

TABLE 1. Basic cost information for San Juan County Projected 2023

Item			
<b>Labor Wage Rate:</b>			
Equipment operators	\$/hour		17.63
General & Irrigators	\$/hour		16.60
<b>Purchased Inputs:</b>			
<b>Fertilizer:</b>			
Nitrogen (N)	\$/pound		0.83
Phosphate (P205)	\$/pound		2.00
<b>Seed:</b>			
Alfalfa	\$/pound		4.50
Oats	\$/pound		0.56
Pasture	\$/pound		2.60
Wire	\$/pound		1.32
Canal Water	\$/acre foot		10.75
<b>Energy:</b>			
Diesel fuel	\$/gallon		4.33
Gasoline	\$/gallon		2.60
Natural Gas	\$/MCF		2.71
LP Gas	\$/gallon		2.45
Electricity	cents/KwHr		12.31
Employee Liability Insurance	\$/ \$1,000 wages		12.00
Employee Benefits	percent/w ages		12.00%
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)		2.07
Personal Property Tax Rate - NR	\$/ \$1,000 (Assessed Value)		24.67
- R			28.92
<b>Supervision Factors</b>			
Field Crop-Irrigation	\$/labor hour		1.00
Field Crop-Equipment & General	\$/labor hour		0.50
Management Rate	percent		4.00%

BUDGET AREA..... SAN JUAN COUNTY Projected 2023  
 FARM SIZE..... 20 ACRES  
 IRRIGATION TYPE..... FLOOD  
 NUMBER OF CROPS..... 2

ACREAGE SUMMARY:	LAND USE (ACRES)	WATER USE	
		AC. IN. PER AC.	TOTAL AC. IN.
ALFALFA ESTABLISHMENT	1.5	48	72.0
ALFALFA	9.0	60	540.0
PASTURE ESTABLISHMENT	0.5 *	21	10.5
PASTURE	10.0	62	620.0
TOTAL	20.5		1,242.5
ACRE FEET PER ACRE OF WATER RIGHTS			5.05

\* DOUBLE-CROPPED

TABLE 1a. Overhead cost information for San Juan County. Projected 2023

ITEM		CROP ENTERPRISE	LIVESTOCK ENTERPRISE	TOTAL
Electricity (Domestic & Shop)	38.40 per month	420	42	462
Telephone	38.40 per month	420	42	462
Accounting & Legal		130		147
Misc. Supplies & Hand Tools		245	25	324
Pickup and Auto	Crop Ent. Livestock Ent.			
miles	3,100 1,545 @	0.665 per mile	1,132 564	1,695
<b>Insurance</b>				
- general liability (non-employee)		0		0
- fire/theft		0		0
<b>Property Taxes</b>				
- non-planted land		0		0
- other than land & machinery		60		60
Building repairs and maintenance		115	12	141
Dues, fees, publications		115	6	134
Farmstead Equipment		175	18	225
	Total	2,812	707	3,519
Total per planted acre		137.15		

TABLE 4. Alfalfa establishment, flood-irrigated, budgeted per acre costs and returns for a 20 acre part-time farm, San Juan County. Projected 2023  
 Planting dates: April 15 - June 1  
 Harvest dates: June 15 - July 1

