

Table 4A. Income and Cash Operating Summary; Early Potatoes, 1998

COUNTY: Maricopa FARM: Maricopa Veg 98 WATER SOURCE: Roosevelt Irrigation TILLAGE: Conventional
 CROP: Potatoes, Early ACRES: 1.0 IRRIGATION SYSTEM: Flood Furrow SOIL: Sandy-Loam
 AREA: Roosevelt ID YIELD: 292.0 CW / Acre PREVIOUS CROP: Wheat, Winter DATE: 12/10/98

Item	Unit	Quantity	Price/ Unit	Budgeted /Acre	Total /Acre	Your Farm Budget	
INCOME	Potatoes	Hundred Lbs	292.00	\$8.44	\$2,464.48	\$2,464.48	_____
CASH LAND PREPARATION AND GROWING EXPENSES (including sales tax)							
Paid Labor (including benefits)					146.14	_____	
Tractor/Self Propelled					66.78	_____	
Irrigation					54.99	_____	
Other/ Contract					24.37	_____	
Chemicals and Custom Applications					142.99	_____	
Fertilizer					107.65	_____	
Insecticide					11.36	_____	
Herbicide					4.95	_____	
Other Chemicals					19.03	_____	
Farm Machinery and Vehicles					71.41	_____	
Diesel Fuel					22.94	_____	
Gasoline					3.52	_____	
Repairs and Maintenance					44.95	_____	
Irrigation Water(excluding labor)					115.00	_____	
Water Assessment (See Note Below) **						_____	
Other Purchased Inputs & Seed/Transplants					697.95	_____	
TOTAL CASH LAND PREPARATION AND GROWING EXPENSES					1173.49	_____	
CASH HARVEST AND POST HARVEST EXPENSES							
Paid Labor (including benefits)					156.95	_____	
Tractor/Self Propelled					30.22	_____	
Other/Contract					126.73	_____	
Farm Machinery and Vehicles					45.79	_____	
Diesel Fuel					9.96	_____	
Repairs and Maintenance					35.83	_____	
TOTAL HARVEST AND POST HARVEST EXPENSE					202.74	_____	
OPERATING OVERHEAD PICKUP USE					15.29	_____	
OPERATING INTEREST AT 10.0%					32.97	_____	
TOTAL CASH OPERATING EXPENSES					\$1,424.50	=====	
RETURNS OVER CASH OPERATING EXPENSES					\$1,039.98	_____	

Notes: The above figures do not include ownership costs, see table B for detailed cost allocation.

** A water assessment charge of \$15.00 per Acre is included as an ownership cost in Table B.

Table 4B. Allocations of Ownership Costs; Early Potatoes, 1998

COUNTY: Maricopa FARM: Maricopa Veg 98 WATER SOURCE: Roosevelt Irrigation TILLAGE: Conventional
 CROP: Potatoes, Early ACRES: 1.0 IRRIGATION SYSTEM: Flood Furrow SOIL: Sandy-Loam
 AREA: Roosevelt ID YIELD: 292.0 CW / Acre PREVIOUS CROP: Wheat, Winter DATE: 12/10/98

Item	-- CASH COST BASIS (\$/ACRE) --		-- TOTAL COST BASIS (\$/ACRE) --	
	Income and Costs	Net Returns	Income and Costs	Net Returns
TOTAL INCOME at \$8.44 / CW	\$2,464.48		\$2,464.48	
TOTAL OPERATING EXPENSES	\$1,424.50		\$1,424.50	
RETURN OVER CASH OPERATING EXPENSES		\$1,039.98		\$1,039.98
CASH OVERHEAD EXPENSES				
Taxes, Housing and Insurance, Farm Machinery	13.98		13.98	
General and Office Overhead (5.0% of Total Operating Exp.)	71.22		71.22	
General Farm Maintenance (3.0% of Total Operating Exp.)	42.73		42.73	
Total Cash Overhead Expenses	127.94		127.94	
Total Cash Operating and Overhead Cost	1,552.43		1,552.43	
RETURNS OVER CASH OPER. AND OVER. EXPENSES		\$912.05		\$912.05
CAPITAL ALLOCATIONS (100% Equity)				
Capital Replacement, Machinery and Vehicles			84.17	
Interest on Equity, Machinery and Vehicles			36.10	
Total Capital Allocations			120.27	
RETURNS TO LAND, CAPITAL, MANAGEMENT AND RISK ----->		\$912.05		
RETURNS TO LAND, MANAGEMENT AND RISK ----->				\$791.78
Land Cost / Rent or Lease	0.00		0.00	
Land Cost / Ownership (100% Equity)				
Property Taxes (\$619.00 X 16.0% X 0.141)	13.98		13.98	
Opportunity Interest on Land (100% X 6.0 X \$619.00)			37.14	
Water Assessment	15.00		15.00	
Total Land Costs	28.98		66.12	
RETURNS TO CAPITAL, MANAGEMENT AND RISK ----->		\$883.07		
RETURNS TO MANAGEMENT AND RISK ----->				\$725.65
Management Services (8% of Total Operation Expenses)			113.96	
TOTAL OWNERSHIP COST	156.92		428.29	
TOTAL COST	\$1,581.41		\$1,852.79	
RETURNS TO CAPITAL, MANAGEMENT AND RISK ----->		\$883.07		
RETURNS TO RISK (PROFITS) ----->				\$611.69
BREAK-EVEN PRICE TO COVER OPERATING COST (PER Lb)		\$4.88		\$4.88
BREAK-EVEN PRICE TO COVER OWNERSHIP COST		\$0.54		\$1.47
BREAK-EVEN PRICE TO COVER TOTAL COST		\$5.42		\$6.35

