

Table 17A. Income and Cash Operating Summary; Spring Watermelons, 2001

COUNTY: La Paz FARM: La Paz County WATER SOURCE: CRIR Irrigation Project TILLAGE: Double Crop
 CROP: Watermelons ACRES: 1.0 IRRIGATION SYSTEM: Flood Furrow SOIL: Sandy-Loam
 AREA: Parker CRIR YIELD: 14.1 Tn / Acre PREVIOUS CROP: Cotton, Upland DATE: 8/22/01

Item	Unit	Quantity	Price/ Unit	Budgeted /Acre	Total /Acre	Your Farm Budget
INCOME -> Melons	Ton	14.12	\$141.60	\$1,999.39	\$1,999.39	_____
CASH LAND PREPARATION AND GROWING EXPENSES (including sales tax)						
Paid Labor (including benefits)					133.38	_____
Tractor/Self Propelled				86.09		_____
Irrigation				23.66		_____
Other/ Contract				23.63		_____
Chemicals and Custom Applications					453.52	_____
Fertilizer				143.60		_____
Insecticide				309.92		_____
Farm Machinery and Vehicles					116.40	_____
Diesel Fuel				42.73		_____
Gasoline				14.13		_____
Repairs and Maintenance				59.54		_____
Irrigation Water (excluding labor)					0.00	_____
Water Assessment (See Note Below) **						_____
Other Purchased Inputs & Seed/Transplants				96.23	399.23	_____
Other Services and Rentals				303.00		_____
TOTAL CASH LAND PREPARATION AND GROWING EXPENSES					1102.52	_____
CASH HARVEST AND POST HARVEST EXPENSES						
Paid Labor (including benefits)					1.46	_____
Tractor/Self Propelled				1.46		_____
Farm Machinery and Vehicles					3.15	_____
Diesel Fuel				1.48		_____
Repairs and Maintenance				1.67		_____
Custom Harvest/Post Harvest					1096.00	_____
TOTAL HARVEST AND POST HARVEST EXPENSE					1100.61	_____
OPERATING OVERHEAD -> PICKUP USE					13.69	_____
OPERATING INTEREST AT 10.0%					33.65	_____
TOTAL CASH OPERATING EXPENSES					\$2,250.47	_____
RETURNS OVER CASH OPERATING EXPENSES					(\$251.07)	_____

66

Notes: The above figures do not include ownership costs, see table B for detailed cost allocation.
 ** A water assessment charge of \$19.25 per Acre is included as an ownership cost in Table B.

Table 17B. Allocations of Ownership Costs; Spring Watermelons, 2001

COUNTY: La Paz FARM: La Paz County WATER SOURCE: CRIR Irrigation Project TILLAGE: Double Crop
 CROP: Watermelons ACRES: 1.0 IRRIGATION SYSTEM: Flood Furrow SOIL: Sandy-Loam
 AREA: Parker CRIR YIELD: 14.1 Tn / Acre PREVIOUS CROP: Cotton, Upland DATE: 8/22/01