ITEM	PRICE	YIELD						TOTAL
<b>GROSS RETURNS</b>								
OAT HAY	245.00	2.00 TONS (IN FIELD)						490.00
<b>TOTAL</b>								490.00
<b>PURCHASED INPUTS</b>								
PURCHASED INPUTS	PRICE	QUANTITY	PURCHASED INPUTS					TOTAL
ALFALFA SEED	4.50	20.00 LBS	90.00					90.00
OAT SEED	0.56	45.00 LBS	25.20					25.20
PHOSPHATE (P2O5)	2.00	45.00 LBS	90.00					90.00
CANAL WATER		48.00 AC. IN.			75.00			75.00
CANAL WATER (MAINTENANCE)		1 ACRE			8.00			8.00
<b>SUBTOTAL</b>			205.20		83.00			288.20
<b>PREHARVEST OPERATIONS</b>								
PREHARVEST OPERATIONS	POWER UNIT	ACCOMPLISHMENT RATE	PURCHASED INPUTS	LABOR	FUEL & LUBE	REPAIRS	FIXED COST	TOTAL
PLOW	65 HP	0.83 HR		14.63	10.49	0.21	3.71	29.04
DISC (2X)	65 HP	0.84 HR		14.81	10.62	0.21	3.75	29.39
FERTILIZE	65 HP	0.05 HR		0.88	0.63	0.01	0.22	1.75
CORRUGATE	65 HP	0.41 HR		7.23	5.18	0.10	2.84	15.36
DRILL	65 HP	0.33 HR		5.82	4.17	0.08	1.47	11.55
DITCHER	65 HP	0.10 HR		1.76	1.26	0.02	0.45	3.50
IRRIGATE (6X)		3.00 HR		49.80				49.80
<b>SUBTOTAL</b>		5.56 HR		94.93	32.36	0.64	12.45	140.38
<b>HARVEST OPERATIONS</b>								
MOWER	65 HP	0.45 HR		7.93	5.69	0.37	6.97	20.96
RAKE	65 HP	0.26 HR		4.58	3.29	0.15	4.02	12.05
BALER (CUSTOM)			65.60					65.60
<b>SUBTOTAL</b>		0.71 HR	65.60	12.52	8.98	0.52	11.00	98.61
<b>OVERHEAD EXPENSES</b>								
DOWNTIME		2.43 HR		42.75				42.75
EMPLOYEE BENEFITS				12.89				12.89
INSURANCE			1.29					1.29
LAND TAXES							2.23	2.23
SUPERVISION AND MANAGEMENT				21.78				21.78
OTHER EXPENSES			190.08					190.08
<b>SUBTOTAL</b>		2.43 HR	191.37	77.42			2.23	271.02
<b>TOTAL OPERATING EXPENSES</b>		8.70 HR	462.17	184.88	41.34	1.16	108.67	798.21
<b>NET OPERATING PROFIT</b>								-308.21
INTEREST ON OPERATING CAPITAL (		117.11 @	0.10 )					11.42
INTEREST ON EQUIPMENT INVESTMENT								28.84
<b>RETURN TO LAND AND RISK</b>								-348.47

TABLE 5. Alfalfa hay, flood-irrigated, budgeted per acre costs and returns for a 20 acre part-time farm,  
 San Juan County Projected 2023  
 Harvesting dates: June 10 - October 15

ITEM	PRICE	YIELD						TOTAL	
<b>GROSS RETURNS</b>									
ALFALFA HAY	311.00	5.50 TONS (IN FIELD)						1,710.50	
GRAZING	10.00	1.40 AUM						14.00	
<b>TOTAL</b>								<b>1,724.50</b>	
PURCHASED INPUTS		PRICE	QUANTITY	PURCHASED INPUTS				FIXED COST	TOTAL
PHOSPHATE (P2O5)	2.00	45.00 LBS	90.00				90.00		
ESTABLISHMENT: Principal		6.00 YEARS					58.08	58.08	
: Interest							28.01	28.01	
LIVESTOCK FAC & EQUIP							5.00	5.00	
CANAL WATER		60.00 AC. IN.					93.75	93.75	
CANAL WATER (MAINTENANCE)		1 ACRE					8.00	8.00	
<b>SUBTOTAL</b>			<b>90.00</b>				<b>192.83</b>	<b>282.83</b>	
PREHARVEST OPERATIONS	POWER UNIT	ACCOMPLISHMENT RATE	PURCHASED INPUTS	LABOR	FUEL & LUBE	REPAIRS	FIXED COST	TOTAL	
FERTILIZE	65 HP	0.05 HR		0.88	0.63	0.01	0.22	1.75	
DITCHER	65 HP	0.10 HR		1.76	1.26	0.02	0.45	3.50	
CORRUGATE	65 HP	0.41 HR		7.23	5.18	0.10	2.84	15.36	
IRRIGATE (10X)		5.00 HR		83.00				83.00	
<b>SUBTOTAL</b>		<b>5.56 HR</b>		<b>92.87</b>	<b>7.08</b>	<b>0.14</b>	<b>3.51</b>	<b>103.61</b>	
<b>HARVEST OPERATIONS</b>									
MOWER (3X)	65 HP	1.35 HR		23.80	17.07	1.11	20.92	62.89	
RAKE (3X)	65 HP	0.78 HR		13.75	9.86	0.45	12.07	36.14	
BALER (CUSTOM)			180.40					180.40	
<b>SUBTOTAL</b>		<b>2.13 HR</b>	<b>180.40</b>	<b>37.55</b>	<b>26.93</b>	<b>1.56</b>	<b>32.99</b>	<b>279.43</b>	
<b>OVERHEAD EXPENSES</b>									
DOWNTIME		0.55 HR		9.61				9.61	
EMPLOYEE BENEFITS				15.65				15.65	
INSURANCE			1.57					1.57	
LAND TAXES							2.23	2.23	
SUPERVISION AND MANAGEMENT				75.07				75.07	
OTHER EXPENSES			190.08					190.08	
<b>SUBTOTAL</b>		<b>0.55 HR</b>	<b>191.64</b>	<b>100.33</b>			<b>2.23</b>	<b>294.20</b>	
<b>TOTAL OPERATING EXPENSES</b>		<b>8.24 HR</b>	<b>462.04</b>	<b>230.75</b>	<b>34.00</b>	<b>1.70</b>	<b>231.57</b>	<b>960.07</b>	
<b>NET OPERATING PROFIT</b>								<b>764.43</b>	
INTEREST ON OPERATING CAPITAL	(	64.21	@	0.10	)			6.26	
INTEREST ON EQUIPMENT INVESTMENT								37.58	
<b>RETURN TO LAND AND RISK</b>								<b>720.59</b>	

