

APPENDIX

**TABLE OF CONTENTS
FOR SPREADSHEETS**

	<u>Page #</u>
Proforma Cash Flow Statement - Historical Data.	80
Proforma Cash Flow Statement - Sales 50% Organizational and 50% Pond Side (Operating Loan Included)	81
Proforma Cash Flow Statement - Addition of Second Pond.	82
Proforma Cash Flow Statement Sales 50% Organizational and 50% Pond Side	83
Evaluation of Merchandising - Scenario A.	84
Proforma Cash Flow Statement Sales 50% Catering and 50% Pond Side	85
Scenario B.	86
Proforma Cash Flow Statement 50% Catering and 50% Organizational.	87
Scenario C.	88
Proforma Cash Flow Statement Sales 100% Pond Side	89
Scenario D.	90
Proforma Cash Flow Statement - Sales 100% to Seafood Processors.	91
Scenario E.	92
Proforma Cash Flow Statement Sales 100% to Organizations.	93
Scenario F.	94
Proforma Cash Flow Statement 100% Catering.	95
Scenario G.	96
Proforma Cash Flow Statement Sales 50% Organizational and 50% Pond Side	
Pessimistic Scenario, Price Variable.	97
Pessimistic Scenario, Feed Cost Increases	98
Pessimistic Scenario, Fingerling Cost Increases	99
Worst Case Scenario	100

Proforma Cash Flow Statement 50% Catering and 50%
Organizational

Pessimistic Scenario, Price Variable.	101
Pessimistic Scenario, Feed Cost Increases	102
Pessimistic Scenario, Fingerling Cost Increases . .	103
Accounting Methods	104
Balance Sheet	107
Income Statement	110

G. WATERS
CASH FLOW STATEMENT

HISTORICAL DATA

1988 CUM	1989												1989 CUM	
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC		
<hr/>														
FUND SOURCES														
BEGINNING CASH BALANCE		209	236	371	1098	859	2396	2464	2332	1247	424	537	1066	13240
ORGANIZATIONAL SALES	2950		117	571		278		340	339		454	1187		3286
AND SIDE SALES		37	30	327	79	61	20	143	51	194	150	110	680	1882
PROCESSING SALES														
ENTERING SALES														
OPERATING LOANS	2400					3800								3800
EQUIPMENT LOANS	3935													
LONG TERM LOANS														
<hr/>														
TOTAL SOURCES	9285	246	383	1269	1177	4720	2694	2607	2723	1780	574	1101	2933	8968
<hr/>														
FUND USES:														
LABOR														
UTILITIES	114	10	12	8	14	22	30	28	31	18	8	5	17	203
REPAIRS & MAINTENANCE											29			29
FUEL	228			163				95						258
INSURANCE														
INTERESTS	1325					2240								2240
CASH FEED	1310			304					1421	1301				3027
WEIGHT												100		100
EDUCATION	86					25			23	12				60
SUPPLIES	360					38		152						189
FEES & SUBSCRIPTIONS	27									25		30	14	69
CONTINUING EDUCATION	362						200							200
OPERATING INTEREST	264												530	530
EQUIPMENT INTEREST	433												364	364
LONG TERM INTEREST														
<hr/>														
TOTAL EXPENSES	4509	10	12	171	318	2325	230	275	1476	1356	37	35	1025	7269
<hr/>														
CAPITAL EXPENDITURES:														
EAT	975													
OCK	250													
AGES	1650													
ISCELLANEOUS	1060													
<hr/>														
TOTAL CAPITAL EXPENDITURES	3935													
<hr/>														
DEBT REPAYMENT:														
OPERATING PRINCIPAL													1000	1000
EQUIPMENT PRINCIPAL	632												701	701
LONG TERM PRINCIPAL														
<hr/>														
TOTAL DEBT REPAYD	632												1701	1701
<hr/>														
ENDING CASH BALANCE	209	236	371	1098	859	2396	2464	2332	1247	424	537	1066	207	

K. G. WATTERS
 PROFORMA CASH FLOW STATEMENT
 SENSITIVITY FACTORS:

SALES 50% ORGANIZATIONAL AND 50% POND SIDE
 OPERATING LOAN INCLUDED

QUANTITY POND 1.00 QUANTITY ORGANIZATIONAL 1.00 PRICE FINGERLINGS 1.00
 PRICE POND 1.00 PRICE ORGANIZATIONAL 1.00 PRICE FISH FEED 1.00

	1990												1990	1991	1992	1993					
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	CUM	CUM	CUM	CUM					

FUND SOURCES																					
BEGINNING CASH BALANCE	207	420	75	1683	206	944	421	468	35	865	1304	1987		578	3015	7759					
ORGANIZATIONAL SALES	142	120	1300	314	239	82	568	202	770	598	441	2697		8393	8393	8393					
POND SIDE SALES	81	68	743	179	138	47	325	116	440	342	252	1541	4271	4796	4796	4796					
PROCESS. SALES																					
CATERING SALES																					
OPERATING LOANS	1200												1200								
EQUIPMENT LOANS																					
LONG TERM LOANS																					

TOTAL SOURCES	430	608	2118	2176	1782	1074	1313	785	1245	1805	1997	6225	5471	13767	16204	20948					

FUND USES:																					
LABOR																					
UTILITIES	10	10	10	10	20	30	30	30	20	10	10	10	200	200	200	200					
REPAIRS & MAINTENANCE										29	29	40	70	120							
FUEL							95	95	258	260	260	260									
INSURANCE																					
FINGERLINGS													1500	1950	2325	2325					
FISH FEED	360	360	360	720	360	720	720	360	360								4320	4140	3960	3960	
FREIGHT				100													100	100	100	100	
MEDICATION																					
SUPPLIES					98	63											63				
DUES & SUBSCRIPTIONS			65													65	65	65	65		
CONTINUING EDUCATION						200											200	200	200	200	
OPERATING INTEREST													572	572	132						
EQUIPMENT INTEREST													286	286	201	111					
LONG TERM INTEREST																					

TOTAL EXPENSES	10	533	435	1970	838	653	845	750	380	501	10	868	7793	7488	7491	7430					

CAPITAL EXPENDITURES:																					
BOAT																					
DOCK																					
CAGES																					
MISCELLANEOUS																					

TOTAL CAPITAL EXPENDITURES																					

DEBT REPAYMENT:																					
OPERATING PRINCIPAL													4000	2400							
EQUIPMENT PRINCIPAL													779	779	864	954					
LONG TERM PRINCIPAL																					

