

**Table 19A. Income and Cash Operating Summary; Fall Leaf Lettuce, 1998**

COUNTY: Maricopa                      FARM: Maricopa Veg 98                      WATER SOURCE: Salt River Project                      TILLAGE: Double Crop  
 CROP: Lettuce, Leaf                      ACRES: 1.0                      IRRIGATION SYSTEM: Flood Furrow                      SOIL: Sandy-Loam  
 AREA: Salt River Project                      YIELD: 333.0 Ct / Acre                      PREVIOUS CROP: Mixed Greens                      DATE: 12/10/98

Item	Unit	Quantity	Price/ Unit	Budgeted /Acre	Total /Acre	Your Farm Budget	
INCOME	Lettuce	Crt	333.00	\$17.29	\$5,757.57	\$5,757.57	_____
CASH LAND PREPARATION AND GROWING EXPENSES (including sales tax)							
Paid Labor (including benefits)						223.81	_____
Tractor/Self Propelled					86.03		_____
Irrigation					137.78		_____
Chemicals and Custom Applications						248.50	_____
Fertilizer					103.48		_____
Insecticide					94.63		_____
Herbicide					50.39		_____
Farm Machinery and Vehicles						60.41	_____
Diesel Fuel					20.23		_____
Repairs and Maintenance					40.18		_____
Irrigation Water (excluding labor)						18.33	_____
Water Assessment (See Note Below) **							_____
Other Purchased Inputs &						379.56	_____
Seed/Transplants					304.56		_____
Other Services and Rentals					75.00		_____
TOTAL CASH LAND PREPARATION AND GROWING EXPENSES						930.61	_____
CASH HARVEST AND POST HARVEST EXPENSES							
Custom Harvest/Post Harvest						999.00	_____
Other Materials						316.93	_____
TOTAL HARVEST AND POST HARVEST EXPENSE						1315.93	_____
OPERATING OVERHEAD PICKUP USE						12.74	_____
OPERATING INTEREST AT 10.0%						13.74	_____
TOTAL CASH OPERATING EXPENSES						\$2,273.03	=====
RETURNS OVER CASH OPERATING EXPENSES						\$3,484.54	_____

Notes: The above figures do not include ownership costs, see table B for detailed cost allocation.  
 \*\* A water assessment charge of \$10.00 per Acre is included as an ownership cost in Table B.

**Table 19B. Allocations of Ownership Costs; Fall Leaf Lettuce, 1998**

COUNTY: Maricopa      FARM: Maricopa Veg 98      WATER SOURCE: Salt River Project      TILLAGE: Double Crop  
 CROP: Lettuce, Leaf      ACRES: 1.0      IRRIGATION SYSTEM: Flood Furrow      SOIL: Sandy-Loam  
 AREA: Salt River Project      YIELD: 333.0 Ct / Acre      PREVIOUS CROP: Mixed Greens      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 \$17.29 / Ct	\$5,757.57		\$5,757.57	
TOTAL OPERATING EXPENSES	\$2,273.03		\$2,273.03	
RETURN OVER CASH OPERATING EXPENSES		\$3,484.54		\$3,484.54
CASH OVERHEAD EXPENSES				
Taxes, Housing and Insurance, Farm Machinery	7.58		7.58	
General and Office Overhead (5.0% of Total Operating Exp.)	113.65		113.65	
General Farm Maintenance (3.0% of Total Operating Exp.)	68.19		68.19	
Total Cash Overhead Expenses	189.42		189.42	
Total Cash Operating and Overhead Cost	2,462.45		2,462.45	
RETURNS OVER CASH OPER. AND OVER. EXPENSES		\$3,295.12		\$3,295.12
CAPITAL ALLOCATIONS (100% Equity)				
Capital Replacement, Machinery and Vehicles			43.78	
Interest on Equity, Machinery and Vehicles			18.32	
Total Capital Allocations			62.10	
RETURNS TO LAND, CAPITAL, MANAGEMENT AND RISK ----->		\$3,295.12		
RETURNS TO LAND, MANAGEMENT AND RISK ----->				\$3,233.02
Land Cost / Ownership (100% Equity)				
Property Taxes (\$619.00 X 16.0% X 0.141)	6.99		6.99	
Opportunity Interest on Land (100% X 6.0 X \$619.00)			18.57	
Water Assessment	10.00		10.00	
Total Land Costs	16.99		35.56	
RETURNS TO CAPITAL, MANAGEMENT AND RISK ----->		\$3,278.13		
RETURNS TO MANAGEMENT AND RISK ----->				\$3,197.46
Management Services ( 8% of Total Operation Expenses)			181.84	
TOTAL OWNERSHIP COST	206.41		468.92	
TOTAL COST	\$2,479.44		\$2,741.95	
RETURNS TO CAPITAL, MANAGEMENT AND RISK ----->		\$3,278.13		
RETURNS TO RISK (PROFITS) ----->				\$3,015.62
BREAK-EVEN PRICE TO COVER OPERATING COST ( PER Lb )		\$6.83		\$6.83
BREAK-EVEN PRICE TO COVER OWNERSHIP COST		\$0.62		\$1.41
BREAK-EVEN PRICE TO COVER TOTAL COST		\$7.45		\$8.23

