPERATING CAPITAL	(\$44.80	@	5.50%)		\$2.46
INTEREST ON EQUIPMENT INVESTMENT							\$48.12

RETURN TO LAND AND RISK							\$61.35
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BUDGET SUMMARY

GROSS RETURN		\$945.00	
VARIABLE OPERATING EXPENSES	\$378.26		
RETURN OVER VARIABLE EXPENSES		\$566.74	(GROSS MARGIN)
FIXED EXPENSES	\$317.97		
NET FARM INCOME		\$248.77	(RETURN TO CAPITAL, LABOR, LAND & RISK)
LABOR AND MANAGEMENT COST	\$136.83		
NET OPERATING PROFIT		\$111.94	(RETURN TO CAPITAL, LAND & RISK)
CAPITAL COSTS	\$50.58		
RETURN TO LAND AND RISK		\$61.35	

TABLE 7. Permanent pasture establishment, flood-irrigated, budgeted per acre costs and returns for an 80 acre farm, San Juan County,
 Projected 2018
 Planting dates: August 15 - September 15

PURCHASED INPUTS	PRICE	QUANTITY	PURCHASED INPUTS				FIXED COST	TOTAL
SEED	\$3.25	14 LBS	\$45.50					\$45.50
NITROGEN (N)	\$0.31	20 LBS	\$6.20					\$6.20
PHOSPHATE (P205)	\$0.24	50 LBS	\$12.00					\$12.00
CANAL WATER		21 AC. IN.					\$53.38	\$53.38
CANAL WATER (MAINTENANCE)							\$8.00	\$8.00
SUBTOTAL			\$63.70				\$53.38	\$117.08

PREHARVEST OPERATIONS	POWER UNIT	ACCOMPLISHMENT RATE	PURCHASED INPUTS	LABOR	FUEL & LUBE	REPAIRS	FIXED COST	TOTAL
PLOW	96 HP	0.67 HR		\$5.23	\$9.79	\$3.42	\$21.69	\$40.12
DISC (2X)	96 HP	0.34 HR		\$2.65	\$4.97	\$1.27	\$13.92	\$22.81
HARROW	96 HP	0.19 HR		\$1.48	\$2.78	\$0.18	\$2.71	\$7.15
FERTILIZE	96 HP	0.05 HR		\$0.39	\$0.73	\$0.05	\$0.30	\$1.46
CORRUGATE	40 HP	0.21 HR		\$1.64	\$1.88	\$0.75	\$5.71	\$9.98
DRILL	96 HP	0.21 HR		\$1.64	\$3.07	\$0.42	\$67.11	\$72.24
DITCHER (2X)	40 HP	0.10 HR		\$0.78	\$0.90	\$0.11	\$4.08	\$5.88
IRRIGATE (3X)		1.50 HR		\$11.25				\$11.25
SUBTOTAL		3.27 HR		\$25.06	\$24.12	\$6.19	\$115.53	\$170.90

OVERHEAD EXPENSES								
DOWNTIME		0.44 HR		\$3.45				\$3.45
EMPLOYEE BENEFITS				\$4.51				\$4.51
INSURANCE			\$0.50					\$0.50
SUPERVISION AND MANAGEMENT				\$22.54				\$22.54
SUBTOTAL		0.44 HR	\$0.50	\$30.50				\$31.01

TOTAL OPERATING EXPENSES		3.71 HR	\$64.20	\$55.56	\$24.12	\$6.19	\$168.90	\$318.98
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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 2018
Harvesting dates: Year Round