TOTAL DEBT REPAYD													4779	3264	954						

ENDING CASH BALANCE	420	75	1683	206	944	421	468	35	865	1304	1987	578	578	3015	7759	13518					

K. G. WATTERS

PROPORMA CASH FLOW STATEMENT

ADDITION OF SECOND POND

	1990												1990 CUM	1991 CUM	1992 CUM	1993 CUM
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC				
FUND SOURCES:																
BEG. CASH BAL.	207	420	75	1683	206	944	420	467	34	864	1302	1985		516	349	5916
ORGANIZ. SALES	142	120	1300	314	239	82	568	202	770	598	441	2697	7472	16786	16786	16786
POND SIDE SALES	81	68	743	179	137	47	324	115	440	342	252	1541	4270	9592	9592	9592
PROCESS. SALES																
CATERING SALES																
OPERATING LOANS					1200								5400			
EQUIPMENT LOANS														2150		
LONG TERM LOANS	30000												30000			
TOTAL SOURCES	30430	608	2118	2176	1782	1073	1312	784	1244	1803	1995	10423	47141	29044	26727	32294
FUND USES:																
LABOR																
UTILITIES	10	10	10	10	20	30	30	30	20	10	10	10	200	400	400	400
REPAIRS & MAINT.										29			29	80	140	240
FUEL		163					95						258	320	320	320
INSURANCE																
PINGERLINGS				1500									1500	4775	4650	4650
PISH FEED		360	360	360	720	360	720	720	360	360			4320	7740	7920	7920
FREIGHT				100									100	100	100	100
MEDICATION						63							63	120	120	120
SUPPLIES					98					102			200	300	300	300
DUES & SUBSCRIB'S			65										65	65	65	65
CONT. EDUCATION						200							200	200	200	200
OPERATING INTEREST												660	660	726	77	
EQUIPMENT INTEREST												286	286	438	310	156
LONG TERM INTEREST												3300	3300	3204	3098	2979
TOTAL EXPENSES	10	533	435	1970	838	653	845	750	380	501	10	4256	11181	18468	17700	17450
CAPITAL EXPENDITURES:																
BOAT																
DOCK																
CAGES														1650		
MISC.														500		
NEW POND CONSTR.	30000															
TOT. CAP. EXPENDIT	30000													2150		
DEBT REPAYMENT:																
OPERATING PRINCIPAL												4000		5900	700	
EQUIPMENT PRINCIPAL												779	779	1209	1337	426
LONG TERM PRINCIPAL												872	872	968	1074	1193
TOTAL DEBT REPAID												5651		8077	3111	1619
YR END CASH BAL.	420	75	1683	206	944	420	467	34	864	1302	1985	516	516	349	5916	13225

K. G. WATTERS

PROFORMA CASH FLOW STATEMENT SALES 50% ORGANIZATIONAL AND 50% POND SIDE

SENSITIVITY FACTORS:

POND QUANTITY 1.00 ORGANIZATIONAL QUANTITY 1.00 FINGERLING PRICE 1.00
 POND PRICE 1.00 ORGANIZATIONAL PRICE 1.00 PISH FEED PRICE 1.00

	1990												1990	1991	1992	1993
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	CUM	CUM	CUM	CUM

FUND SOURCES:																
BEG. CASH BAL.	207	420	75	1683	206	-256	-780	-733	-1166	-336	102	785		-584	3053	7797
ORGANIZ. SALES	142	120	1300	314	239	82	-568	202	770	598	441	2697	7472	8393	8393	8393
POND SIDE SALES	81	68	743	179	137	47	324	115	440	342	252	1541	4270	4796	4796	4796
PROCESS. SALES																
CATERING SALES																
OPERATING LOANS																
EQUIPMENT LOANS																
LONG TERM LOANS																

TOTAL SOURCES	430	608	2118	2176	582	-127	112	-416	44	603	795	5023	11741	12605	16242	20986

FUND USES:																
LABOR																
UTILITIES	10	10	10	10	20	30	30	30	20	10	10	10	200	200	200	200
REPAIRS & MAINT.													29	40	70	120
FUEL		163					95						258	260	260	260
INSURANCE																
FINGERLINGS				1500									1500	1950	2325	2325
PISH FEED		360	360	360	720	360	720	720	360	360			4320	4140	3960	3960
FREIGHT				100									100	100	100	100
MEDICATION						63							63			
SUPPLIES					98					102			200	200	200	200
DUES & SUBSCRI'S			65										65	65	65	65
COMT. EDUCATION						200							200	200	200	200
OPERATING INTEREST													532	532	132	
EQUIPMENT INTEREST													286	286	201	111
LONG TERM INTEREST																

TOTAL EXPENSES	10	533	435	1970	838	653	845	750	380	501	10	828	7753	7488	7491	7430

CAPITAL EXPENDITURES:																
BOAT																
DOCK																
CAGES																
MISC.																

TOT. CAP. EXPENDITURES																

DEBT REPAYMENT:																
OPERATING PRINCIPAL													4000	1200		
EQUIPMENT PRINCIPAL													779	864	954	
LONG TERM PRINCIPAL																

TOTAL DEBT REPAID													4779	2064	954	

YR END CASH BAL.	420	75	1683	206	-256	-780	-733	-1166	-336	102	785	-584	-584	3053	7797	13556

EVALUATION OF MERCHANDISING SCENARIOS

Scenario A -- Base Case, 50% Pond and 50% Organization Sales

The Watters family can market their fish under scenario "A" if the following conditions prevail. The number of organizations demanding fish and targeted for Watters Catfish Sales is limited in the local geographical market area. This scenario offers 50% of the fish as pondside sales and 50% of the fish as sales to organizations. This strategy provides for market expansion by word of mouth advertising.

Strengths of Scenario A

Price: Distributes price risk between two market segments.

Form: Gives opportunity to market two different product forms including fish in the round and processed fish sales. Capitalizes on the Watters marketing strategy of a money back guarantee for the freshness of the product marketed.

Concept: Focuses on the traditional catfish commodity.

Channel: Builds a parallel customer base in two market channels and expands the number of potential customers in the direct marketing channel.

Place: Captures the local market potential and expands the market area by word of mouth sales on a wider geographical basis.

Other Factors:

Weaknesses of Scenario A

Price: Value of the catfish is reduced by the price focused in the low to medium levels which reduces potential product revenues.

Form: Limits the customer choices only a fresh form and reduces potential convenience of processed and prepared product forms.

Concept: Deals with only a commodity format.

Channel: Fails to penetrate commercial marketing channels.

Place: Available only in a local market.

Other Factors: Requires coordination between two customer groups.

