

TABLE 1. Basic cost information for San Juan County Projected 2019

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		0.42
Phosphate (P205)	\$/pound		0.49
<b>Seed:</b>			
Alfalfa	\$/pound		3.05
Oats	\$/pound		0.34
Pasture	\$/pound		2.60
Wire	\$/pound		1.32
Canal Water	\$/acre foot		10.75
<b>Energy:</b>			
Diesel fuel	\$/gallon		2.65
Gasoline	\$/gallon		2.35
Natural Gas	\$/MCF		4.00
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		5.50%
Land Interest Rate	percent		5.00%
Equipment Interest Rate	percent		5.50%
Real Interest Rate	percent		4.00%
Land Taxes	253.00 /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 2019  
 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 2019

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 @	0.500 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 2019  
 Planting dates: April 15 - June 1  
 Harvest dates: June 15 - July 1

ITEM	PRICE	YIELD						TOTAL
<b>GROSS RETURNS</b>								
OAT HAY	100.00	2.00 TONS (IN FIELD)						200.00
<b>TOTAL</b>								<b>200.00</b>
PURCHASED INPUTS		PRICE	QUANTITY	PURCHASED INPUTS				TOTAL
ALFALFA SEED	2.80	20.00 LBS	56.00					56.00
OAT SEED	0.30	45.00 LBS	13.50					13.50
PHOSPHATE (P2O5)	0.20	45.00 LBS	9.00					9.00
CANAL WATER		48.00 AC. IN.				75.00		75.00
CANAL WATER (MAINTENANCE)		1 ACRE				8.00		8.00
<b>SUBTOTAL</b>				<b>78.50</b>			<b>83.00</b>	<b>161.50</b>
PREHARVEST OPERATIONS	POWER UNIT	ACCOMPLISHMENT RATE	PURCHASED INPUTS	LABOR	FUEL & LUBE	REPAIRS	FIXED COST	TOTAL
PLOW	65 HP	0.83 HR		5.60	5.85	0.21	3.71	15.37
DISC (2X)	65 HP	0.84 HR		5.67	5.92	0.21	3.75	15.55
FERTILIZE	65 HP	0.05 HR		0.34	0.35	0.01	0.22	0.93
CORRUGATE	65 HP	0.41 HR		2.77	2.89	0.10	2.84	8.61
DRILL	65 HP	0.33 HR		2.23	2.33	0.08	1.47	6.11
DITCHER	65 HP	0.10 HR		0.68	0.70	0.02	0.45	1.85
IRRIGATE (6X)		3.00 HR		19.35				19.35
<b>SUBTOTAL</b>		<b>5.56 HR</b>		<b>36.63</b>	<b>18.05</b>	<b>0.64</b>	<b>12.45</b>	<b>67.76</b>
<b>HARVEST OPERATIONS</b>								
MOWER	65 HP	0.45 HR		3.04	3.17	0.37	6.97	13.55
RAKE	65 HP	0.26 HR		1.76	1.83	0.15	4.02	7.76
BALER (CUSTOM)			65.60					65.60
<b>SUBTOTAL</b>		<b>0.71 HR</b>	<b>65.60</b>	<b>4.79</b>	<b>5.01</b>	<b>0.52</b>	<b>11.00</b>	<b>86.91</b>
<b>OVERHEAD EXPENSES</b>								
DOWNTIME		2.43 HR		16.37				16.37
EMPLOYEE BENEFITS				4.97				4.97
INSURANCE			0.50					0.50
LAND TAXES							2.23	2.23
SUPERVISION AND MANAGEMENT				13.81				13.81
OTHER EXPENSES			144.71					144.71
<b>SUBTOTAL</b>		<b>2.43 HR</b>	<b>145.21</b>	<b>35.14</b>			<b>2.23</b>	<b>182.58</b>
<b>TOTAL OPERATING EXPENSES</b>		<b>8.70 HR</b>	<b>289.31</b>	<b>76.57</b>	<b>23.05</b>	<b>1.16</b>	<b>108.67</b>	<b>498.76</b>
<b>NET OPERATING PROFIT</b>								<b>-298.76</b>
INTEREST ON OPERATING CAPITAL (		49.85 @	0.07 )					3.24
INTEREST ON EQUIPMENT INVESTMENT								21.43
<b>RETURN TO LAND AND RISK</b>								<b>-323.43</b>

TABLE 5. Alfalfa hay, flood-irrigated, budgeted per acre costs and returns for a 20 acre part-time farm,  
 San Juan County Projected 2019  
 Harvesting dates: June 10 - October 15