100

Item	-- CASH COST BASIS (\$/ACRE) --		-- TOTAL COST BASIS (\$/ACRE) --	
	Income and Costs	Net Returns	Income and Costs	Net Returns
TOTAL INCOME at \$141.60 / Tn	\$1,999.39		\$1,999.39	
TOTAL OPERATING EXPENSES	\$2,250.47		\$2,250.47	
RETURN OVER CASH OPERATING EXPENSES		(\$251.07)		(\$251.07)
CASH OVERHEAD EXPENSES				
Taxes, Housing and Insurance, Farm Machinery	12.31		12.31	
General and Office Overhead (5.0%of Total Operating Exp.)	112.52		112.52	
General Farm Maintenance (3.0% of Total Operating Exp.)	67.51		67.51	
Total Cash Overhead Expenses	192.35		192.35	
Total Cash Operating and Overhead Cost	2,442.81		2,442.81	
RETURNS OVER CASH OPER. AND OVER. EXPENSES		(\$443.42)		(\$443.42)
CAPITAL ALLOCATIONS (100% Equity)				
Capital Replacement, Machinery and Vehicles			60.75	
Interest on Equity, Machinery and Vehicles			17.46	
Total Capital Allocations			78.21	
RETURNS TO LAND, CAPITAL, MANAGEMENT AND RISK ----->		(\$443.42)		
RETURNS TO LAND, MANAGEMENT AND RISK ----->				(\$521.63)
Land Cost / Rent or Lease	150.00		150.00	
Water Assessment **	19.25		19.25	
Total Land Costs	169.25		169.25	
RETURNS TO CAPITAL, MANAGEMENT AND RISK ----->		(\$612.67)		
RETURNS TO MANAGEMENT AND RISK ----->				(\$690.88)
Management Services (8% of Total Operation Expenses)			180.04	
TOTAL OWNERSHIP COST	361.60		619.85	
TOTAL COST	\$2,612.06		\$2,870.31	
RETURNS TO CAPITAL, MANAGEMENT AND RISK ----->		(\$612.67)		
RETURNS TO RISK (PROFITS) ----->				(\$870.92)
Item	-- CASH COST BASIS (\$/ACRE) --		-- TOTAL COST BASIS (\$/ACRE) --	
	Income and Costs	Net Returns	Income and Costs	Net Returns
BREAK-EVEN PRICE TO COVER OPERATING COST (PER Lb)		\$159.38		\$159.38
BREAK-EVEN PRICE TO COVER OWNERSHIP COST		\$25.61		\$43.90
BREAK-EVEN PRICE TO COVER TOTAL COST		\$184.99		\$203.28

Table 17C. Variable Operating Costs; Spring Watermelons, 2001

COUNTY: La Paz FARM: La Paz County WATER SOURCE: CRIR Irrigation Project TILLAGE: Double Crop
 CROP: Watermelons ACRES: 1.0 IRRIGATION SYSTEM: Flood Furrow SOIL: Sandy-Loam
 AREA: Parker CRIR YIELD: 14.1 Tn / Acre PREVIOUS CROP: Cotton, Upland DATE: 8/22/01

101

No.	First Month	Operation	---- Hours * ----		---- Operating Costs (\$/ACRE *) Per Operation ----					Tot. Cash Expenses	Class	
			Machine	Labor	Fuel/Rps.	Labor	Cust/Serv.	Materials	Total			Times
1	Dec	Rip	0.300	0.333	5.23	2.92			8.15	1.0	8.15	L
2	Dec	Disk	0.150	0.167	3.15	1.46			4.61	2.0	9.22	L
3	Dec	Laser Level	0.225	0.250	3.83	2.19			6.03	1.0	6.03	L
4	Jan	Soil Fertility					3.00		3.00	1.0	3.00	G
5	Jan	Apply Fert/Ground	0.225	0.250	1.53	2.19		43.46	47.18	1.0	47.18	G
6	Jan	List	0.150	0.167	2.01	1.46			3.47	1.0	3.47	L
7	Jan	Shape Beds	1.200	1.333	16.81	11.70			106.47	1.0	106.47	L
8	Jan	Plant	0.514	0.571	5.71	5.01		107.36	118.09	1.0	118.09	L
9	Jan	Make Ditches	0.045	0.050	0.67	0.44			1.10	7.0	7.73	G
10	Jan	Dust Control	0.009	0.010	0.17	0.16			0.33	150.0	48.80	G
11	Jan	Irrigate		0.752		5.77			5.77	1.0	5.77	G
12	Jan	Knock Ditches	0.023	0.025	0.33	0.22			0.55	7.0	3.86	G
13	Jan	Cultivate	0.450	0.500	3.33	4.39			7.71	6.0	46.27	G
14	Feb	Thinning					75.00		75.00	1.0	75.00	G
15	Mar	Apply Fert/Ground	0.327	0.364	3.44	3.19		29.48	36.12	2.0	72.23	G
16	Mar	Apply Insect./Ground	0.225	0.250	1.71	2.19		37.28	41.18	6.0	247.09	G
17	Mar	Apply Herbicide/Ground	0.225	0.250	1.65	2.19		8.26	12.10	1.0	12.10	G
18	Mar	Incorporate Herbicide	0.514	0.571	4.11	5.01			9.12	1.0	9.12	G
19	Mar	Hand Weeding					75.00		75.00	1.0	75.00	G
20	Mar	Irrigate		0.333		2.56			2.56	4.0	10.23	G
21	Mar	Turn Vines					75.00		75.00	2.0	150.00	G
22	Apr	Irrigate/Run Fertilizer		0.500		3.83		15.02	18.85	2.0	37.70	G
23	May	Harvest 13.7 Tn					1096.00		1096.00	1.0	1096.00	H
24	Jun	Residue Disposal 13.7 Tn	0.150	0.167	3.15	1.46			4.61	1.0	4.61	P
		Pickup Use 50 Mi/Acre	1.667		13.69						13.69	
		Operating Interest at 10.0					33.65				33.65	
TOTAL CASH OPERATING EXPENSES (includes all times over):											2250.47	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 \$19.25 per Acre is included as an ownership cost in Table B.