K. G. MATTERS

PROFORMA CASH FLOW STATEMENT SALES 50% CATERING AND 50% POND SIDE

SENSITIVITY FACTORS:

POND QUANTITY 1.00 CATERING QUANTITY 1.00 FINGERLING PRICE 1.00 LABOR COST 1.00
 POND PRICE 1.00 CATERING PRICE 1.00 PISH FEED PRICE 1.00 CATERING COST 1.00

	1990												1990	1991	1992	1993
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	CUM	CUM	CUM	CUM
FUND SOURCES:																
BEG. CASH BAL.	207	607	1848	2156	1172	470	588	67	701	1520	1919	5722		1173	13188	26347
ORGANIZ. SALES																
POND SIDE SALES	81	68	743	179	137	47	324	115	440	342	252	1541	4270	4796	4796	4796
PROCESS. SALES																
CATERING SALES	397	1924		936		845		1443	884	650	4011		11089	19871	19871	19871
OPERATING LOANS																
EQUIPMENT LOANS	1000												1000			
LONG TERM LOANS																
TOTAL SOURCES	1685	2599	2591	3271	1308	1362	912	1626	2025	2511	6182	7263	16359	25840	37855	51014
FUND USES:																
LABOR	33	46		46		46		46	46	33	92		388	715	715	715
CATERING COST	35	172		84		75		129	79	58	358		989	1978	1978	1978
UTILITIES	10	10	10	10	20	30	30	30	20	10	10	10	200	200	200	200
REPAIRS & MAINT.										29			29	40	70	120
FUEL		163					95						258	260	260	260
INSURANCE																
FINGERLINGS				1500									1500	1950	2325	2325
PISH FEED		360	360	360	720	360	720	720	360	360			4320	4140	3960	3960
FREIGHT				100									100	100	100	100
MEDICATION						63							63			
SUPPLIES					98					102			200	200	200	200
DUES & SUBSCRI'S			65										65	65	65	65
CONT. EDUCATION						200							200	200	200	200
OPERATING INTEREST												572	572	132		
EQUIPMENT INTEREST												396	396	274	148	
LONG TERM INTEREST																
TOTAL EXPENSES	78	751	435	2100	838	774	845	925	505	592	460	978	9280	10254	10221	10123
CAPITAL EXPENDITURES:																
BOAT																
DOCK																
CAGES																
MISC.	1000												1000			1000
TOT. CAP. EXPENDITURES	1000												1000			1000
DEBT REPAYMENT:																
OPERATING PRINCIPAL												4000		1200		
EQUIPMENT PRINCIPAL												1112	1112	1197	1287	
LONG TERM PRINCIPAL																
TOTAL DEBT REPAYD												5112		2397	1287	
YR END CASH BAL.	607	1848	2156	1172	470	588	67	701	1520	1919	5722	1173	1173	13188	26347	39891

Scenario B -- 50% Pond and 50% Catering Sales

The Watters family can market their fish under scenario "B" if the following conditions prevail. The marketing effort is directed at two customer groups. The Watter's fish are marketed in the ratio of 50% of the fish as pondside sales and 50% of the fish to catering. The Watters had limited success with the catering business, but feel it can be expanded rapidly by word-of-mouth promotion. The many menu combinations for catering give considerable pricing flexibility to this scenario.

Strengths of Scenario B

Price: Distributes price risk between two market segments. Improves the range of prices and potential revenues with a focus on low, but raises price level from medium to a higher level based on product attributes of the catering activity.

Form: Gives opportunity to market expanded product forms including fish in fresh and prepared forms.

Concept: Broadens the customer choices to maximize the menu selections in 50% of the market (catering) available to customers.

Channel: Builds parallel customer bases in the direct marketing channel.

Place: Captures only the local market.

Other Factors:

Weaknesses of Scenario B

Price: Better than Scenario A in generating revenues because it focuses on price in the 50% low and 50% high levels, but not as good as some other Scenarios.

Form: 50% of poundage is marketed only in a fresh form. Limited choice in options for convenience for customer.

Concept: Deals with a commodity format.

Channel: Limited to the direct marketing option.

Place: Geographical territory is only extended as far as the reputation of K. G. Watters. This is a short run problem because the word of mouth promotion should open other opportunities.

Other Factors: Requires more marketing coordination than in Scenario A because of the on and off farm selling activities.

K. G. WATTERS

PROFORMA CASH FLOW STATEMENT 50% CATERING & 50% ORGANIZATIONAL

SENSITIVITY FACTORS:

ORGANIZ. QUANTITY 1.00 CATERING QUANTITY 1.00 FINGERLING PRICE 1.00 LABOR 1.00
 ORGANIZ. PRICE 1.00 CATERING PRICE 1.00 FISH FEED PRICE 1.00 CATERING COST 1.00

1990	1990												1990	1991	1992	1993
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	CUM	CUM	CUM	CUM
FUND SOURCES:																
BEG. CASH BAL.	207	668	1961	2826	1976	1377	1530	1253	1973	3122	3778	7770		4376	21217	39201
ORGANIZ. SALES	142	120	1300	314	239	82	568	202	770	598	441	2697	7473	8393	8393	8393
POUND SIDE SALES																
PROCESS. SALES																
CATERING SALES	397	1924		936		845		1443	884	650	4011		11089	19871	19871	19871
OPERATING LOANS																
EQUIPMENT LOANS	1000												1000			
LONG TERM LOANS																
TOTAL SOURCES	1745	2712	3261	4076	2215	2304	2098	2898	3627	4370	8230	10467	19562	32640	49481	67465
FUND USES:																
LABOR	33	46		46		46		46	46	33	92		388	715	715	715
CATERING COST	35	172		84		75		129	79	58	358		989	750	750	750
UTILITIES	10	10	10	10	20	30	30	30	20	10	10	10	200	200	200	200
REPAIRS & MAINT.											29		29	40	70	120
FUEL		163					95						258	260	260	260
INSURANCE																
FINGERLINGS				1500									1500	1950	2325	2325
FISH FEED		360	360	360	720	360	720	720	360	360			4320	4140	3960	3960
FREIGHT				100									100	100	100	100
MEDICATION						63							63			
SUPPLIES					98					102			200	200	200	200
DUES & SUBSCRIBERS			65										65	65	65	65
CONT. EDUCATION						200							200	200	200	200
OPERATING INTEREST												572	572	132		
EQUIPMENT INTEREST												396	396	274	148	
LONG TERM INTEREST																
TOTAL EXPENSES	78	751	435	2100	838	774	845	925	505	592	460	978	9280	9026	8993	8895
CAPITAL EXPENDITURES:																
BOAT																
DOCK																
CAGES																
MISC.	1000												1000			1000
TOT. CAP. EXPENDITURE	1000												1000			1000
DEBT REPAYMENT:																
OPERATING PRINCIPAL												4000		1200		
EQUIPMENT PRINCIPAL												1112	1112	1197	1287	
LONG TERM PRINCIPAL																
TOTAL DEBT REPAYED														2397	1287	
YR END CASH BAL.	668	1961	2826	1976	1377	1530	1253	1973	3122	3778	7770	4376	4376	21217	39201	57570

Scenario C -- 50% Organizational and 50% Catering Sales

The Watters family under scenario "C" can market their fish if the following conditions prevail. The sales plan calls for 50% of the catfish to be marketed to organizations, and 50% of the fish to catering. Under this scenario, the family gives up the pondside sales. The catering aspect of the effort under scenario "C" is much more seasonal with the demand for fish sales being concentrated in April and October-December.

