

**Table 8A. Income and Cash Operating Summary; Watermelon Seedless, 1998**

COUNTY: Maricopa                      FARM: Maricopa Veg 98                      WATER SOURCE: Roosevelt Water                      TILLAGE: Conventional  
 CROP: Watermelons                      ACRES: 1.0                      IRRIGATION SYSTEM: Flood Furrow                      SOIL: Sandy-loam  
 AREA: Roosevelt WCD                      YIELD: 13.3 Tn / Acre                      PREVIOUS CROP: Wheat, Winter                      DATE: 12/10/98

Item	Unit	Quantity	Price/ Unit	Budgeted /Acre	Total /Acre	Your Farm Budget	
INCOME	Melons	Ton	13.25	\$156.92	\$2,079.19	\$2,079.19	_____
CASH LAND PREPARATION AND GROWING EXPENSES (including sales tax)							
Paid Labor (including benefits)						129.01	_____
Tractor/Self Propelled					54.90		_____
Irrigation					67.62		_____
Other/ Contract					6.50		_____
Chemicals and Custom Applications						139.19	_____
Fertilizer					82.43		_____
Insecticide					41.64		_____
Herbicide					15.12		_____
Farm Machinery and Vehicles						56.21	_____
Diesel Fuel					19.13		_____
Gasoline					3.65		_____
Repairs and Maintenance					33.42		_____
Irrigation Water (excluding labor)						133.33	_____
Water Assessment (See Note Below) **							_____
Other Purchased Inputs &						962.31	_____
Seed/Transplants					333.11		_____
Other Services and Rentals					243.00		_____
Other Materials					386.20		_____
TOTAL CASH LAND PREPARATION AND GROWING EXPENSES						1420.05	_____
CASH HARVEST AND POST HARVEST EXPENSES							
Paid Labor (including benefits)						116.98	_____
Tractor/Self Propelled					116.98		_____
Farm Machinery and Vehicles						64.75	_____
Diesel Fuel					21.53		_____
Repairs and Maintenance					43.22		_____
Custom Harvest/Post Harvest						140.00	_____
Other Materials						399.73	_____
TOTAL HARVEST AND POST HARVEST EXPENSE						721.47	_____
OPERATING OVERHEAD PICKUP USE						15.29	_____
OPERATING INTEREST AT 10.0%						50.04	_____
TOTAL CASH OPERATING EXPENSES						\$2,206.85	_____
RETURNS OVER CASH OPERATING EXPENSES						(\$127.66)	_____

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

\*\* A water assessment charge of \$17.00 per Acre is included as an ownership cost in Table B.

**Table 8B. Allocations of Ownership Costs; Watermelon Seedless, 1998**

COUNTY: Maricopa FARM: Maricopa Veg 98 WATER SOURCE: Roosevelt Water TILLAGE: Conventional  
 CROP: Watermelons ACRES: 1.0 IRRIGATION SYSTEM: Flood Furrow SOIL: Sandy-loam  
 AREA: Roosevelt WCD YIELD: 13.3 Tn / 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 \$156.92 / Tn	\$2,079.19		\$2,079.19	
TOTAL OPERATING EXPENSES	\$2,206.85		\$2,206.85	
RETURN OVER CASH OPERATING EXPENSES		(\$127.66)		(\$127.66)
CASH OVERHEAD EXPENSES				
Taxes, Housing and Insurance, Farm Machinery	12.36		12.36	
General and Office Overhead (5.0% of Total Operating Exp.)	110.34		110.34	
General Farm Maintenance (3.0% of Total Operating Exp.)	66.21		66.21	
Total Cash Overhead Expenses	188.90		188.90	
Total Cash Operating and Overhead Cost	2,395.75		2,395.75	
RETURNS OVER CASH OPER. AND OVER. EXPENSES		(\$316.56)		(\$316.56)
CAPITAL ALLOCATIONS (100% Equity)				
Capital Replacement, Machinery and Vehicles			72.29	
Interest on Equity, Machinery and Vehicles			18.13	
Total Capital Allocations			90.42	
RETURNS TO LAND, CAPITAL, MANAGEMENT AND RISK ----->		(\$316.56)		
RETURNS TO LAND, MANAGEMENT AND RISK ----->				(\$406.99)
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	17.00		17.00	
Total Land Costs	30.98		68.12	
RETURNS TO CAPITAL, MANAGEMENT AND RISK ----->		(\$347.55)		
RETURNS TO MANAGEMENT AND RISK ----->				(\$475.11)
Management Services (8% of Total Operation Expenses)			176.55	
TOTAL OWNERSHIP COST	219.89		524.00	
TOTAL COST	\$2,426.74		\$2,730.85	
RETURNS TO CAPITAL, MANAGEMENT AND RISK ----->		(\$347.55)		
RETURNS TO RISK (PROFITS) ----->				(\$651.66)
BREAK-EVEN PRICE TO COVER OPERATING COST ( PER Lb )		\$166.55		\$166.55
BREAK-EVEN PRICE TO COVER OWNERSHIP COST		\$16.60		\$39.55
BREAK-EVEN PRICE TO COVER TOTAL COST		\$183.15		\$206.10