ITEM	PRICE	YIELD						TOTAL
GROSS RETURNS								
PASTURE	\$12.00	12.00 AUMS						\$144.00
TOTAL								\$144.00
PURCHASED INPUTS								
	PRICE	QUANTITY	PURCHASED INPUTS				FIXED COST	TOTAL
NITROGEN (N)	\$0.31	100 LBS	\$31.00					\$31.00
LIVESTOCK FAC & EQUIP ESTABLISHMENT: Principal		15 YEARS					\$5.00	\$5.00
: Interest							\$21.27	\$21.27
CANAL WATER		62 AC. IN.					\$4.95	\$4.95
CANAL WATER (MAINTENANCE)		1 ACRE					\$157.58	\$157.58
							\$8.00	\$8.00
SUBTOTAL			\$31.00				\$196.79	\$227.79
PREHARVEST OPERATIONS								
	POWER UNIT	ACCOMPLISHMENT RATE	PURCHASED INPUTS	LABOR	FUEL & LUBE	REPAIRS	FIXED COST	TOTAL
FERTILIZE	96 HP	0.05 HR		\$0.39	\$0.73	\$0.05	\$0.30	\$1.46
CORRUGATE	40 HP	0.21 HR		\$1.64	\$1.88	\$0.75	\$5.71	\$9.98
DITCHER (2X)	40 HP	0.10 HR		\$0.78	\$0.90	\$0.11	\$4.08	\$5.88
IRRIGATE (11X)		5.50 HR		\$41.25				\$41.25
SUBTOTAL		5.86 HR		\$44.06	\$3.51	\$0.91	\$10.09	\$58.57
OVERHEAD EXPENSES								
DOWNTIME		0.09 HR		\$0.70				\$0.70
EMPLOYEE BENEFITS				\$7.93				\$7.93
INSURANCE			\$0.88					\$0.88
LAND TAXES							\$2.43	\$2.43
SUPERVISION AND MANAGEMENT				\$15.76				\$15.76
OTHER EXPENSES			\$266.22					\$266.22
SUBTOTAL		0.09 HR	\$267.11	\$24.39			\$2.43	\$293.93
TOTAL OPERATING EXPENSES		5.95 HR	\$298.11	\$68.45	\$3.51	\$0.91	\$209.32	\$580.29
NET OPERATING PROFIT								(\$436.29)
INTEREST ON OPERATING CAPITAL		(\$16.61	@	5.50%)		\$0.91
INTEREST ON EQUIPMENT INVESTMENT								\$6.58
RETURN TO LAND AND RISK								(\$443.78)
BUDGET SUMMARY								
GROSS RETURN			\$144.00					
VARIABLE OPERATING EXPENSES	\$302.53							
RETURN OVER VARIABLE EXPENSES		(\$158.53)	(GROSS MARGIN)					
FIXED EXPENSES	\$209.32							
NET FARM INCOME		(\$367.84)	(RETURN TO CAPITAL, LABOR, LAND & RISK)					
LABOR AND MANAGEMENT COST	\$68.45							
NET OPERATING PROFIT		(\$436.29)	(RETURN TO CAPITAL, LAND & RISK)					
CAPITAL COSTS	\$7.49							
RETURN TO LAND AND RISK		(\$443.78)						

TABLE 9. Corn for silage, flood-irrigated, budgeted per acre costs and returns for an 80 acre farm, San Juan County, Projected 2018
 Planting dates: May 1 - May 20
 Harvesting dates: September 1 - September 30

ITEM	PRICE	YIELD	TOTAL
GROSS RETURNS			
CORN SILAGE	\$32.00	21.00 TONS (HAULED)	\$672.00
TOTAL			\$672.00

PURCHASED INPUTS	PRICE	QUANTITY	PURCHASED INPUTS	FIXED COST	TOTAL
SEED	\$3.00	30 000	\$90.00		\$90.00
ANHYDROUS AMMONIA (NH3)	\$0.21	225 LBS	\$47.25		\$47.25
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
SUBTOTAL			\$153.25	\$130.00	\$283.25

PREHARVEST OPERATIONS	POWER UNIT	ACCOMPLISHMENT RATE	PURCHASED INPUTS	LABOR	FUEL & LUBE	REPAIRS	FIXED COST	TOTAL
PLOW	96 HP	0.67 HR		\$5.23	\$9.79	\$3.42	\$21.69	\$40.12
DISC (2X)	96 HP	0.34 HR		\$2.65	\$4.97	\$1.27	\$13.92	\$22.81
HARROW	96 HP	0.19 HR		\$1.48	\$2.78	\$0.18	\$2.71	\$7.15
FERTILIZE	96 HP	0.05 HR		\$0.39	\$0.73	\$0.05	\$0.30	\$1.46
CORRUGATE	40 HP	0.21 HR		\$1.64	\$1.88	\$0.75	\$5.71	\$9.98
PRE-IRRIGATE		0.75 HR		\$5.63				\$5.63
PLANTER	96 HP	0.26 HR		\$2.03	\$3.80	\$0.67	\$37.17	\$43.66
CULTIVATOR (2X)	40 HP	0.42 HR		\$3.28	\$3.77	\$1.49	\$11.43	\$19.97
IRRIGATE (9X)		4.50 HR		\$33.75				\$33.75
SUBTOTAL		7.39 HR		\$56.07	\$27.72	\$7.83	\$92.92	\$184.54

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	\$10.38	\$0.93	\$54.61	\$71.45
LOAD & HAUL	40 HP	0.71 HR		\$5.54	\$6.37	\$1.20	\$29.30	\$42.42
SUBTOTAL		1.42 HR		\$11.08	\$16.75	\$2.13	\$83.91	\$113.87

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						\$2.43	\$2.43
SUPERVISION AND MANAGEMENT			\$53.32				\$53.32
OTHER EXPENSES		\$266.22					\$266.22
SUBTOTAL	0.89 HR	\$267.57	\$72.35			\$2.43	\$342.34

TOTAL OPERATING EXPENSES	9.70 HR	\$420.82	\$139.49	\$44.47	\$9.96	\$309.26	\$924.00
NET OPERATING PROFIT							(\$252.00)
INTEREST ON OPERATING CAPITAL	(\$87.09	@	5.50%)		\$4.79
INTEREST ON EQUIPMENT INVESTMENT							\$87.68
RETURN TO LAND AND RISK							(\$344.47)