Strengths of Scenario C

Price: Distributes price risk between two market segments. Improves the range of prices and potential revenues by focusing on medium to high price level products. Offers considerable price leverage with the many options in the concept category of prepared foods.

Form: Gives a significant opportunity to market expanded product forms including fish in the fresh and prepared form. The options for the prepared aspect of the scenario offers appeal to many groups.

Concept: Broadens the customer choices to maximize the menu selections available to the catering market segment.

Channel: Builds parallel customer bases and the potential for serving many subgroups in the catering market channel.

Place: Captures only the local market with the potential for expanded territorial sales.

Other Factors:

Weaknesses of Scenario C

Price: Price competition might be a factor from franchises offering prepared products of a similar nature (Long John Silver).

Form: Extra equipment might be needed to implement.

Concept: Extra training may be needed for the Watters family in preparation methods and for labor hired to support the catering business.

Channel: Limited to the direct marketing options available.

Place: Geographical territory is only extended as far as the reputation of K. G. Watters. This is a short run problem because the word of mouth promotion should open other opportunities.

Other Factors:

K. G. WATTERS

PROFORMA CASH FLOW STATEMENT SALES 100¢ POND SIDE

SENSITIVITY FACTORS:

POND QUANTITY 1.00 FINGERLING PRICE 1.00
 POND PRICE 1.00 FISH FEED PRICE 1.00

	1990												1990	1991	1992	1993
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	CUM	CUM	CUM	CUM

FUND SOURCES:																
BEG. CASH BAL.	207	372	-14	1154	-429	-972	-1523	-1668	-2170	-2301	-1853	-1126		-3407	-3351	-2188
ORGANIZ. SALES																
POND SIDE SALES	175	147	1603	387	295	101	700	249	249	949	737	3326	8918	9608	9608	9608
PROCESS. SALES																
CATERING SALES																
OPERATING LOANS																
EQUIPMENT LOANS																
LONG TERM LOANS																

TOTAL SOURCES	382	519	1589	1541	-134	-870	-823	-1420	-1921	-1352	-1116	2200	8918	6201	6257	7420

FUND USES:																
LABOR																
UTILITIES	10	10	10	10	20	30	30	30	20	10	10	10	200	200	200	200
REPAIRS & MAINT.										29			29	40	70	120
FUEL		163					95						258	260	260	260
INSURANCE																
FINGERLINGS				1500									1500	1950	2325	2325
FISH FEED		360	360	360	720	360	720	720	360	360			4320	4140	3960	3960
FREIGHT				100									100	100	100	100
MEDICATION						63							63			
SUPPLIES					98					102			200	200	200	200
DUES & SUBSCRI'S			65										65	65	65	65
CONT. EDUCATION						200							200	200	200	200
OPERATING INTEREST												532	532	132		
EQUIPMENT INTEREST												286	286	201	111	
LONG TERM INTEREST																

TOTAL EXPENSES	10	533	435	1970	838	653	845	750	380	501	10	828	7753	7488	7491	7430

CAPITAL EXPENDITURES:																
BOAT																
DOCK																
CAGES																
MISC.																

TOT. CAP. EXPENDITURES																

DEBT REPAYMENT:																
OPERATING PRINCIPAL												4000		1200		
EQUIPMENT PRINCIPAL												779	779	864	954	
LONG TERM PRINCIPAL																

TOTAL DEBT REPAYED												4779		2064	954	

YR END CASH BAL.	372	-14	1154	-429	-972	-1523	-1668	-2170	-2301	-1853	-1126	-3407	-3407	-3351	-2188	-10

Scenario D -- 100% Pondsides Sales

The Watters family can market their fish under scenario "D" if the following conditions prevail. This scenario limits the marketing effort to 100% of the fish sales as pondsides activity.

Strengths of Scenario D

Price: Price has stabilized over a period. Locally he can identify with the quality image of his aquaculture operation.

Form: Offers a fresh product, limited processing, and the money back guarantee.

Concept: Focuses only on a commodity profile.

Channel:

Place:

Other Factors: Focuses attention and work ethic on only one marketing activity.

Weaknesses of Scenario D

Price: Offers limited price and revenue generating potential. Subject to price competition if local food stores carry competing products.

Form: Offers a fresh product and limits choices to customers. Does not capture the full range of value added and product opportunities of a catering option.

Concept: Sold only in a commodity form and can't leverage the ideas of creativity, convenience, and complimentary goods in the marketing effort.

Channel: Limited to the direct market to local customers.

Place: Limited in the geographic area where customers will travel to the farm for purchases. Supply may exceed demand with the restricted market area.

Other Factors:

K. G. WATTERS

PROFORMA CASH FLOW STATEMENT SALES 100¢ TO SEAFOOD PROCESSORS

SENSITIVITY FACTORS:

PROCESSING QUANTITY 1.00 FINGERLINGS PRICE 1.00

PROCESSING PRICE 1.00 FISH FEED PRICE 1.00

	1990												1990	1991	1992	1993					
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	CUM	CUM	CUM	CUM					

FUND SOURCES:																					
BEG. CASH BAL.	207	197	5064	4629	2659	1821	1168	323	-427	-807	-1308	822		-4785	-6477	-7063					
ORGANIZ. SALES																					
POND SIDE SALES																					
PROCESS. SALES		5400											2140	7540	7860	7860	7860				
CATERING SALES																					
OPERATING LOANS																					
EQUIPMENT LOANS																					
LONG TERM LOANS																					

TOTAL SOURCES	207	5597	5064	4629	2659	1821	1168	323	-427	-807	832	822	7540	3075	1382	797					

FUND USES:																					
LABOR																					
UTILITIES	10	10	10	10	20	30	30	30	20	10	10	10	200	200	200	200					
REPAIRS & MAINT.											29	29	40	70	120						
FUEL		163						95						258	260	260	260				
INSURANCE																					
FINGERLINGS													1500	1500	2325	2325					
FISH FEED		360	360	360	720	360	720	720	360	360						4320	4140	3960	3960		
FREIGHT				100											100	100	100	100			
MEDICATION						63											63				
SUPPLIES					98						102						200	200	200	200	
DUES & SUBSCRIBERS			65											65	65	65	65				
CONT. EDUCATION						200											200	200	200	200	
OPERATING INTEREST													532	532	132						
EQUIPMENT INTEREST													286	286	201	111					
LONG TERM INTEREST																					

TOTAL EXPENSES	10	533	435	1970	838	653	845	750	380	501	10	828	7753	7488	7491	7430					

CAPITAL EXPENDITURES:																					
BOAT																					
DOCK																					
CAGES																					
MISC.																					