ITEM	PRICE	YIELD						TOTAL
<b>GROSS RETURNS</b>								
ALFALFA HAY	175.00	5.50 TONS (IN FIELD)						962.50
GRAZING	10.00	1.40 AUM						14.00
<b>TOTAL</b>							<b>976.50</b>	
PURCHASED INPUTS		PRICE	QUANTITY	PURCHASED INPUTS		FIXED COST		TOTAL
PHOSPHATE (P2O5)		0.49	45.00 LBS	22.05				22.05
ESTABLISHMENT: Principal			6.00 YEARS			53.90		53.90
: Interest						17.24		17.24
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>22.05</b>		<b>177.90</b>		<b>199.95</b>
PREHARVEST OPERATIONS	POWER UNIT	ACCOMPLISHMENT RATE	PURCHASED INPUTS	LABOR	FUEL & LUBE	REPAIRS	FIXED COST	TOTAL
FERTILIZE	65 HP	0.05 HR		0.34	0.35	0.01	0.22	0.93
DITCHER	65 HP	0.10 HR		0.68	0.70	0.02	0.45	1.85
CORRUGATE	65 HP	0.41 HR		2.77	2.89	0.10	2.84	8.61
IRRIGATE (10X)		5.00 HR		32.25				32.25
<b>SUBTOTAL</b>		<b>5.56 HR</b>		<b>36.03</b>	<b>3.95</b>	<b>0.14</b>	<b>3.51</b>	<b>43.63</b>
<b>HARVEST OPERATIONS</b>								
MOWER (3X)	65 HP	1.35 HR		9.11	9.52	1.11	20.92	40.66
RAKE (3X)	65 HP	0.78 HR		5.27	5.50	0.45	12.07	23.29
BALER (CUSTOM)			180.40					180.40
<b>SUBTOTAL</b>		<b>2.13 HR</b>	<b>180.40</b>	<b>14.38</b>	<b>15.02</b>	<b>1.56</b>	<b>32.99</b>	<b>244.34</b>
<b>OVERHEAD EXPENSES</b>								
DOWNTIME		0.55 HR		3.68				3.68
EMPLOYEE BENEFITS				6.05				6.05
INSURANCE			0.60					0.60
LAND TAXES							2.23	2.23
SUPERVISION AND MANAGEMENT				45.15				45.15
OTHER EXPENSES			144.71					144.71
<b>SUBTOTAL</b>		<b>0.55 HR</b>	<b>145.32</b>	<b>54.88</b>			<b>2.23</b>	<b>202.42</b>
<b>TOTAL OPERATING EXPENSES</b>		<b>8.24 HR</b>	<b>347.77</b>	<b>105.29</b>	<b>18.96</b>	<b>1.70</b>	<b>216.63</b>	<b>690.35</b>
<b>NET OPERATING PROFIT</b>							<b>286.15</b>	
INTEREST ON OPERATING CAPITAL		(	28.46	@	0.07	)		1.85
INTEREST ON EQUIPMENT INVESTMENT								27.91
<b>RETURN TO LAND AND RISK</b>							<b>256.39</b>	

**BUDGET SUMMARY**

GROSS RETURN		976.50	
VARIABLE OPERATING EXPENSES	368.43		
RETURN OVER VARIABLE EXPENSES		608.07	(GROSS MARGIN)
FIXED EXPENSES	216.63		
NET FARM INCOME		391.44	(RETURN TO CAPITAL, LABOR, LAND & RISK)
LABOR AND MANAGEMENT COST	105.29		
NET OPERATING PROFIT		286.15	(RETURN TO CAPITAL, LAND & RISK)
CAPITAL COSTS	29.76		
RETURN TO LAND AND RISK		256.39	

TABLE 6. Permanent pasture establishment, flood-irrigated, budgeted per acre costs and returns for a 20 acre part-time farm, San Juan County. Projected 2019  
Planting dates: August 15 - September 15