Table 4C. Variable Operating Costs; Early Potatoes, 1998

COUNTY: Maricopa FARM: Maricopa Veg 98 WATER SOURCE: Roosevelt Irrigation TILLAGE: Conventional
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 AREA: Roosevelt ID YIELD: 292.0 CW / Acre PREVIOUS CROP: Wheat, Winter DATE: 12/10/98

No.	First Month	Operation	--- Hours * ---		--- Operating Costs (\$/ACRE *) Per Operation ---					Tot. Cash Expense	Class	
			Machine	Labor	Fuel/Rps.	Labor	Cust/Serv.	Materials	Total			Times
1	Nov	Rip	0.225	0.250	2.86	2.44			5.30	0.5	2.65	L
2	Nov	Plow	0.450	0.500	6.51	4.87			11.38	1.0	11.38	L
3	Nov	Disk	0.225	0.250	3.43	2.44			5.87	3.0	17.60	L
4	Nov	List	0.225	0.250	2.02	2.44			4.46	1.0	4.46	L
5	Nov	Buck Rows	0.045	0.050	0.23	0.49			0.72	3.0	2.15	G
6	Nov	Preirrigate		0.377		3.68	7.67		11.34	1.0	11.34	G
7	Dec	Mulch	0.300	0.333	2.35	3.25			5.60	1.0	5.60	L
8	Dec	Prep/Haul Seed Potato	0.900	2.000	9.96	9.75			19.71	1.0	19.71	L
9	Dec	Plant	0.750	1.666	15.30	16.24	756.11		787.66	1.0	787.66	L
10	Jan	Apply Herbicide/Ground	0.300	0.333	3.16	3.25	4.95		11.35	1.0	11.35	G
11	Jan	Hilling	0.360	0.400	3.04	3.90			6.94	3.0	20.81	L
12	Jan	Disk Ends	0.045	0.050	0.48	0.49			0.97	2.0	1.94	G
13	Jan	Irrigate/Run Fertilizer		0.658		6.41	38.16		44.58	2.0	89.15	G
14	Feb	Irrigate		0.658		6.41	13.42		19.83	6.0	118.99	G
15	Apr	Apply Insecticide/Air					4.75	25.64	30.39	1.0	30.39	G
16	Apr	Prepare Ends	0.045	0.050	0.48	0.49			0.97	1.0	0.97	H
17	Apr	Cut Vines	0.750	0.833	6.64	8.12			14.76	1.0	14.76	G
18	Apr	Prepare Ends	0.045	0.050	0.24	0.49			0.73	1.0	0.73	H
19	Apr	Knock Ditches	0.045	0.050	0.23	0.49			0.72	1.0	0.72	G
20	Apr	Roll Beds	0.129	0.143	0.65	1.39			2.04	1.0	2.04	L
21	Apr	Dig	0.900	2.000	31.57	19.50			51.06	1.0	51.06	H
22	Apr	Haul 10	1.800	4.000	14.07	38.42			52.49	1.0	52.49	H
23	Apr	Pk Shed Process/Cooling		10.00		97.48			97.48	1.0	97.48	P
24	May	Disk Residue	0.225	0.250	3.43	2.44			5.87	1.0	5.87	L
		Pickup Use60 Mi/Acre	2.000		15.29						15.29	
		Operating Interest at 10.0					32.97				32.97	
TOTAL CASH OPERATING EXPENSES (includes all times over):					141.65	294.12	37.54	951.19			1424.50	T

*NOTES: Machine and labor hours and operating cost are for one time over the designated acreage. The "Tot. Cash Expense" column and the "TOTAL CASH OPERATING EXPENSES" row include all operations, all times over. Classes are defined below. A water assessment charge of \$15.00 per Acre is included as an ownership cost in Table B.