TOT. CAP. EXPENDITURES																					

DEBT REPAYMENT:																					
OPERATING PRINCIPAL													4000	1200							
EQUIPMENT PRINCIPAL													779	779	864	954					
LONG TERM PRINCIPAL																					

TOTAL DEBT REPAYED													4779	2064	954						

YR END CASH BAL.	197	5064	4629	2659	1821	1168	323	-427	-807	-1308	822	-4785	-4785	-6477	-7063	-6633					

Scenario E -- 100% Seafood Processor Sales

The family can market fish under scenario "E" if the following conditions prevail. The marketing effort of scenario "E" consists of 100% of his fish as sales to a seafood processor. The seafood processor picks up the catfish at the pondside.

Strengths of Scenario E

Price: Well defined market price for product established in the trade.

Form: Sold live or packed in ice in as fresh product only.

Concept: Sold as a farm fresh commodity.

Channel: Opens up several different marketing channels with a deep customer base.

Place: Opens up selling opportunities for large regional and national markets.

Other Factors:

Weaknesses of Scenario E

Price: Very competitive price structure, with price subject to supply and demand on a daily basis. K. G. will face considerable price risk in the market. Mid-Atlantic competes with regions that have climate advantage in the production process.

Form: Marketing strategy of a money back guarantee does not influence the final customer, but only influence the first handler.

Concept: Marketing a commodity only without any product brand or identification.

Channel: The channel usually has several handlers with each expecting a certain level of operating margins. The price at the producer level will usually be subject to pressure from the market.

Place:

Other Factors:

K. G. WATTERS
 PROFORMA CASH FLOW STATEMENT SALES 100% TO ORGANIZATIONS

SENSITIVITY FACTORS:
 ORGANIZATIONAL QUANTITY 1.00 FINGERLING PRICE 1.00
 ORGANIZATIONAL PRICE 1.00 FISH FEED PRICE 1.00

	1990												1990	1991	1992	1993					
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	CUM	CUM	CUM	CUM					
<hr/>																					
FUND SOURCES:																					
BEG. CASH BAL.	207	473	172	2261	901	527	34	292	-67	1048	1708	2554		6717	13630	20318					
ORGANIZ. SALES	276	232	2525	609	464	160	1103	392	1495	1161	856	5238	14510	15133	15133	15133					
POND SIDE SALES																					
PROCESS. SALES																					
CATERING SALES																					
OPERATING LOANS																					
EQUIPMENT LOANS																					
LONG TERM LOANS																					
<hr/>																					
TOTAL SOURCES	483	705	2696	2871	1365	687	1137	683	1428	2209	2564	7792	14510	21850	28763	35451					
<hr/>																					
FUND USES:																					
LABOR																					
UTILITIES	10	10	10	10	20	30	30	30	20	10	10	10	200	200	200	200					
REPAIRS & MAINT.											29	29	40	70	120						
FUEL							163	95					258	260	260	260					
INSURANCE																					
FINGERLINGS				1500													1500	1950	2325	2325	
FISH FEED	360		360	360	720	360	720	720	360	360					4320	4140	3960	3960			
FREIGHT				100													100	100	100	100	
MEDICATION						63											63				
SUPPLIES					98						102					200	200	200	200		
DUES & SUBScri'S	65															65	65	65	65		
CONT. EDUCATION						200											200	200	200	200	
OPERATING INTEREST													286	286	201	111					
EQUIPMENT INTEREST													286	286	201	111					
LONG TERM INTEREST																					
<hr/>																					
TOTAL EXPENSES	10	533	435	1970	838	653	845	750	380	501	10	296	7221	7356	7491	7430					
<hr/>																					
CAPITAL EXPENDITURES:																					
BOAT																					
DOCK																					
CAGES																					
MISC.																					
<hr/>																					
TOT. CAP. EXPENDITURES																					
<hr/>																					
DEBT REPAYMENT:																					
OPERATING PRINCIPAL																					
EQUIPMENT PRINCIPAL													779	779	864	954					
LONG TERM PRINCIPAL																					
<hr/>																					
TOTAL DEBT REPAYD													779	864	954						
<hr/>																					
YR END CASH BAL.	473	172	2261	901	527	34	292	-67	1048	1708	2554	6717	6717	13630	20318	28021					

Scenario F -- 100% Organizational Sales

Watters under scenario "F" can market his fish if the following conditions prevail. They market 100% of their fish as sales to organizations. The catfish are picked up at the farm.

Strengths of Scenario F

Price: A money back guarantee of price ensures the medium price level and revenues at the farm level.

Form: The product is sold fresh, and with limited processing.

Concept: Sold a traditional farm raised product.

Channel: Focuses only on the direct marketing channel.

Place:

Other Factors: One commodity provides a clear focus for serving a customer group.

Weaknesses of Scenario F

Price: Revenues not maximized when compared to other scenarios.

Form: Limited to fresh sales.

Concept: Sold as a commodity and can't leverage any value added options to the pack.

Channel: Limited to the direct marketing channel.

Place: Depending on the number of organizations, the market may become saturated. As the enterprise expands with the one market option territorial boundaries must expand.

Other Factors:

K. G. WATTERS
 PROPORMA CASH FLOW STATEMENT

100% CATERING

SENSITIVITY FACTORS:

CATERING QUANTITY 1.00 FINGERLING PRICE 1.00 LABOR 1.00
 CATERING PRICE 1.00 FISH FEED PRICE 1.00 CATERING COST 1.00

	1990												1990	1991	1992	1993
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	CUM	CUM	CUM	CUM

FUND SOURCES:																
BEG. CASH BAL.	207	876	3786	3351	3025	2187	3012	2167	3984	5153	5792	12965		11447	37769	63903
ORGANIZ. SALES																
POND SIDE SALES																
PROCESS. SALES																
CATERING SALES	793	3848		1872		1690		2886	1768	1300	8021		22178	39742	39742	39742
OPERATING LOANS																
EQUIPMENT LOANS	1000												1000			
LONG TERM LOANS																

TOTAL SOURCES	2000	4724	3786	5223	3025	3877	3012	5053	5752	6453	13813	12965	23178	51189	77511	103645

FUND USES:																
LABOR	43	62		61		61		61	61	44	122		516	951	951	951
CATERING COST	71	343		167		151		258	158	116	716		1979	3842	3842	3842
UTILITIES	10	10	10	10	20	30	30	30	20	10	10	10	200	200	200	200
REPAIRS & MAINT.										29			29	40	70	120
FUEL		163					95						258	260	260	260
INSURANCE																
FINGERLINGS				1500									1500	1950	2325	2325
FISH FEED		360	360	360	720	360	720	720	360	360			4320	4140	3960	3960
FREIGHT				100									100	100	100	100
MEDICATION						63							63			
SUPPLIES					98					102			200	200	200	200
DUES & SUBSCRI'S			65										65	65	65	65
CONT. EDUCATION						200							200	200	200	200
OPERATING INTEREST																
EQUIPMENT INTEREST												396	396	274	148	
LONG TERM INTEREST																

TOTAL EXPENSES	124	938	435	2198	838	865	845	1069	599	661	848	406	9826	12222	12321	12223

CAPITAL EXPENDITURES:																
BOAT																
DOCK																
CAGES																
MISC.	1000												1000			1000

TOT. CAP. EXPENDITURE	1000												1000			1000

DEBT REPAYMENT:																
OPERATING PRINCIPAL																
EQUIPMENT PRINCIPAL												1112	1112	1197	1287	
LONG TERM PRINCIPAL																

TOTAL DEBT REPAYED													1112	1197	1287	

YR END CASH BAL.	876	3786	3351	3025	2187	3012	2167	3984	5153	5792	12965	11447	11447	37769	63903	90422

Scenario G -- 100% Catering Sales

The Watters family under scenario "G" can market fish if the following conditions prevail. They market all of their fish through catering functions.