BUDGET SUMMARY			
GROSS RETURN		\$672.00	
VARIABLE OPERATING EXPENSES	\$475.25		
RETURN OVER VARIABLE EXPENSES		\$196.75	(GROSS MARGIN)
FIXED EXPENSES	\$309.26		
NET FARM INCOME		(\$112.51)	(RETURN TO CAPITAL, LABOR, LAND & RISK)
LABOR AND MANAGEMENT COST	\$139.49		
NET OPERATING PROFIT		(\$252.00)	(RETURN TO CAPITAL, LAND & RISK)
CAPITAL COSTS	\$92.47		
RETURN TO LAND AND RISK		(\$344.47)	

TABLE 10. Summary of per acre costs and returns for an 80 acre farm, San Juan County,
Projected 2018

	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	\$160.00	\$185.00		\$12.00	\$32.00
GOVERNMENT PAYMENTS	\$0.00	\$0.00		\$0.00	\$0.00
SECOND INCOME	\$10.00	\$20.00		\$0.00	\$0.00
GROSS RETURN	\$370.00	\$945.00		\$144.00	\$672.00
CASH OPERATING EXPENSES					
SEED	\$99.80		\$45.50		\$90.00
FERTILIZER	\$10.80	\$10.80	\$18.20	\$31.00	\$47.25
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	\$31.55	\$23.92	\$24.12	\$3.51	\$44.47
FUEL-IRRIGATION					
REPAIRS	\$6.96	\$2.46	\$6.19	\$0.91	\$9.96
CUSTOM CHARGES					
LAND TAXES	\$2.43	\$2.43		\$2.43	\$2.43
OTHER EXPENSES	\$0.82	\$267.26	\$0.50	\$267.11	\$267.57
TOTAL CASH EXPENSES	\$177.81	\$380.69	\$94.52	\$304.95	\$477.68
RETURN OVER CASH EXPENSES	\$192.19	\$564.31	(\$94.52)	(\$160.95)	\$194.32
FIXED EXPENSES	\$274.69	\$315.54	\$168.90	\$206.89	\$306.83
TOTAL EXPENSES	\$452.50	\$696.23	\$263.42	\$511.84	\$784.51
NET FARM INCOME	(\$82.50)	\$248.77	(\$263.42)	(\$367.84)	(\$112.51)
LABOR AND MANAGEMENT COSTS	\$100.50	\$136.83	\$55.56	\$68.45	\$139.49
NET OPERATING PROFIT	(\$182.99)	\$111.94	(\$318.98)	(\$436.29)	(\$252.00)
CAPITAL COSTS					
INTEREST ON OPERATING CAPITAL	\$4.20	\$2.46		\$0.91	\$4.79
INTEREST ON EQUIPMENT INVESTMENT	\$57.05	\$48.12		\$6.58	\$87.68
TOTAL CAPITAL COSTS	\$61.25	\$50.58	\$0.00	\$7.49	\$92.47
RETURN TO LAND AND RISK	(\$244.24)	\$61.35	(\$318.98)	(\$443.78)	(\$344.47)

TABLE 11. Whole farm summary, San Juan County,
Projected 2018

GROSS RETURNS		
OAT HAY	6.00 ACRES	
CROP		\$2,160
GRAZING		\$60
ALFALFA HAY	34.00 ACRES	
CROP		\$31,450
GRAZING		\$680
PASTURE	20.00 ACRES	
GRAZING		\$2,880
CORN FOR SILAGE	20.00 ACRES	
CROP		\$13,440
GROSS RETURN		<u>\$50,670</u>
CASH OPERATING EXPENSES		
SEED		\$2,444
FERTILIZER		\$2,015
CHEMICALS		\$907
CROP INSURANCE		\$0
OTHER PURCHASED INPUTS		\$2,076
CANAL WATER		\$0
FUEL, OIL & LUBRICANTS-EQUIPMENT		\$1,986
FUEL-IRRIGATION		\$0
REPAIRS		\$349
CUSTOM CHARGES		\$0
LAND TAXES		\$194
OTHER EXPENSES		\$19,786
TOTAL CASH EXPENSES		<u>\$29,758</u>
RETURN OVER CASH EXPENSES		\$20,912
FIXED EXPENSES		\$21,010
TOTAL EXPENSES		\$50,768
NET FARM INCOME		(\$98)
LABOR AND MANAGEMENT COSTS		\$9,470
NET OPERATING PROFIT		(\$9,568)
CAPITAL COSTS		
INTEREST ON OPERATING CAPITAL		\$223
INTEREST ON EQUIPMENT INVESTMENT		\$3,863
TOTAL CAPITAL COSTS		<u>\$4,086</u>
RETURN TO LAND AND RISK		<u>(\$13,654)</u>

LAND VALUE	RETURN TO RISK*	RETURN ON INVESTMENT**
\$1,000 /ACRE	(\$16,054)	-7.07%
\$2,500 /ACRE	(\$19,654)	-3.75%
\$4,000 /ACRE	(\$23,254)	-2.55%
\$5,500 /ACRE	(\$26,854)	-1.93%
\$7,000 /ACRE	(\$30,454)	-1.55%
\$8,500 /ACRE	(\$34,054)	-1.30%

* 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)