OPERATING COST SUMMARY BY CLASS

Land Preparation (L)	251.43
Growing (G)	851.09
Harvest (H)	1,096.00
Post Harvest (P)	4.61
Marketing (M)	0.00
Operating Overhead (O)	47.34
Total (T)	\$2,250.47

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

Prices ->		- 25%	- 10%	Budgeted	+ 10%	+ 25%	Break-even Price
Yields		\$106.20	\$127.44	\$141.60	\$155.76	\$177.00	
- 25%	10.6	-967.00	-742.07	-592.12	-442.16	-217.23	197.51
- 10%	12.7	-907.16	-637.25	-457.30	-277.35	-7.44	177.59
Budgeted	14.1	-867.27	-567.36	-367.42	-167.48	132.43	167.62
+ 10%	15.5	-827.38	-497.48	-277.54	-57.61	272.29	159.47
Break-even Yield		44.82	25.58	19.89	16.27	12.78	

Table 17D. Resource and Cash Flow Requirements; Spring Watermelons, 2001

COUNTY: La Paz FARM: La Paz County WATER SOURCE: CRIR Irrigation Project TILLAGE: Double Crop
 CROP: Watermelons ACRES: 1.0 IRRIGATION SYSTEM: Flood Furrow SOIL: Sandy-Loam
 AREA: Parker CRIR YIELD: 14.1 Tn / Acre PREVIOUS CROP: Cotton, Upland DATE: 8/22/01

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			0.75		12.21	6.58				18.79
JAN C	1.0	18.0	3.41		31.87	29.83	132.56	96.23	3.00	293.49
FEB C			1.88		16.01	18.54			75.00	109.55
MAR C	2.0	8.0	4.23		28.63	38.44	112.30		150.00	329.37
APR C	2.0	12.0	2.15		13.89	20.01	119.06		75.00	227.96
MAY C	2.0	12.0	1.78		10.44	16.82	89.58		548.00	664.84
JUN C			0.37		6.50	4.61			548.00	559.11
Pickup Use 50 Mi/Acre					13.69					13.69
Operating Interest at 10.0									33.65	33.65
Water Assessment				**						
Total	7.0	50.0	14.56		133.24	134.83	453.50	96.23	1432.65	2250.47
%					5.92	5.99	20.15	4.28	63.66	100.00

TOTAL RESOURCE REQUIREMENTS (per Acre)

Total N 247.2
 Total P 183.1
 Total Labor 14.6
 Total Water 50.0

TOTAL ENERGY REQUIREMENTS (per Acre)