Strengths of Scenario G

Price: Maximizes price and potential revenues for the enterprise.

Form: Offer many different choices for prepared foods. Fish is complemented by the other food groups.

Concept: Maximizes the choices available with alternative menus serving customer groups.

Channel: Direct contact with the potential customers.

Place: Maximizes the value of the reputation of the Watters family in the local community.

Other Factors:

Weaknesses of Scenario G

Price:

Form: Coordination needed for targeting product form categories.

Concept: The Watters family must be trained in the unique preparation techniques for the food concepts offered -- Cajun, Blackened, smoked, or fried catfish, etc.

Channel: Eliminates other available marketing channels.

Place: Market may be saturated with only catering offered to groups in the local market area.

Other Factors:

K. G. WATTERS
 PROFORMA CASH FLOW STATEMENT PESSIMISTIC SCENARIO, PRICE VARIABLE
 SALES 50% ORGANIZATIONAL AND 50% POND SIDE

SENSITIVITY FACTORS:

POND QUANTITY 1.00 ORGANIZATIONAL QUANTITY 1.00 FINGERLING PRICE 1.00
 POND PRICE 0.77 ORGANIZATIONAL PRICE 0.82 FISH FEED PRICE 1.00

	1990												1990	1991	1992	1993
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	CUM	CUM	CUM	CUM
FUND SOURCES:																
BEG. CASH BAL.	207	376	-7	1197	-378	-915	-1464	-1594	-2090	-1500	-1248	-702		-2911	-1887	243
ORGANIZ. SALES	116	98	1066	257	196	67	466	165	631	490	361	2212	6127	6882	6882	6882
POND SIDE SALES	62	53	572	138	105	36	250	89	339	263	194	1187	3288	3693	3693	3693
PROCESS. SALES																
CATERING SALES																
OPERATING LOANS																
EQUIPMENT LOANS																
LONG TERM LOANS																
TOTAL SOURCES	386	526	1632	1592	-77	-811	-749	-1340	-1120	-747	-692	2696	9414	7665	8688	10818
FUND USES:																
LABOR																
UTILITIES	10	10	10	10	20	30	30	30	20	10	10	10	200	200	200	200
REPAIRS & MAINT.										29			29	40	70	120
FUEL		163					95						258	260	260	260
INSURANCE																
FINGERLINGS				1500									1500	1950	2325	2325
FISH FEED		360	360	360	720	360	720	720	360	360			4320	4140	3960	3960
FREIGHT				100									100	100	100	100
MEDICATION						63							63			
SUPPLIES					98					102			200	200	200	200
DUES & SUBScri'S			65										65	65	65	65
CONT. EDUCATION						200							200	200	200	200
OPERATING INTEREST												532	532	132		
EQUIPMENT INTEREST												286	286	201	111	
LONG TERM INTEREST																
TOTAL EXPENSES	10	533	435	1970	838	653	845	750	380	501	10	828	7753	7488	7491	7430
CAPITAL EXPENDITURES:																
BOAT																
DOCK																
CAGES																
MISC.																
TOT. CAP. EXPENDITURES																
DEBT REPAYMENT:																
OPERATING PRINCIPAL												4000		1200		
EQUIPMENT PRINCIPAL												779	779	864	954	
LONG TERM PRINCIPAL																
TOTAL DEBT REPAYED												4779		2064	954	
YR END CASH BAL.	376	-7	1197	-378	-915	-1464	-1594	-2090	-1500	-1248	-702	-2911	-2911	-1887	243	3388

K. G. WATTERS PESSIMISTIC SCENARIO, FEED COST INCREASES
 PROPORMA CASH FLOW STATEMENT SALES 50% ORGANIZATIONAL AND 50% POND SIDE

SENSITIVITY FACTORS:

POND QUANTITY 1.00 ORGANIZATIONAL QUANTITY 1.00 FINGERLING PRICE 1.00
 POND PRICE 1.00 ORGANIZATIONAL PRICE 1.00 FISH FEED PRICE 1.15

	1990												1990	1991	1992	1993
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	CUM	CUM	CUM	CUM
FUND SOURCES:																
BEG. CASH BAL.	207	420	21	1575	44	-526	-1104	-1165	-1706	-930	-546	137		-1232	1784	5934
ORGANIZ. SALES	142	120	1300	314	239	82	-568	202	770	598	441	2697	7472	8393	8393	8393
POND SIDE SALES	81	68	743	179	137	47	324	115	440	342	252	1541	4270	4796	4796	4796
PROCESS. SALES																
CATERING SALES																
OPERATING LOANS																
EQUIPMENT LOANS																
LONG TERM LOANS																
TOTAL SOURCES	430	608	2064	2068	420	-397	-212	-848	-496	9	147	4375	11741	11957	14973	19123
FUND USES:																
LABOR																
UTILITIES	10	10	10	10	20	30	30	30	20	10	10	10	200	200	200	200
REPAIRS & MAINT.										29			29	40	70	120
FUEL		163					95						258	260	260	260
INSURANCE																
FINGERLINGS				1500									1500	1950	2325	2325
FISH FEED		414	414	414	828	414	828	828	414	414			4968	4761	4554	4554
FREIGHT				100									100	100	100	100
MEDICATION						63							63			
SUPPLIES					98					102			200	200	200	200
DUES & SUBSCRIBERS			65										65	65	65	65
COMT. EDUCATION						200							200	200	200	200
OPERATING INTEREST												532	532	132		
EQUIPMENT INTEREST												286	286	201	111	
LONG TERM INTEREST																
TOTAL EXPENSES	10	587	489	2024	946	707	953	858	434	555	10	828	8401	8109	8085	8024
CAPITAL EXPENDITURES:																
BOAT																
DOCK																
CAGES																
MISC.																
TOT. CAP. EXPENDITURES																
DEBT REPAYMENT:																
OPERATING PRINCIPAL													4000	1200		
EQUIPMENT PRINCIPAL													779	864	954	
LONG TERM PRINCIPAL																
TOTAL DEBT REPAYED													4779	2064	954	
YR END CASH BAL.	420	21	1575	44	-526	-1104	-1165	-1706	-930	-546	137	-1232	-1232	1784	5934	11099