**Table 19C. Variable Operating Costs; Fall Leaf Lettuce, 1998**

COUNTY: Maricopa FARM: Maricopa Veg 98 WATER SOURCE: Salt River Project TILLAGE: Double Crop  
 CROP: Lettuce, Leaf ACRES: 1.0 IRRIGATION SYSTEM: Flood Furrow SOIL: Sandy-Loam  
 AREA: Salt River Project YIELD: 333.0 Ct / Acre PREVIOUS CROP: Mixed Greens 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	Aug	Plow	0.900	1.000	7.54	9.75			17.29	1.0	17.29	L
2	Aug	Disk	0.600	0.667	4.91	6.50			11.41	3.0	34.22	L
3	Sep	Laser Level	0.450	0.500	4.50	4.87			9.37	1.0	9.37	L
4	Sep	Make Borders	0.180	0.200	0.51	1.95			2.46	1.0	2.46	G
5	Sep	Preirrigate		0.800		7.80			7.80	1.0	7.80	G
6	Sep	Knock Borders	0.180	0.200	0.51	1.95			2.46	1.0	2.46	G
7	Sep	Apply Fert/Ground	0.450	0.500	3.73	4.87		65.43	74.04	1.0	74.04	G
8	Sep	List	0.300	0.333	2.08	3.25			5.33	1.0	5.33	L
9	Sep	Shape Beds	0.180	0.200	1.36	1.95		78.22	81.53	1.0	81.53	L
10	Sep	Plant	0.360	0.400	4.34	3.90		304.56	312.80	1.0	312.80	L
11	Sep	Apply Herbicide/Ground	0.180	0.200	0.96	1.95		50.39	53.30	1.0	53.30	G
12	Sep	Make Ditches	0.023	0.025	0.32	0.24			0.57	1.0	0.57	G
13	Sep	Irrigate		1.333		13.00		1.83	14.83	10.0	148.31	G
14	Sep	Cultivate	0.900	1.000	4.75	9.75			14.50	1.0	14.50	G
15	Sep	Thinning					75.00		75.00	1.0	75.00	G
16	Oct	Apply Insect./Ground	0.180	0.200	0.83	1.95		3.44	6.22	1.0	6.22	G
17	Oct	Apply Fert/Side Dress	0.900	1.000	9.07	9.75		38.05	56.86	1.0	56.86	G
18	Oct	Apply Insect./Ground	0.180	0.200	0.96	1.95		6.48	9.40	2.0	18.79	G
19	Nov	Harvest, Load & Haul 333	0.600	0.667	4.42	6.50	999.00	316.93	1315.93	1.0	1315.93	H
20	Nov	Disk Residue 333 Ct	0.600	0.667	4.42	6.50			10.92	1.0	10.92	L
		Pickup Use50 Mi/Acre	1.667		12.74						12.74	
		Operating Interest at 10.0					13.74				13.74	
TOTAL CASH OPERATING EXPENSES (includes all times over):					73.73	223.23	1087.74	888.33			2273.03	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 \$10.00 per Acre is included as an ownership cost in Table B.