OPERATING COST SUMMARY BY CLASS

Land Preparation (L)	885.24
Growing (G)	288.26
Harvest (H)	105.26
Post Harvest (P)	97.48
Marketing (M)	0.00
Operating Overhead (O)	48.26
Total (T)	<u>\$1,424.50</u>

SENSITIVITY OF THE NET REVENUES OVER TOTAL CASH EXPENSES (\$/ACRE)

		Prices	- 25%	- 10%	Budgeted	+ 10%	+ 25%		
Yields			\$6.33	\$7.60	\$8.44	\$9.28	\$10.55	Break-even Price	
- 25%	219.0		27.47	304.73	489.56	674.40	951.65	6.20	
- 10%	262.8		274.23	606.93	828.74	1,050.54	1,383.24	5.29	
Budgeted	292.0		438.73	808.41	1,054.85	1,301.30	1,670.97	4.83	
+ 10%	321.2		603.24	1,009.88	1,280.97	1,552.06	1,958.70	4.45	
Break-even Yield			214.12	174.83	155.78	140.47	122.42		

Table 4D. Resource and Cash Flow Requirements; Early Potatoes, 1998

COUNTY: Maricopa FARM: Maricopa Veg 98 WATER SOURCE: Roosevelt Irrigation TILLAGE: Conventional
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Month *	Number Irrigations	Water Applied (inches)	Total Labor (Hrs)	Operating Costs (\$/ACRE *)							
				Purchased Water	Fuel, Oil and Repairs	Labor	Chemicals	Other Purchases	Services	Total	
NOV P	1.0	4.0	1.80	7.67	14.68	16.35					38.70
DEC P			8.92		30.75	47.92	58.16	697.95			834.79
JAN C	1.0	7.0	1.49	13.42	6.74	14.54	29.69				64.38
FEB C	3.0	21.0	1.97	40.25		12.83	24.75				77.82
MAR C	2.0	14.0	1.72	26.83	2.95	10.31					40.10
APR C	2.0	14.0	18.94	26.83	74.63	189.55	25.64		4.75		321.40
MAY C			0.25		3.35	2.44					5.79
Pickup Use60 Mi/Acre					15.29						15.29
Operating Interest at 10.0									32.97		32.97
Water Assessment				**							
Total	9.0	60.0	35.09	115.00	141.65	294.12	138.24	697.95	37.72	1424.50	
%				8.07	9.94	20.63	9.70	49.00	2.65	100.00	

TOTAL RESOURCE REQUIREMENTS (per Acre)

Total N 150.0
 Total P 184.0
 Total K 0.0
 Total Labor 35.1
 Total Water 60.0

TOTAL ENERGY REQUIREMENTS (per Acre)

Diesel Fuel 40.7 Gal
 Unleaded Gas 8.7 Gal
 All Direct Energy 6.7 M BTU

EQUIPMENT REQUIREMENTS (per Acre)

Bed Roller, 4 Rw	0.13 Hr	Blade Scraper, 10'	0.05 Hr	Flat Trailer	0.90 Hr
Hiller, 4 Row	1.08 Hr	Lister, 5 Bottom	0.22 Hr	Moldboard Plow, 4-16 2	0.45 Hr
Offset Disk, 13.5'	0.14 Hr	Offset Disk, 16.5'	0.90 Hr	Offset Disk, 8'	0.05 Hr
Pickup Truck, 1/2 Ton	2.90 Hr	Planter, Potato 3 Comp. 4	0.75 Hr	Potato Harvester, 4 Row	0.90 Hr
Power Mulcher, 4 Rw	0.30 Hr	Rolling Cultivator, 4 Rw	0.30 Hr	Root Cutter-Puller, 4 Row	0.75 Hr
Rowbuck, 10'	0.14 Hr	Saddle Tk Sprayer, 2 Tk 8	0.30 Hr	Tractor, 50 PTO HP,	0.05 Hr
Tractor, 60 PTO HP,	2.41 Hr	Tractor, 100 PTO HP,	3.24 Hr	Tractor, 150 PTO HP,	2.36 Hr
V-Ripper, 5 Shnk	0.11 Hr	Vegetable Trailer Flat Bed	1.80 Hr		

MATERIALS REQUIREMENT (per Acre)

