

TABLE 1. Acreage Summary, San Juan County,  
Actual 2023

BUDGET AREA.....	SAN JUAN COUNTY, 2023.		
FARM SIZE.....	80 ACRES		
IRRIGATION TYPE.....	SPRINKLER		
NUMBER OF CROPS.....	1		
	WATER USE		
<b>ACREAGE SUMMARY:</b>	LAND USE (ACRES)	AC.IN. PER AC.	TOTAL AC.IN.
ALFALFA ESTABLISHMENT	11.00	39	429
ALFALFA	69.00	46	3,174
<b>TOTAL</b>	<b>80.00</b>		<b>3,603</b>
<b>ACRE FEET PER ACRE OF WATER RIGHTS</b>			<b>3.75</b>

TABLE 2. Basic cost information for San Juan County,  
Actual 2023

Item			
<b>Labor Wage Rate:</b>			
Equipment operators		\$/hour	\$17.63
General & Irrigators		\$/hour	\$16.60
<b>Purchased Inputs:</b>			
<b>Fertilizer:</b>			
Phosphate (P205)		\$/pound	\$2.00
<b>Seed:</b>			
Alfalfa		\$/pound	\$4.50
Oats		\$/pound	\$0.56
Wire		\$/pound	\$1.32
Canal Water		\$/acre foot	\$45.00
<b>Energy:</b>			
Diesel fuel		\$/gallon	\$4.33
Gasoline		\$/gallon	\$2.60
Electricity		cents/KwHr	12.31
LP Gas		\$/gallon	\$2.45
Natural Gas		\$/MCF	\$2.71
(service charge)		\$/month	\$10.00
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	9.75%
Land Interest Rate		percent	9.15%
Equipment Interest Rate		percent	8.75%
Real Interest Rate		percent	3.00%
Land Taxes	\$392.00	/acre (full value)	\$3.78
Personal Property Tax Rate	- NR	\$/(\$1,000 (Assessed Value)	\$28.92
	- R		\$24.67
<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,  
Actual 2023

Item			
Electricity (Domestic & Shop)		\$134.40 per month	\$1,613
Telephone		\$96.00 per month	\$1,152
Accounting & Legal			\$570
Misc. Supplies & Hand Tools			\$960
Pickup and Auto			
miles	13,184	@ \$0.665 per mile	\$8,767
<b>Insurance</b>			
- general liability (non-employee)			\$1,190
- fire/theft			\$774
<b>Property Taxes</b>			
- non-farm land			\$0
- other than land & machinery			\$6,010
Building repairs and maintenance			\$595
Dues, fees, publications			\$294
Farmstead Equipment			\$192
<b>Total</b>			<b>\$22,118</b>
<b>Total per planted acre</b>			<b>\$320.55</b>



TABLE 7. Alfalfa hay, sprinkler-irrigated, budgeted per acre costs and returns for an 80 acre farm, San Juan County, Actual 2023  
Harvesting dates: June 1 - October 15

ITEM	PRICE	YIELD	TOTAL
<b>GROSS RETURNS</b>			
ALFALFA HAY	\$311.00	5.00 TONS (STACKED)	\$1,555.00
GRAZING	\$10.00	2.00 AUM	\$20.00
<b>TOTAL</b>			<b>\$1,575.00</b>

PURCHASED INPUTS	PRICE	QUANTITY	PURCHASED INPUTS	FIXED COST	TOTAL
PHOSPHATE (P2O5)	\$2.00	40.00 LBS	\$80.00		\$80.00
INSECTICIDE (AERIAL)	\$19.20	1.00 ACRE	\$19.20		\$19.20
WIRE	\$1.32	43.00 LBS	\$56.76		\$56.76
LIVESTOCK FAC & EQUIP ESTABLISHMENT: Principal		6.00 YEARS		\$5.00	\$5.00
: Interest				\$61.28	\$61.28
CANAL WATER		46.00 AC. IN.		\$42.00	\$42.00
CANAL WATER (MAINTENANCE)		1 ACRE		\$172.50	\$172.50
				\$8.00	\$8.00
<b>SUBTOTAL</b>			<b>\$155.96</b>	<b>\$288.78</b>	<b>\$444.74</b>

PREHARVEST OPERATIONS	POWER UNIT	ACCOMPLISHMENT RATE	PURCHASED INPUTS	LABOR	FUEL & LUBE	REPAIRS	FIXED COST	TOTAL
FERTILIZE	96 HP	0.05 HR		\$0.88	\$1.32	\$0.04	\$0.44	\$2.68
DITCHER (2X)	40 HP	0.10 HR		\$1.76	\$0.97	\$0.11	\$3.05	\$5.89
IRRIGATE (13X)		3.25 HR		\$53.95	\$42.52	\$0.00	\$10.66	\$107.13
<b>SUBTOTAL</b>		<b>3.40 HR</b>		<b>\$56.59</b>	<b>\$44.81</b>	<b>\$0.15</b>	<b>\$14.14</b>	<b>\$115.70</b>

HARVEST OPERATIONS	POWER UNIT	ACCOMPLISHMENT RATE	PURCHASED INPUTS	LABOR	FUEL & LUBE	REPAIRS	FIXED COST	TOTAL
SWATHER (3X)	14 FT	0.48 HR		\$8.46	\$7.78	\$0.26	\$20.75	\$37.25
BALER (3X)	40 HP	0.63 HR		\$11.11	\$6.13	\$0.74	\$10.94	\$28.91
BALE WAGON (3X)	96 HP	0.60 HR		\$10.58	\$15.82	\$1.31	\$17.31	\$45.02
<b>SUBTOTAL</b>		<b>1.71 HR</b>		<b>\$30.15</b>	<b>\$29.73</b>	<b>\$2.31</b>	<b>\$49.00</b>	<b>\$111.18</b>