**BUDGET SUMMARY**

GROSS RETURN	1,724.50	
VARIABLE OPERATING EXPENSES	497.75	
RETURN OVER VARIABLE EXPENSES	1,226.75	(GROSS MARGIN)
FIXED EXPENSES	231.57	
NET FARM INCOME	995.19	(RETURN TO CAPITAL, LABOR, LAND & RISK)
LABOR AND MANAGEMENT COST	230.75	
NET OPERATING PROFIT	764.43	(RETURN TO CAPITAL, LAND & RISK)
CAPITAL COSTS	43.84	
RETURN TO LAND AND RISK	720.59	

TABLE 6. Permanent pasture establishment, flood-irrigated, budgeted per acre costs and returns for a 20 acre part-time farm, San Juan County. Projected 2023  
Planting dates: August 15 - September 15

ITEM	PRICE	QUANTITY	PURCHASED INPUTS				TOTAL		
						FIXED COST			
<b>PURCHASED INPUTS</b>									
SEED	2.50	15.00 LBS	37.50				37.50		
NITROGEN (N)	0.83	20.00 LBS	16.60				16.60		
PHOSPHATE (P205)	2.00	50.00 LBS	100.00				100.00		
CANAL WATER		21.00 AC. IN.				32.81	32.81		
CANAL WATER (MAINTENANCE)						8.00	8.00		
SUBTOTAL			154.10			40.81	194.91		
<b>PREHARVEST OPERATIONS</b>									
	POWER UNIT	ACCOMPLISHMENT RATE	PURCHASED INPUTS	LABOR	FUEL & LUBE	REPAIRS	FIXED COST	TOTAL	
PLOW	65 HP	0.83 HR		14.63	10.49	0.21	3.71	29.04	
DISC (2X)	65 HP	0.84 HR		14.81	10.62	0.21	3.75	29.39	
HARROW	65 HP	0.41 HR		7.23	5.18	0.10	2.84	15.36	
FERTILIZE	65 HP	0.05 HR		0.88	0.63	0.01	0.22	1.75	
CORRUGATE	65 HP	0.41 HR		7.23	5.18	0.10	2.84	15.36	
DRILL	65 HP	0.33 HR		5.82	4.17	0.08	1.47	11.55	
DITCHER	65 HP	0.10 HR		1.76	1.26	0.02	0.45	3.50	
IRRIGATE (3X)		1.50 HR		24.90				24.90	
SUBTOTAL			4.47 HR	77.26	37.54	0.74	15.29	130.84	
<b>OVERHEAD EXPENSES</b>									
DOWNTIME		0.74 HR		13.09				13.09	
EMPLOYEE BENEFITS				9.27				9.27	
INSURANCE			0.93					0.93	
SUPERVISION AND MANAGEMENT				16.02				16.02	
SUBTOTAL			0.74 HR	0.93	38.38			39.30	
TOTAL OPERATING EXPENSES			5.21 HR	155.03	115.64	37.54	0.74	56.10	365.05