K. G. WATTERS PESSIMISTIC SCENARIO, FINGERLING COST INCREASES
 PROPORMA CASH FLOW STATEMENT SALES 50% ORGANIZATIONAL AND 50% POND SIDE
 SENSITIVITY FACTORS:

POND QUANTITY 1.00 ORGANIZATIONAL QUANTITY 1.00 FINGERLING PRICE 1.10
 POND PRICE 1.00 ORGANIZATIONAL PRICE 1.00 PISH FEED PRICE 1.00

	1990												1990	1991	1992	1993
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	CUM	CUM	CUM	CUM
FUND SOURCES:																
BEG. CASH BAL.	207	420	75	1683	56	-406	-930	-883	-1316	-486	-48	635		-734	2708	7220
ORGANIZ. SALES	142	120	1300	314	239	82	568	202	770	598	441	2697	7472	8393	8393	8393
POND SIDE SALES	81	68	743	179	137	47	324	115	440	342	252	1541	4270	4796	4796	4796
PROCESS. SALES																
CATERING SALES																
OPERATING LOANS																
EQUIPMENT LOANS																
LONG TERM LOANS																
TOTAL SOURCES	430	608	2118	2176	432	-277	-38	-566	-106	453	645	4873	11741	12455	15897	20409
FUND USES:																
LABOR																
UTILITIES	10	10	10	10	20	30	30	30	20	10	10	10	200	200	200	200
REPAIRS & MAINT.										29			29	40	70	120
FUEL		163					95						258	260	260	260
INSURANCE																
FINGERLINGS				1650									1650	2145	2558	2558
PISH FEED		360	360	360	720	360	720	720	360	360			4320	4140	3960	3960
FREIGHT				100									100	100	100	100
MEDICATION						63							63			
SUPPLIES					98					102			200	200	200	200
DUES & SUBSCRI'S			65										65	65	65	65
CONT. EDUCATION						200							200	200	200	200
OPERATING INTEREST												532	532	132		
EQUIPMENT INTEREST												286	286	201	111	
LONG TERM INTEREST																
TOTAL EXPENSES	10	533	435	2120	838	653	845	750	380	501	10	828	7903	7683	7724	7663
CAPITAL EXPENDITURES:																
BOAT																
DOCK																
CAGES																
MISC.																
TOT. CAP. EXPENDITURES																
DEBT REPAYMENT:																
OPERATING PRINCIPAL													4000	1200		
EQUIPMENT PRINCIPAL													779	864	954	
LONG TERM PRINCIPAL																
TOTAL DEBT REPAYD													4779	2064	954	
YR END CASH BAL.	420	75	1683	56	-406	-930	-883	-1316	-486	-48	635	-734	-734	2708	7220	12746

K. G. WATTERS
 WORST CASE SCENARIO, ALL VARIABLES NEGATIVELY IMPACTED
 PROPORMA CASH FLOW STATEMENT SALES 50% ORGANIZATIONAL AND 50% POND SIDE

SENSITIVITY FACTORS:

POND QUANTITY 1.00 ORGANIZATIONAL QUANTITY 1.00 FINGERLING PRICE 1.10
 POND PRICE 0.77 ORGANIZATIONAL PRICE 0.82 FISH FEED PRICE 1.15

	1990												1990	1991	1992	1993
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	CUM	CUM	CUM	CUM

FUND SOURCES:																
BEG. CASH BAL.	207	376	-61	1089	-690	-1335	-1938	-2176	-2780	-2244	-2046	-1500		-3709	-3501	-2198
ORGANIZ. SALES	116	98	1066	257	196	67	466	165	631	490	361	2212	6127	6882	6882	6882
POND SIDE SALES	62	53	572	138	105	36	250	89	339	263	194	1187	3288	3693	3693	3693
PROCESS. SALES																
CATERING SALES																
OPERATING LOANS																
EQUIPMENT LOANS																
LONG TERM LOANS																

TOTAL SOURCES	386	526	1578	1484	-389	-1231	-1223	-1922	-1810	-1491	-1490	1898	9414	6867	7074	8377

FUND USES:																
LABOR																
UTILITIES	10	10	10	10	20	30	30	30	20	10	10	10	200	200	200	200
REPAIRS & MAINT.										29			29	40	70	120
FUEL		163					95						258	260	260	260
INSURANCE																
FINGERLINGS				1650									1650	2145	2558	2558
FISH FEED		414	414	414	828	414	828	828	414	414			4968	4761	4554	4554
FREIGHT				100									100	100	100	100
MEDICATION						63							63			
SUPPLIES					98					102			200	200	200	200
DUES & SUBSCRI'S			65										65	65	65	65
CONT. EDUCATION						200							200	200	200	200
OPERATING INTEREST												532	532	132		
EQUIPMENT INTEREST													286	286	201	111
LONG TERM INTEREST																

TOTAL EXPENSES	10	587	489	2174	946	707	953	858	434	555	10	828	8551	8304	8318	8257

CAPITAL EXPENDITURES:																
BOAT																
DOCK																
CAGES																
MISC.																

TOT. CAP. EXPENDITURES																

DEBT REPAYMENT:																
OPERATING PRINCIPAL												4000		1200		
EQUIPMENT PRINCIPAL												779	779	864	954	
LONG TERM PRINCIPAL																