18-46-00, Dry	400.00 Lb	20-0-0-45, Nitro-Sul	40.00 Ga	Carbaryl	2.00 Pt
Paraquat	0.50 Ga	Potato Seed	30.00 C	Trifluralin	1.50 Pt
Water, District	60.00 Al				

LABOR REQUIREMENT (per Acre)

Cutter	4.00 Hr	Irrigators	5.64 Hr	Other	5.50 Hr
Packer-Loader	10.00 Hr	Tractor	9.95 Hr		

*NOTE: P = Previous Year C = Current Year N = Next Year

** A water assessment charge of \$15.00 per Acre is included as an ownership cost in Table B.

Table 4E. Schedule of Operations; Early Potatoes, 1998

COUNTY: Maricopa FARM: Maricopa Veg 98 WATER SOURCE: Roosevelt Irrigation TILLAGE: Conventional
 CROP: Potatoes, Early ACRES: 1.0 IRRIGATION SYSTEM: Flood Furrow SOIL: Sandy-Loam
 AREA: Roosevelt ID YIELD: 292.0 CW / Acre PREVIOUS CROP: Wheat, Winter DATE: 12/10/98

First No.	Month	Times	Operation	Equipment/ Custom Oper		Job Rate Acres/Hr	Material Use and Cost				Service Cost \$ / Unit	Labor Type
				HP	Self-Prop./ Implement		Name	Appl. Rate	\$ / Unit			
1	Nov	0.5	Rip	150	V-Ripper, 5 Shnk	4.00						Tractor
2	Nov	1.0	Plow	150	Moldboard Plow, 4-16 2	2.00						Tractor
3	Nov	3.0	Disk	150	Offset Disk, 16.5'	4.00						Tractor
4	Nov	1.0	List	100	Lister, 5 Bottom	4.00						Tractor
5	Nov	3.0	Buck Rows	60	Rowbuck, 10'	20.00						Tractor
6	Nov	1.0	Preirrigate			2.65	Water, District	4.00	Al	23.00	AF	Irrigators
7	Dec	1.0	Mulch	60	Power Mulcher, 4 Rw	3.00						Tractor
8	Dec	1.0	Prep/Haul Seed Potato		Pickup Truck, 1/2 Ton	1.00						Tractor Cutter
9	Dec	1.0	Plant	100	Planter, Potato 3 Comp. 4	1.20	Potato Seed	30.00	C	22.00	CW	Tractor
							18-46-00, Dry	400.00	Lb	275.00	Tn	Other
10	Jan	1.0	Apply Herbicide/Ground	100	Saddle Tk Sprayer, 2 Tk 8	3.00	Trifluralin	1.50	Pt	24.95	Ga	Tractor
					Rolling Cultivator, 4 Rw							
11	Jan	3.0	Hilling	100	Hiller, 4 Row	2.50						Tractor
12	Jan	2.0	Disk Ends	100	Offset Disk, 13.5'	20.00						Tractor
13	Jan	2.0	Irrigate/Run Fertilizer			1.52	Water, District	7.00	Al	23.00	AF	Irrigators
							20-0-0-45, Nitro-Sul	20.00	Ga	240.00	Tn	
14	Feb	6.0	Irrigate			1.52	Water, District	7.00	Al	23.00	AF	Irrigators
15	Apr	1.0	Apply Insecticide/Air		CST Air Spray, 5 Gal Mix		Carbaryl	2.00	Pt	25.00	Ga	4.75 Ac
							Paraquat	0.50	Ga	36.00	Ga	
16	Apr	1.0	Prepare Ends	100	Offset Disk, 13.5'	20.00						Tractor
17	Apr	1.0	Cut Vines	100	Root Cutter-Puller, 4 Row	1.20						Tractor
18	Apr	1.0	Prepare Ends	50	Offset Disk, 8'	20.00						Tractor
19	Apr	1.0	Knock Ditches	60	Blade Scraper, 10'	20.00						Tractor
20	Apr	1.0	Roll Beds	60	Bed Roller, 4 Rw	7.00						Tractor
21	Apr	1.0	Dig	150	Potato Harvester, 4 Row	1.00						Tractor
												Other
22	Apr	1.0	Haul	60	Vegetable Trailer Flat Bed	0.50						Tractor
												Other
23	Apr	1.0	Pk Shed			0.10						Packer-Loa
24	May	1.0	Disk Residue	150	Offset Disk, 16.5'	4.00						Tractor
			Pickup use 60 Mi/Ac		Pickup Truck, 1/2 Ton	0.50						

*NOTES: Machine times, labor times, and material rates are for one time over the designated acreage.