TABLE 8. Summary of per acre costs and returns for a 20 acre part-time farm,  
San Juan County. Projected 2023

	ALFALFA ESTABLISHMENT	ALFALFA HAY	ANNUAL PASTURE EST.	ANNUAL PASTURE
	-----FLOOD-----			
	TONS	TONS		AUMS
PRIMARY YIELD	2.00	5.50		7.00
PRIMARY PRICE	245.00	311.00		12.00
GOVERNMENT PAYMENTS	0.00	0.00		0.00
SECOND INCOME	0.00	14.00		0.00
GROSS RETURN	490.00	1,724.50		84.00
CASH OPERATING EXPENSES				
SEED	115.20		37.50	
FERTILIZER	90.00	90.00	116.60	83.00
CHEMICALS				
CROP INSURANCE				
OTHER PURCHASED INPUTS	0.00	0.00	0.00	0.00
CANAL WATER				
FUEL, OIL & LUBRICANTS-EQUIPMENT	41.34	34.00	37.54	7.08
FUEL-IRRIGATION				
REPAIRS	1.16	1.70	0.74	0.14
CUSTOM CHARGES	65.60	180.40		
LAND TAXES	2.23	2.23		2.23
OTHER EXPENSES	191.37	191.64	0.93	191.29
TOTAL CASH EXPENSES	506.89	499.97	193.31	283.74
RETURN OVER CASH EXPENSES	-16.89	1,224.53	-193.31	-199.74
FIXED EXPENSES	106.45	229.34	56.10	146.87
TOTAL EXPENSES	613.33	729.31	249.42	430.61
NET FARM INCOME	-123.33	995.19	-249.42	-346.61
LABOR AND MANAGEMENT COSTS	184.88	230.75	115.64	124.92
NET OPERATING PROFIT	-308.21	764.43	-365.05	-471.53
CAPITAL COSTS				
INTEREST ON OPERATING CAPITAL	11.42	6.26		4.22
INTEREST ON EQUIPMENT INVESTMENT	28.84	37.58		4.54
TOTAL CAPITAL COSTS	40.26	43.84	0.00	8.76
RETURN TO LAND AND RISK	-348.47	720.59	-365.05	-480.29

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

GROSS RETURNS		
OAT HAY	1.50 ACRES	
CROP		735.00
GRAZING		0.00
ALFALFA HAY	9.00 ACRES	
CROP		15,394.50
GRAZING		126.00
PASTURE	10.00 ACRES	
GRAZING		840.00
LIVESTOCK		15,384.00
GROSS RETURN		<u>32,480</u>
CASH OPERATING EXPENSES		
FORAGE		966.00
FEED AND LIVESTOCK		11,732.54
SEED		191.55
FERTILIZER		1,833.30
CHEMICALS		0.00
CROP INSURANCE		0.00
OTHER PURCHASED INPUTS		0.00
CANAL WATER		0.00
FUEL, OIL & LUBRICANTS-EQUIPMENT		457.61
FUEL-IRRIGATION		0.00
REPAIRS		18.81
CUSTOM CHARGES		1,722.00
LAND TAXES		45.66
OTHER EXPENSES		5,110.16
TOTAL CASH EXPENSES		<u>22,078</u>
RETURN OVER CASH EXPENSES		10,401.87
FIXED EXPENSES		4,155.21
TOTAL EXPENSES		<u>26,232.84</u>
NET FARM INCOME		6,246.66
LABOR AND MANAGEMENT COSTS		4,230.78
NET OPERATING PROFIT		2,015.88
CAPITAL COSTS		
INTEREST ON OPERATING CAPITAL		115.70
INTEREST ON EQUIPMENT INVESTMENT		426.82
INTEREST ON LIVESTOCK ENTERPRISE		3,222.71
TOTAL CAPITAL COSTS		<u>3,765</u>
RETURN TO LAND AND RISK		<u>-1,749.34</u>

LAND VALUE	RETURN TO RISK*	RETURN ON INVESTMENT**
1,000.00 /ACRE	-2,349.34	0.08
2,500.00 /ACRE	-3,249.34	0.04
4,000.00 /ACRE	-4,149.34	0.02
5,500.00 /ACRE	-5,049.34	0.02
7,000.00 /ACRE	-5,949.34	0.01
8,500.00 /ACRE	-6,849.34	0.01

\* 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)