**Table 8C. Variable Operating Costs; Watermelon Seedless, 1998**

COUNTY: Maricopa FARM: Maricopa Veg 98 WATER SOURCE: Roosevelt Water TILLAGE: Conventional  
 CROP: Watermelons ACRES: 1.0 IRRIGATION SYSTEM: Flood Furrow SOIL: Sandy-loam  
 AREA: Roosevelt WCD YIELD: 13.3 Tn / 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	Dec	Rip	0.450	0.500	5.72	4.87			10.60	1.0	10.60	L
2	Dec	Disk	0.225	0.250	3.43	2.44			5.87	3.0	17.60	L
3	Dec	Laser Level	0.450	0.500	5.55	4.87			10.42	0.5	5.21	L
4	Dec	List	0.300	0.333	3.25	3.25		15.12	21.62	1.0	21.62	L
5	Jan	Plant	0.300	0.666	2.88	6.49		333.11	342.48	1.0	342.48	L
6	Jan	Apply Mulch	0.150	0.333	0.89	3.25		386.20	390.34	1.0	390.34	G
7	Jan	Soil Fertility					3.00		3.00	1.0	3.00	G
8	Jan	Apply Fert/Ground	0.300	0.333	2.49	3.25		36.35	42.08	1.0	42.08	G
9	Feb	Buck Rows	0.045	0.050	0.19	0.49			0.68	5.0	3.41	G
10	Feb	Irrigate		0.667		6.50		12.50	19.00	8.0	152.02	G
11	Feb	Disk Ends	0.045	0.050	0.48	0.49			0.97	5.0	4.86	G
12	Mar	Remove Mulch	0.150	0.333	1.24	3.25			4.49	1.0	4.49	G
13	Feb	Cultivate	0.257	0.286	1.71	2.79			4.50	6.0	26.98	G
14	Mar	Thinning					75.00		75.00	1.0	75.00	G
15	Mar	Hand Weeding					75.00		75.00	2.0	150.00	G
16	Apr	Apply Fert/Ground	0.300	0.333	2.49	3.25		29.90	35.63	1.0	35.63	G
17	Apr	Pollinate					15.00		15.00	1.0	15.00	G
18	Apr	Turn Vines	0.100	5.000	2.05				2.05	4.0	8.21	G
19	Apr	Irrigate/Run Fertilizer		0.400		3.90		12.38	16.28	4.0	65.12	G
20	Apr	Apply Insecticide/Air					4.23	16.59	20.82	2.0	41.64	G
21	Jun	Cut Melons		6.667				133.24	133.24	3.0	399.73	H
22	Jun	Load Produce	3.600	8.000	22.00	38.58			60.58	3.0	181.97	H
23	Jun	Haul, Custom 14 Tn					140.00		140.00	1.0	140.00	H
24	Jul	Disk Residue 14 Tn	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					50.04				50.04	
TOTAL CASH OPERATING EXPENSES (includes all times over):					136.99	244.25	441.50	1383.11			2205.85	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 \$17.00 per Acre is included as an ownership cost in Table B.