Diesel Fuel 48.1 Gal
 Unleaded Gas 14.4 Gal
 All Direct Energy 8.5 M BTU

EQUIPMENT REQUIREMENTS (per Acre)

Bed Shaper, 4 Rw	1.20 Hr	Dbl. Gang Disk Cult, 1 Rw	3.21 Hr	Directed Spray Rig, 8	0.22 Hr
Drag Scraper, 14'	0.22 Hr	Fert. Side Dress Unit,	0.65 Hr	Fertilizer Broadcaster,	0.22 Hr
Fertilizer Injector, 3 Row	0.51 Hr	Flexi-Planter - 4 Units	0.51 Hr	Laser, Complete System	0.22 Hr
Lister, 5 Bottom	0.15 Hr	Motor Grader, 12'	0.47 Hr	Offset Disk, 18'	0.45 Hr
Pickup Truck, 1/2 Ton	1.67 Hr	Saddle Tk Sprayer, 2 Tk 8	2.55 Hr	Section Harrow, 3 Section	0.51 Hr
Tractor, 80 PTO HP,	6.18 Hr	Tractor, 150 PTO HP,	1.35 Hr	Tractor, 200 PTO HP, 4WD	0.98 Hr
Truck, 5 Ton w/1000 Gal	1.35 Hr	V-Ripper, 5 Shnk	0.30 Hr		

MATERIALS REQUIREMENT (per Acre)

10-34-00, Lqd	7.00 Ga	11-52-00, Dry	300.00 Lb	20-00-00, Amm. Nitrate,	500.00 Lb
32-00-00, URAN 32, Lqd	30.00 Ga	Endosulfan	1.20 Lb	Esfenvalerate	12.00 Pt
Imidacloprid	16.00 Oz	Water, District	50.00 Al	Watermelon Seed (Hyb)	3.00 Th

LABOR REQUIREMENT (per Acre)

Irrigators	3.09 Hr	Tractor	9.98 Hr	Truck Driver	1.50 Hr
------------	---------	---------	---------	--------------	---------

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

** A water assessment charge of \$19.25 per Acre is included as an ownership cost in Table B.

Table 17E. Schedule of Operations; Spring Watermelons, 2001

COUNTY: La Paz FARM: La Paz County WATER SOURCE: CRIR Irrigation Project TILLAGE: Double Crop
 CROP: Watermelons ACRES: 1.0 IRRIGATION SYSTEM: Flood Furrow SOIL: Sandy-Loam
 AREA: Parker CRIR YIELD: 14.1 Tn / Acre PREVIOUS CROP: Cotton, Upland DATE: 8/22/01