ITEM	PRICE	QUANTITY	PURCHASED INPUTS		FIXED COST	TOTAL		
<b>PURCHASED INPUTS</b>					<b>FIXED COST</b>			
SEED	2.50	15.00 LBS	37.50			37.50		
NITROGEN (N)	0.29	20.00 LBS	5.80			5.80		
PHOSPHATE (P205)	0.20	50.00 LBS	10.00			10.00		
CANAL WATER		21.00 AC. IN.			32.81	32.81		
CANAL WATER (MAINTENANCE)					8.00	8.00		
SUBTOTAL			53.30		40.81	94.11		
<b>PREHARVEST OPERATIONS</b>	<b>POWER UNIT</b>	<b>ACCOMPLISHMENT RATE</b>	<b>PURCHASED INPUTS</b>	<b>LABOR</b>	<b>FUEL &amp; LUBE</b>	<b>REPAIRS</b>	<b>FIXED COST</b>	<b>TOTAL</b>
PLOW	65 HP	0.83 HR		5.60	5.85	0.21	3.71	15.37
DISC (2X)	65 HP	0.84 HR		5.67	5.92	0.21	3.75	15.55
HARROW	65 HP	0.41 HR		2.77	2.89	0.10	2.84	8.61
FERTILIZE	65 HP	0.05 HR		0.34	0.35	0.01	0.22	0.93
CORRUGATE	65 HP	0.41 HR		2.77	2.89	0.10	2.84	8.61
DRILL	65 HP	0.33 HR		2.23	2.33	0.08	1.47	6.11
DITCHER	65 HP	0.10 HR		0.68	0.70	0.02	0.45	1.85
IRRIGATE (3X)		1.50 HR		9.68				9.68
SUBTOTAL		4.47 HR		29.72	20.94	0.74	15.29	66.69
<b>OVERHEAD EXPENSES</b>								
DOWNTIME		0.74 HR		5.01				5.01
EMPLOYEE BENEFITS				3.57				3.57
INSURANCE			0.36					0.36
SUPERVISION AND MANAGEMENT				9.42				9.42
SUBTOTAL		0.74 HR	0.36	18.00				18.35
<b>TOTAL OPERATING EXPENSES</b>		<b>5.21 HR</b>	<b>53.66</b>	<b>47.72</b>	<b>20.94</b>	<b>0.74</b>	<b>56.10</b>	<b>179.16</b>

TABLE 7. Permanent pasture, flood-irrigated, budgeted per acre costs and returns for a 20 acre part-time farm,  
 San Juan County.  
 Projected 2019  
 Harvesting dates: Year Round

ITEM	PRICE	YIELD						TOTAL
<b>GROSS RETURNS</b>								
PASTURE	12.00	7.00 AUMS						84.00
<b>TOTAL</b>							<b>84.00</b>	
<b>PURCHASED INPUTS</b>								
PURCHASED INPUTS	PRICE	QUANTITY	PURCHASED INPUTS				FIXED COST	TOTAL
NITROGEN (N)	0.29	100.00 LBS	29.00					29.00
ESTABLISHMENT: Principal		20.00 YEARS					8.96	8.96
: Interest							5.02	5.02
CANAL WATER		62.00 AC. IN.					96.88	96.88
CANAL WATER (MAINTENANCE)		1 ACRE					8.00	8.00
<b>SUBTOTAL</b>			<b>29.00</b>				<b>118.85</b>	<b>147.85</b>
<b>PREHARVEST OPERATIONS</b>								
POWER UNIT	ACCOMPLISHMENT RATE	PURCHASED INPUTS	LABOR	FUEL & LUBE	REPAIRS	FIXED COST	TOTAL	
FERTILIZE	65 HP	0.05 HR		0.34	0.35	0.01	0.22	0.93
CORRUGATE	65 HP	0.41 HR		2.77	2.89	0.10	2.84	8.61
DITCHER	65 HP	0.10 HR		0.68	0.70	0.02	0.45	1.85
IRRIGATE (11X)		5.50 HR		35.48				35.48
<b>SUBTOTAL</b>	<b>6.06 HR</b>			<b>39.26</b>	<b>3.95</b>	<b>0.14</b>	<b>3.51</b>	<b>46.86</b>
<b>OVERHEAD EXPENSES</b>								
DOWNTIME		0.14 HR		0.95				0.95
EMPLOYEE BENEFITS				4.71				4.71
INSURANCE			0.47					0.47
LAND TAXES						2.23		2.23
SUPERVISION AND MANAGEMENT				9.14				9.14
OTHER EXPENSES			144.71					144.71
<b>SUBTOTAL</b>	<b>0.14 HR</b>		<b>145.18</b>	<b>14.80</b>		<b>2.23</b>		<b>162.21</b>
<b>TOTAL OPERATING EXPENSES</b>	<b>6.20 HR</b>		<b>174.18</b>	<b>54.05</b>	<b>3.95</b>	<b>0.14</b>	<b>124.59</b>	<b>356.91</b>
<b>NET OPERATING PROFIT</b>							<b>-272.91</b>	<b>-0.067355</b>
INTEREST ON OPERATING CAPITAL	(	15.52	@	0.07				1.01
INTEREST ON EQUIPMENT INVESTMENT								3.37
<b>RETURN TO LAND AND RISK</b>							<b>-277.29</b>	