OPERATING COST SUMMARY BY CLASS		SENSITIVITY OF THE NET REVENUES OVER TOTAL CASH EXPENSES (\$/ACRE)						
		Prices		- 25%	- 10%	Budgeted	+ 10%	+ 25%
Land Preparation (L)	471.46	Yields		\$12.97	\$15.56	\$17.29	\$19.02	\$21.61
Growing (G)	459.16							Break-even Price
Harvest (H)	1,315.93							
Post Harvest (P)	0.00	- 25%	249.8	1,293.40	1,941.13	2,372.95	2,804.77	3,452.49
Marketing (M)	0.00	- 10%	299.7	1,743.74	2,521.01	3,039.19	3,557.38	4,334.65
Operating Overhead (O)	26.48	Budgeted	333.0	2,043.96	2,907.60	3,483.36	4,059.11	4,922.75
		+ 10%	366.3	2,344.19	3,294.19	3,927.52	4,560.85	5,510.85
Total (T)	\$2,273.03	+ 25%	416.3	2,794.53	3,874.07	4,593.77	5,313.46	6,393.01
		Break-even Yield		106.29	82.54	71.84	63.60	54.26

**Table 19D. Resource and Cash Flow Requirements; Fall Leaf Lettuce, 1998**

COUNTY: Maricopa FARM: Maricopa Veg 98 WATER SOURCE: Salt River Project TILLAGE: Double Crop  
 CROP: Lettuce, Leaf ACRES: 1.0 IRRIGATION SYSTEM: Flood Furrow SOIL: Sandy-Loam  
 AREA: Salt River Project YIELD: 333.0 Ct / Acre PREVIOUS CROP: Mixed Greens 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
AUG C			2.33		12.21	16.25				28.46
SEP C	4.0	18.0	9.02		33.75	141.06	194.04	304.56	75.00	748.41
OCT C	4.0	16.0	6.93	8.33	10.71	46.42	54.46			119.92
NOV C	3.0	12.0	4.67	10.00	4.32	19.50		316.93	999.00	1349.75
Pickup Use50 Mi/Acre					12.74					12.74
Operating Interest at 10.0 Water Assessment				**					13.74	13.74
<b>Total</b>	<b>11.0</b>	<b>46.0</b>	<b>22.96</b>	<b>18.33</b>	<b>73.73</b>	<b>223.23</b>	<b>248.50</b>	<b>621.49</b>	<b>1087.74</b>	<b>2273.03</b>
<b>%</b>				<b>0.81</b>	<b>3.24</b>	<b>9.82</b>	<b>10.93</b>	<b>27.34</b>	<b>47.85</b>	<b>100.00</b>

TOTAL RESOURCE REQUIREMENTS ( per Acre)		TOTAL ENERGY REQUIREMENTS ( per Acre)	
Total N	209.8	Diesel Fuel	25.1 Gal
Total P	207.0	Unleaded Gas	5.0 Gal
Total K	0.0	All Direct Energy	4.1 M BTU
Total Labor	23.0		
Total Water	46.0		

EQUIPMENT REQUIREMENTS ( per Acre)			
Bed Shaper, 4 Rw	0.18 Hr	Border Disk, 6' Disk	0.36 Hr
Drag Scraper, 10'	0.45 Hr	Fert. Side Dress Unit,	1.35 Hr
Lister, 5 Bottom	0.30 Hr	Manual Spray Rig, 150 g	0.18 Hr
Motor Grader, 12'	0.02 Hr	Offset Disk, 10.5'	0.60 Hr
Pickup Truck, 1/2 Ton	1.67 Hr	Planter, Stanhay, 4 Row	0.36 Hr
Tractor, 25 PTO HP	0.36 Hr	Tractor, 50 PTO HP,	2.97 Hr
Tractor, 125 PTO HP,	0.45 Hr		
		Cultivator, Sweep, 4 Rw	1.80 Hr
		Laser, Complete System	0.45 Hr
		Moldboard Plow, 3-16 2	0.90 Hr
		Offset Disk, 12'	1.80 Hr
		Saddle Tk Sprayer, 2 Tk 8	0.72 Hr
		Tractor, 70 PTO HP,	4.14 Hr

MATERIALS REQUIREMENT ( per Acre)			
18-46-00, Dry	450.00 Lb	46-00-00, Urea 46	280.00 Lb
Boxes for Leaf Lettuce	333.00 Ct	Diazinon	1.00 Pt
Leaf Lettuce Sd (coated)	800.00 Th	Methomyl	2.00 Pt
		Bensulide	10.00 Pt
		Imidacloprid	16.00 Oz
		Water, District	46.00 Al

LABOR REQUIREMENT ( per Acre)			
Irrigators	14.13 Hr	Tractor	8.83 Hr

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

\*\* A water assessment charge of \$10.00 per Acre is included as an ownership cost in Table B.