OPERATING COST SUMMARY BY CLASS

Land Preparation (L)	403.38
Growing (G)	1,016.67
Harvest (H)	721.47
Post Harvest (P)	0.00
Marketing (M)	0.00
Operating Overhead (O)	65.33
Total (T)	\$2,206.85

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

Prices	- 25%	- 10%	Budgeted	+ 10%	+ 25%	Break-even Price
Yields	\$117.69	\$141.23	\$156.92	\$172.61	\$196.15	
- 25%	9.9	-855.77	-621.86	-465.93	-309.99	-76.08
- 10%	11.9	-730.27	-449.58	-262.45	-75.33	205.37
Budgeted	13.3	-646.60	-334.72	-126.80	81.11	392.99
+ 10%	14.6	-562.93	-219.87	8.84	237.55	580.62
Break-even Yield		23.49	17.11	14.49	12.56	10.47

**Table 8D. Resource and Cash Flow Requirements; Watermelon Seedless, 1998**

COUNTY: Maricopa FARM: Maricopa Veg 98 WATER SOURCE: Roosevelt Water TILLAGE: Conventional  
 CROP: Watermelons ACRES: 1.0 IRRIGATION SYSTEM: Flood Furrow SOIL: Sandy-loam  
 AREA: Roosevelt WCD YIELD: 13.3 Tn / Acre PREVIOUS CROP: Wheat, Winter DATE: 12/10/98

Month *	Number Irrigations	Water Applied (inches)	Total Labor (Hrs)	Operating Costs (\$/ACRE *)						
				Purchased Water	Fuel, Oil and Repairs	Labor	Chemicals	Other Purchases	Services	Total
DEC P			1.83		36.51	30.56	15.12			82.19
JAN C			1.43		6.81	19.28	36.35	719.31	3.00	784.75
FEB C	3.0	18.0	2.39	37.50	2.33	15.59				55.42
MAR C	3.0	18.0	3.01	37.50	3.55	18.83			150.00	209.88
APR C	2.0	8.0	12.09	16.67	6.83	10.91	54.58		94.23	183.22
MAY C	3.0	14.0	11.57	29.17	2.72	11.38	24.68		4.23	72.18
JUN C	1.0	6.0	44.67	12.50	59.60	136.25		399.74	140.00	748.09
JUL C			0.25		3.35	2.44				5.79
Pickup Use60 Mi/Acre					15.29					15.29
Operating Interest at 10.0									50.04	50.04
Water Assessment				**						
<b>Total</b>	<b>12.0</b>	<b>64.0</b>	<b>77.23</b>	<b>133.34</b>	<b>136.99</b>	<b>244.25</b>	<b>130.73</b>	<b>1119.05</b>	<b>441.50</b>	<b>2206.85</b>
<b>%</b>				<b>6.04</b>	<b>6.21</b>	<b>11.11</b>	<b>5.92</b>	<b>50.71</b>	<b>20.01</b>	<b>100.00</b>

TOTAL RESOURCE REQUIREMENTS ( per Acre)

Total N 202.8  
 Total P 115.0  
 Total K 0.0  
 Total Labor 77.2  
 Total Water 64.0

TOTAL ENERGY REQUIREMENTS ( per Acre)

Diesel Fuel 50.4 Gal  
 Unleaded Gas 8.8 Gal  
 All Direct Energy 8.1 M BTU

EQUIPMENT REQUIREMENTS ( per Acre)

Crew Bus, 44 Passenger	0.40 Hr	Cultivator, Sweep, 4 Rw	1.54 Hr	Drag Scraper, 14'	0.22 Hr
Fert. Side Dress Unit,	0.60 Hr	Flat Trailer	0.15 Hr	Laser, Complete System	0.22 Hr
Lister, 5 Bottom	0.30 Hr	Mulch Layer, 1 Rw	0.15 Hr	Offset Disk, 13.5'	0.23 Hr
Offset Disk, 16.5'	0.90 Hr	Pickup Truck, 1/2 Ton	2.00 Hr	Rowbuck, 10'	0.23 Hr
Saddle Tk Sprayer, 2 Tk 8	0.30 Hr	Tractor, 50 PTO HP,	11.62 Hr	Tractor, 70 PTO HP,	2.14 Hr
Tractor, 100 PTO HP,	0.53 Hr	Tractor, 150 PTO HP,	1.58 Hr	Transplanter, Veg, 4Row	0.30 Hr
V-Ripper, 5 Shnk	0.45 Hr	Vegetable Trailer, Custom	10.80 Hr		

MATERIALS REQUIREMENT ( per Acre)

18-46-00, Dry	250.00 Lb	32-00-00, URAN 32, Lqd	16.00 Ga	46-00-00, Urea 46	220.00 Lb
Bensulide	3.00 Pt	Endosulfan	3.00 Pt	Fenvalerate	16.00 Oz
Plastic Mulch	8.80 TF	Water, District	64.00 Al	Watermelon Bins	42.00 Ea
Watermelon Transplant	9.00 Th				

LABOR REQUIREMENT ( per Acre)

Cutter	20.00 Hr	Hand Weeders	20.00 Hr	Irrigators	6.94 Hr
Loader/Watermelons	12.00 Hr	Other	0.67 Hr	Tractor	17.63 Hr

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

\*\* A water assessment charge of \$17.00 per Acre is included as an ownership cost in Table B.