<b>BUDGET SUMMARY</b>			
GROSS RETURN		84.00	
VARIABLE OPERATING EXPENSES	178.27		
RETURN OVER VARIABLE EXPENSES		-94.27	(GROSS MARGIN)
FIXED EXPENSES	124.59		
NET FARM INCOME		-218.86	(RETURN TO CAPITAL, LABOR, LAND & RISK)
LABOR AND MANAGEMENT COST	54.05		
NET OPERATING PROFIT		-272.91	(RETURN TO CAPITAL, LAND & RISK)
CAPITAL COSTS	4.38		
RETURN TO LAND AND RISK		-277.29	

PASTURE LIVESTOCK



TABLE 8. Summary of per acre costs and returns for a 20 acre part-time farm,  
San Juan County. Projected 2019

	ALFALFA ESTABLISHMENT	ALFALFA HAY	ANNUAL PASTURE EST.	ANNUAL PASTURE
	-----FLOOD-----			
	TONS	TONS		AUMS
PRIMARY YIELD	2.00	5.50		7.00
PRIMARY PRICE	100.00	175.00		12.00
GOVERNMENT PAYMENTS	0.00	0.00		0.00
SECOND INCOME	0.00	14.00		0.00
GROSS RETURN	200.00	976.50		84.00
CASH OPERATING EXPENSES				
SEED	69.50		37.50	
FERTILIZER	9.00	22.05	15.80	29.00
CHEMICALS				
CROP INSURANCE				
OTHER PURCHASED INPUTS	0.00	0.00	0.00	0.00
CANAL WATER				
FUEL, OIL & LUBRICANTS-EQUIPMENT	23.05	18.96	20.94	3.95
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	145.21	145.32	0.36	145.18
TOTAL CASH EXPENSES	315.75	370.66	75.34	180.50
RETURN OVER CASH EXPENSES	-115.75	605.84	-75.34	-96.50
FIXED EXPENSES	106.45	214.40	56.10	122.36
TOTAL EXPENSES	422.19	585.06	131.44	302.86
NET FARM INCOME	-222.19	391.44	-131.44	-218.86
LABOR AND MANAGEMENT COSTS	76.57	105.29	47.72	54.05
NET OPERATING PROFIT	-298.76	286.15	-179.16	-272.91
CAPITAL COSTS				
INTEREST ON OPERATING CAPITAL	3.24	1.85		1.01
INTEREST ON EQUIPMENT INVESTMENT	21.43	27.91		3.37
TOTAL CAPITAL COSTS	24.67	29.76	0.00	4.38
RETURN TO LAND AND RISK	-323.43	256.39	-179.16	-277.29

TABLE 9. Whole farm summary, San Juan County. Projected 2019

GROSS RETURNS		
OAT HAY	1.50 ACRES	
CROP		300.00
GRAZING		0.00
ALFALFA HAY	9.00 ACRES	
CROP		8,662.50
GRAZING		126.00
PASTURE	10.00 ACRES	
GRAZING		840.00
LIVESTOCK		15,384.00
GROSS RETURN		<u>25,313</u>
CASH OPERATING EXPENSES		
FORAGE		966.00
FEED AND LIVESTOCK		11,656.38
SEED		123.00
FERTILIZER		509.85
CHEMICALS		0.00
CROP INSURANCE		0.00
OTHER PURCHASED INPUTS		0.00
CANAL WATER		0.00
FUEL, OIL & LUBRICANTS-EQUIPMENT		255.21
FUEL-IRRIGATION		0.00
REPAIRS		18.81
CUSTOM CHARGES		1,722.00
LAND TAXES		45.66
OTHER EXPENSES		3,699.11
TOTAL CASH EXPENSES		<u>18,996</u>
RETURN OVER CASH EXPENSES		6,316.48
FIXED EXPENSES		3,906.25
TOTAL EXPENSES		22,902.26
NET FARM INCOME		2,410.24
LABOR AND MANAGEMENT COSTS		2,199.47
NET OPERATING PROFIT		210.76
CAPITAL COSTS		
INTEREST ON OPERATING CAPITAL		31.60
INTEREST ON EQUIPMENT INVESTMENT		317.06
INTEREST ON LIVESTOCK ENTERPRISE		2,146.00
TOTAL CAPITAL COSTS		<u>2,495</u>
RETURN TO LAND AND RISK		<u>-2,283.90</u>

LAND VALUE	RETURN TO RISK*	RETURN ON INVESTMENT**
1,000.00 /ACRE	-3,083.90	0.01
2,500.00 /ACRE	-4,283.90	0.00
4,000.00 /ACRE	-5,483.90	0.00
5,500.00 /ACRE	-6,683.90	0.00
7,000.00 /ACRE	-7,883.90	0.00
8,500.00 /ACRE	-9,083.90	0.00

\* 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)