OVERHEAD EXPENSES	ACCOMPLISHMENT RATE	PURCHASED INPUTS	LABOR	FUEL & LUBE	REPAIRS	FIXED COST	TOTAL
DOWNTIME	0.44 HR		\$7.76				\$7.76
EMPLOYEE BENEFITS			\$15.61				\$15.61
INSURANCE		\$1.73					\$1.73
LAND TAXES						\$3.78	\$3.78
SUPERVISION AND MANAGEMENT			\$114.38				\$114.38
OTHER EXPENSES		\$320.55					\$320.55
<b>SUBTOTAL</b>	<b>0.44 HR</b>	<b>\$322.29</b>	<b>\$137.75</b>			<b>\$3.78</b>	<b>\$463.82</b>

TOTAL OPERATING EXPENSES 5.55 HR \$478.25 \$224.49 \$74.54 \$2.46 \$355.70 \$1,135.43

NET OPERATING PROFIT \$439.57

INTEREST ON OPERATING CAPITAL ( \$91.89 @ 9.75% ) \$8.96  
INTEREST ON EQUIPMENT INVESTMENT \$54.76

RETURN TO LAND AND RISK \$375.85

BUDGET SUMMARY			
GROSS RETURN		\$1,575.00	
VARIABLE OPERATING EXPENSES	\$555.24		
RETURN OVER VARIABLE EXPENSES		\$1,019.76	(GROSS MARGIN)
FIXED EXPENSES	\$355.70		
NET FARM INCOME		\$664.06	(RETURN TO CAPITAL, LABOR, LAND & RISK)
LABOR AND MANAGEMENT COST	\$224.49		
NET OPERATING PROFIT		\$439.57	(RETURN TO CAPITAL, LAND & RISK)
CAPITAL COSTS	\$63.72		
RETURN TO LAND AND RISK		\$375.85	

TABLE 8. Summary of per acre costs and returns for an 80 acre farm, San Juan County,  
Actual 2023

	ALFALFA ESTABLISHMENT	ALFALFA HAY
	TONS	TONS
PRIMARY YIELD	2.25	5.00
PRIMARY PRICE	\$245.00	\$311.00
GOVERNMENT PAYMENTS	\$0.00	\$0.00
SECOND INCOME	\$10.00	\$20.00
GROSS RETURN	\$561.25	\$1,575.00
CASH OPERATING EXPENSES		
SEED	\$115.20	
FERTILIZER	\$90.00	\$80.00
CHEMICALS		\$19.20
CROP INSURANCE		
OTHER PURCHASED INPUTS	\$25.45	\$56.76
CANAL WATER		
FUEL, OIL & LUBRICANTS-EQUIPMENT	\$52.87	\$32.02
FUEL-IRRIGATION	\$36.05	\$42.52
REPAIRS	\$6.12	\$2.46
CUSTOM CHARGES		
LAND TAXES	\$3.78	\$3.78
OTHER EXPENSES	\$1.50	\$322.29
TOTAL CASH EXPENSES	\$330.97	\$559.02
RETURN OVER CASH EXPENSES	\$230.28	\$1,015.98
FIXED EXPENSES	\$314.16	\$351.92
TOTAL EXPENSES	\$645.13	\$910.94
NET FARM INCOME	(\$83.88)	\$664.06
LABOR AND MANAGEMENT COSTS	\$169.47	\$224.49
NET OPERATING PROFIT	(\$253.36)	\$439.57
CAPITAL COSTS		
INTEREST ON OPERATING CAPITAL	\$13.33	\$8.96
INTEREST ON EQUIPMENT INVESTMENT	\$100.98	\$54.76
TOTAL CAPITAL COSTS	\$114.31	\$63.72
RETURN TO LAND AND RISK	(\$367.66)	\$375.85

TABLE 9. Whole farm summary, San Juan County,  
Actual 2023

GROSS RETURNS		
OAT HAY	11.00 ACRES	
CROP		\$6,174
ALFALFA HAY	69.00 ACRES	
CROP		\$107,295
GRAZING		\$1,380
GROSS RETURN		<u>\$114,849</u>
CASH OPERATING EXPENSES		
SEED		\$1,267
FERTILIZER		\$6,510
CHEMICALS		\$1,325
CROP INSURANCE		\$0
OTHER PURCHASED INPUTS		\$4,196
CANAL WATER		\$0
FUEL, OIL & LUBRICANTS-EQUIPMENT		\$2,791
FUEL-IRRIGATION		\$3,330
REPAIRS		\$237
CUSTOM CHARGES		\$0
LAND TAXES		\$302
OTHER EXPENSES		\$22,254
TOTAL CASH EXPENSES		<u>\$42,213</u>
RETURN OVER CASH EXPENSES		\$72,636
FIXED EXPENSES		\$23,510
TOTAL EXPENSES		\$65,723
NET FARM INCOME		\$49,126
LABOR AND MANAGEMENT COSTS		\$17,354
NET OPERATING PROFIT		\$31,772
CAPITAL COSTS		
INTEREST ON OPERATING CAPITAL		\$765
INTEREST ON EQUIPMENT INVESTMENT		\$4,890
TOTAL CAPITAL COSTS		<u>\$5,654</u>
RETURN TO LAND AND RISK		<u>\$26,117</u>

LAND VALUE	RETURN TO RISK*	RETURN ON INVESTMENT**
\$1,000 /ACRE	\$23,717	25.28%
\$2,500 /ACRE	\$20,117	12.93%
\$4,000 /ACRE	\$16,517	8.69%
\$5,500 /ACRE	\$12,917	6.54%
\$7,000 /ACRE	\$9,317	5.25%
\$8,500 /ACRE	\$5,717	4.38%

\* 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)