**Table 19E. Schedule of Operations; Fall Leaf Lettuce, 1998**

COUNTY: Maricopa      FARM: Maricopa Veg 98      WATER SOURCE: Salt River Project      TILLAGE: Double Crop  
 CROP: Lettuce, Leaf      ACRES: 1.0      IRRIGATION SYSTEM: Flood Furrow      SOIL: Sandy-Loam  
 AREA: Salt River Project      YIELD: 333.0 Ct / Acre      PREVIOUS CROP: Mixed Greens      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	Aug	1.0	Plow	70	Moldboard Plow, 3-16 2	1.00						Tractor	
2	Aug	3.0	Disk	70	Offset Disk, 12'	1.50						Tractor	
3	Sep	1.0	Laser Level	125	Drag Scraper, 10' Laser, Complete System	2.00						Tractor	
4	Sep	1.0	Make Borders	25	Border Disk, 6' Disk	5.00						Tractor	
5	Sep	1.0	Preirrigate			1.25	Water, District	6.00	Al	0.00	AF	Irrigators	
6	Sep	1.0	Knock Borders	25	Border Disk, 6' Disk	5.00						Tractor	
7	Sep	1.0	Apply Fert/Ground	50	Fert. Side Dress Unit, 4Row	2.00	18-46-00, Dry	450.00	Lb	275.00	Tn	Tractor	
8	Sep	1.0	List	70	Lister, 5 Bottom	3.00						Tractor	
9	Sep	1.0	Shape Beds	70	Bed Shaper, 4 Rw Saddle Tk Sprayer, 2 Tk 8 Row	5.00	Imidacloprid	16.00	Oz	591.67	Ga	Tractor	
10	Sep	1.0	Plant	70	Planter, Stanhay, 4 Row	2.50	Leaf Lettuce Sd	800.00	Th	0.36	Th	Tractor	
11	Sep	1.0	Apply Herbicide/Ground	50	Saddle Tk Sprayer, 2 Tk 8	5.00	Bensulide	10.00	Pt	38.12	Ga	Tractor	
12	Sep	1.0	Make Ditches		Motor Grader, 12'	40.00						Tractor	
13	Sep	10.0	Irrigate			0.75	Water, District	4.00	Al	5.50	AF	Irrigators	
14	Sep	1.0	Cultivate	50	Cultivator, Sweep, 4 Rw	1.00						Tractor	
15	Sep	1.0	Thinning		CST Thinning						75.00	Ac	
16	Oct	1.0	Apply Insect./Ground	50	Manual Spray Rig, 150 g on	5.00	Diazinon	1.00	Pt	26.06	Ga	Tractor	
17	Oct	1.0	Apply Fert/Side Dress	50	Cultivator, Sweep, 4 Rw Fert. Side Dress Unit, 4Row	1.00	46-00-00, Urea 46	280.00	Lb	257.00	Tn	Tractor	
18	Oct	2.0	Apply Insect./Ground	50	Saddle Tk Sprayer, 2 Tk 8	5.00	Methomyl	1.00	Pt	49.05	Ga	Tractor	
19	Nov	1.0	Harvest, Load & Haul		CST Harvest Leaf Lettuce		Boxes for Leaf Lettuce	333.00	Ct	0.90	Ct	3.00	Ct
20	Nov	1.0	Disk Residue	70	Offset Disk, 10.5'	1.50						Tractor	
			Pickup use 50 Mi/Ac		Pickup Truck, 1/2 Ton	0.60							

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

ARIZONA COOPERATIVE EXTENSION  
 Department of Ag and Resource Economics  
 University of Arizona      F 11 / 227