**Table 8E. Schedule of Operations; Watermelon Seedless, 1998**

COUNTY: Maricopa FARM: Maricopa Veg 98 WATER SOURCE: Roosevelt Water TILLAGE: Conventional  
 CROP: Watermelons ACRES: 1.0 IRRIGATION SYSTEM: Flood Furrow SOIL: Sandy-loam  
 AREA: Roosevelt WCD YIELD: 13.3 Tn / Acre PREVIOUS CROP: Wheat, Winter DATE: 12/10/98

First No.	Month	Times	Operation	Equipment/ Custom Oper HP Self-Prop./ Implement	Job Rate Acres/Hr	Material Use and Cost Name	Appl. Rate \$ / Unit	Service Cost \$ / Unit	Labor Type
1	Dec	1.0	Rip	150 V-Ripper, 5 Shnk	2.00				Tractor
2	Dec	3.0	Disk	150 Offset Disk, 16.5'	4.00				Tractor
3	Dec	0.5	Laser Level	150 Drag Scraper, 14' Laser, Complete System	2.00				Tractor
4	Dec	1.0	List	100 Lister, 5 Bottom Saddle Tk Sprayer, 2 Tk 8 Row	3.00	Bensulide	3.00 Pt 38.12 Ga		Tractor
5	Jan	1.0	Plant	70 Transplanter, Veg, 4Row	3.00	Watermelon Transplant	9.00 Th 35.00 Th		Tractor Other
6	Jan	1.0	Apply Mulch	70 Mulch Layer, 1 Rw	6.00	Plastic Mulch	8.80 TF 41.50 TF		Tractor Other
7	Jan	1.0	Soil Fertility	CST Soil Analysis (Surface)				3.00 Ac	
8	Jan	1.0	Apply Fert/Ground	50 Fert. Side Dress Unit, 4Row	3.00	18-46-00, Dry	250.00 Lb 275.00 Tn		Tractor
9	Feb	5.0	Buck Rows	50 Rowbuck, 10'	20.00				Tractor
10	Feb	8.0	Irrigate		1.50	Water, District	6.00 Al 25.00 AF		Irrigators
11	Feb	5.0	Disk Ends	100 Offset Disk, 13.5'	20.00				Tractor
12	Mar	1.0	Remove Mulch	70 Flat Trailer	6.00				Tractor Other
13	Feb	6.0	Cultivate	70 Cultivator, Sweep, 4 Rw	3.50				Tractor
14	Mar	1.0	Thinning	CST Thinning				75.00 Ac	
15	Mar	2.0	Hand Weeding	CST Hand Weeding				75.00 Ac	
16	Apr	1.0	Apply Fert/Ground	50 Fert. Side Dress Unit, 4Row	3.00	46-00-00, Urea 46	220.00 Lb 257.00 Tn		Tractor
17	Apr	1.0	Pollinate	CST Bee Hive Rental				15.00 Ac	
18	Apr	4.0	Turn Vines	Crew Bus, 44 Passenger	0.20				Hand
19	Apr	4.0	Irrigate/Run Fertilizer		2.50	Water, District	4.00 Al 25.00 AF		Irrigators
20	Apr	2.0	Apply Insecticide/Air	CST Air Spray, 3 Gal Mix		32-00-00, URAN 32, Fenvalerate	4.00 Ga 173.00 Tn		
						Endosulfan	8.00 Oz 146.61 Ga	4.23 Ac	
							1.50 Pt 34.80 Ga		
21	Jun	3.0	Cut Melons		0.15	Watermelon Bins	14.00 Ea 9.00 Ea		Cutter
22	Jun	3.0	Load Produce	50 Vegetable Trailer, Custom	0.25				Tractor Loader/Wat
23	Jun	1.0	Haul, Custom	CST Haul Watermelons				10.00 Tn	
24	Jul	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.