First No. Month	Times	Operation	Equipment/ Custom Oper		Job Rate Acre/Hr	Material Use and Cost				Service Cost \$ / Unit	Labor Type
			HP	Self-Prop./ Implement		Name	Appl. Rate	\$ / Unit			
Dec	1.0	Rip	200	V-Ripper, 5 Shnk	3.00						Tractor
Dec	2.0	Disk	200	Offset Disk, 18'	6.00						Tractor
Dec	1.0	Laser Level	200	Drag Scraper, 14'	4.00						Tractor
				Laser, Complete System							
Jan	1.0	Soil Fertility		CST Soil Analysis (Surface)						3.00	Ac
Jan	1.0	Apply Fert/Ground	80	Fertilizer Broadcaster,	4.00	11-52-00, Dry	300.00	Lb	273.33	Tn	Tractor
Jan	1.0	List	150	Lister, 5 Bottom	6.00						Tractor
Jan	1.0	Shape Beds	150	Bed Shaper, 4 Rw	0.75	Imidacloprid	16.00	Oz	588.40	Ga	Tractor
				Saddle Tk Sprayer, 2 Tk 8 Row							
Jan	1.0	Plant	80	Flexi-Planter - 4 Units	1.75	Watermelon Seed	3.00	Th	30.26	Th	Tractor
				Fertilizer Injector, 3 Row		10-34-00, Lqd	7.00	Ga	263.33	Tn	
Jan	7.0	Make Ditches		Motor Grader, 12'	20.00						Tractor
Jan	150.0	Dust Control		Truck, 5 Ton w/1000 Gal Tank	100.00						Truck
Jan	1.0	Irrigate			1.33	Water, District	18.00	Al	0.00	AF	Irrigators
Jan	7.0	Knock Ditches		Motor Grader, 12'	40.00						Tractor
Jan	6.0	Cultivate	80	Dbl. Gang Disk Cult, 1 Rw	2.00						Tractor
Feb	1.0	Thinning		CST Thinning						75.00	Ac
Mar	2.0	Apply Fert/Ground	80	Fert. Side Dress Unit, 4Row	2.75	20-00-00, Amm. Nitrate,	250.00	Lb	222.50	Tn	Tractor
Mar	6.0	Apply Insect./Ground	80	Saddle Tk Sprayer, 2 Tk 8	4.00	Esfenvalerate	2.00	Pt	140.69	Ga	Tractor
Mar	1.0	Apply Herbicide/Ground	80	Directed Spray Rig, 8 Row	4.00	Endosulfan	1.20	Lb	6.49	Lb	Tractor
Mar	1.0	Incorporate Herbicide	80	Dbl. Gang Disk Cult, 1 Rw	1.75						Tractor
				Section Harrow, 3 Section							
Mar	1.0	Hand Weeding		CST Hand Weeding						75.00	Ac
Mar	4.0	Irrigate			3.00	Water, District	4.00	Al	0.00	AF	Irrigators
Mar	2.0	Turn Vines		CST Hand Weeding	0.20					75.00	Ac
Apr	2.0	Irrigate/Run Fertilizer			2.00	Water, District	8.00	Al	0.00	AF	Irrigators
						32-00-00, URAN 32,	15.00	Ga	170.80	Tn	
May	1.0	Harvest		CST Harv/pack/haul						80.00	Tn
Jun	1.0	Residue Disposal	200	Offset Disk, 18'	6.00						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.

Table 17F Operations Calendar; Spring Watermelons, 2001

COUNTY: La Paz FARM: Western Arizona Vegetables WATER SOURCE: CRIR TILLAGE: Double Crop
 CROP: Watermelons ACRES: 1 IRRIGATION SYSTEM: Flood Furrow SOIL: Sandy-Loam
 AREA: Parker YIELD: 13.77 Tn/Acre PREVIOUS CROP: Cotton, Upland DATE: 03/25/2001

No.	Operation	Month and Times Operation Performed											
		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	Rip												1 P
2	Disk	1 C											1 P
3	Laser Level												1 P
4	Soil Fertility	1 C											
5	Apply Fert/Ground	1 C											
6	List	1 C											
7	Bed Shaping/Admire		1 C										
8	Plant	1 C											
9	Make Ditches	1 C	1 C	1 C	2 C	2 C							
10	Dust Control	10 C	30 C	30 C	30 C	30 C	30 C						
11	Irrigate	1 C											
12	Knock Ditches	1 C	1 C	1 C	2 C	2 C							
13	Cultivate		3 C	3 C									
14	Thinning		1 C										
15	Apply Fert/Ground			1 C	1 C								
16	Apply Insect./Ground				2 C	2 C	2 C						
17	Apply Herbicide/Ground			1 C									
18	Incorporate Herbicide			1 C									
19	Hand Weeding			1 C									
20	Irrigate			2 C	1 C	1 C							
21	Turn Vines			1 C	1 C								
22	Irrigate/Run Fertilizer				1 C	1 C							
23	Harv/pack/haul Watermelons					.5 C	.5 C						
24	Disk Residue						1 C						

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