TOTAL DEBT REPAYD												4779		2064	954	

YR END CASH BAL.	376	-61	1089	-690	-1335	-1938	-2176	-2780	-2244	-2046	-1500	-3709	-3709	-3501	-2198	121
=====																

K. G. WATTERS
 PROPORMA CASH FLOW STATEMENT 50% CATERING & 50% ORGANIZATIONAL
 SENSITIVITY FACTORS:

	1.00 CATERING QUANTITY	1.00 FINGERLING PRICE	1.00 LABOR	1.00									1990	1991	1992	1993
ORGANIZ. QUANTITY	0.77 CATERING PRICE	0.93 FISH FEED PRICE	1.00 CATERING COST	1.00									1990	1991	1992	1993
ORGANIZ. PRICE													CUM	CUM	CUM	CUM
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC				
FUND SOURCES:																
BEG. CASH BAL.	207	607	1738	2304	1317	663	737	330	902	1813	2285	5895		1881	15400	30063
ORGANIZ. SALES	109	92	1001	242	184	63	437	156	593	460	340	2077	5754	6463	6463	6463
POND SIDE SALES																
PROCESS. SALES																
CATERING SALES	369	1789		870		786		1342	822	605	3730		10313	18480	18480	18480
OPERATING LOANS																
EQUIPMENT LOANS	1000												1000			
LONG TERM LOANS																
TOTAL SOURCES	1685	2489	2739	3416	1501	1512	1175	1827	2317	2877	6355	7972	17067	26824	40343	55006
FUND USES:																
LABOR	33	46		46		46		46	46	33	92		388	715	715	715
CATERING COST	35	172		84		75		129	79	58	358		989	750	750	750
UTILITIES	10	10	10	10	20	30	30	30	20	10	10	10	200	200	200	200
REPAIRS & MAINT.											29		29	40	70	120
FUEL		163					95						258	260	260	260
INSURANCE																
FINGERLINGS				1500									1500	1950	2325	2325
FISH FEED		360	360	360	720	360	720	720	360	360			4320	4140	3960	3960
FREIGHT				100									100	100	100	100
MEDICATION						63							63			
SUPPLIES					98					102			200	200	200	200
DUES & SUBSCRI'S			65										65	65	65	65
CONT. EDUCATION						200							200	200	200	200
OPERATING INTEREST												572	572	132		
EQUIPMENT INTEREST												396	396	274	148	
LONG TERM INTEREST																
TOTAL EXPENSES	78	751	435	2100	838	774	845	925	505	592	460	978	9280	9026	8993	8895
CAPITAL EXPENDITURES:																
BOAT																
DOCK																
CAGES																
MISC.	1000												1000			1000
TOT. CAP. EXPENDITURE	1000												1000			1000
DEBT REPAYMENT:																
OPERATING PRINCIPAL												4000		1200		
EQUIPMENT PRINCIPAL												1112	1112	1197	1287	
LONG TERM PRINCIPAL																
TOTAL DEBT REPAYED												5112		2397	1287	
YR END CASH BAL.	607	1738	2304	1317	663	737	330	902	1813	2285	5895	1881	1881	15400	30063	45111

K. G. WATTERS
 PROFORMA CASH FLOW STATEMENT PESSIMISTIC SCENARIO, FINGERLING COST INCREASES
 50% CATERING & 50% ORGANIZATIONAL

SENSITIVITY FACTORS:

ORGANIZ. QUANTITY 1.00 CATERING QUANTITY 1.00 FINGERLING PRICE 1.10 LABOR 1.00
 ORGANIZ. PRICE 1.00 CATERING PRICE 1.00 FISH FEED PRICE 1.00 CATERING COST 1.00

	1990												1990	1991	1992	1993
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	CUM	CUM	CUM	CUM
FUND SOURCES:																
BEG. CASH BAL.	207	668	1961	2826	1826	1227	1380	1103	1823	2972	3628	7620		4226	20872	38623
ORGANIZ. SALES	142	120	1300	314	239	82	568	202	770	598	441	2697	7473	8393	8393	8393
POND SIDE SALES																
PROCESS. SALES																
CATERING SALES	397	1924		936		845		1443	884	650	4011		11089	19871	19871	19871
OPERATING LOANS																
EQUIPMENT LOANS	1000												1000			
LONG TERM LOANS																
TOTAL SOURCES	1745	2712	3261	4076	2065	2154	1948	2748	3477	4220	8080	10317	19562	32490	49136	66887
FUND USES:																
LABOR	33	46		46		46		46	46	33	92		388	715	715	715
CATERING COST	35	172		84		75		129	79	58	358		989	750	750	750
UTILITIES	10	10	10	10	20	30	30	30	20	10	10	10	200	200	200	200
REPAIRS & MAINT.										29			29	40	70	120
FUEL		163					95						258	260	260	260
INSURANCE																
FINGERLINGS				1650									1650	2145	2558	2558
FISH FEED		360	360	360	720	360	720	720	360	360			4320	4140	3960	3960
FREIGHT				100									100	100	100	100
MEDICATION						63							63			
SUPPLIES					98					102			200	200	200	200
DUES & SUBSCRI'S			65										65	65	65	65
CONT. EDUCATION						200							200	200	200	200
OPERATING INTEREST												572	572	132		
EQUIPMENT INTEREST													396	274	148	
LONG TERM INTEREST																
TOTAL EXPENSES	78	751	435	2250	838	774	845	925	505	592	460	978	9430	9221	9225	9128
CAPITAL EXPENDITURES:																
BOAT																
DOCK																
CAGES																
MISC.	1000												1000			1000
TOT. CAP. EXPENDITURE	1000												1000			1000
DEBT REPAYMENT:																
OPERATING PRINCIPAL												4000		1200		
EQUIPMENT PRINCIPAL												1112	1112	1197	1287	
LONG TERM PRINCIPAL																
TOTAL DEBT REPAYED												5112		2397	1287	
YR END CASH BAL.	668	1961	2826	1826	1227	1380	1103	1823	2972	3628	7620	4226	4226	20872	38623	56760

K. G. WATTERS PESSIMISTIC SCENARIO, FEED COST INCREASES
 PROPORMA CASH FLOW STATEMENT 50% CATERING & 50% ORGANIZATIONAL

SENSITIVITY FACTORS:

ORGANIZ. QUANTITY 1.00 CATERING QUANTITY 1.00 FINGERLING PRICE 1.00 LABOR 1.00
 ORGANIZ. PRICE 1.00 CATERING PRICE 1.00 FISH FEED PRICE 1.15 CATERING COST 1.00

	1990												1990	1991	1992	1993
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	CUM	CUM	CUM	CUM
FUND SOURCES:																
BEG. CASH BAL.	207	668	1907	2718	1814	1107	1206	821	1433	2528	3130	7122		3728	19948	37338
ORGANIZ. SALES	142	120	1300	314	239	82	568	202	770	598	441	2697	7473	8393	8393	8393
POND SIDE SALES																
PROCESS. SALES																
CATERING SALES	397	1924		936		845		1443	884	650	4011		11089	19871	19871	19871
OPERATING LOANS																
EQUIPMENT LOANS	1000												1000			
LONG TERM LOANS																
TOTAL SOURCES	1745	2712	3207	3968	2053	2034	1774	2466	3087	3776	7582	9819	19562	31992	48212	65602
FUND USES:																
LABOR	33	46		46		46		46	46	33	92		388	715	715	715
CATERING COST	35	172		84		75		129	79	58	358		989	750	750	750
UTILITIES	10	10	10	10	20	30	30	30	20	10	10	10	200	200	200	200
REPAIRS & MAINT.											29		29	40	70	120
FUEL		163					95						258	260	260	260
INSURANCE																
FINGERLINGS				1500									1500	1950	2325	2325
FISH FEED		414	414	414	828	414	828	828	414	414			4968	4761	4554	4554
FREIGHT				100									100	100	100	100
MEDICATION						63							63			
SUPPLIES					98					102			200	200	200	200
DUES & SUBSCRI'S			65										65	65	65	65
CONT. EDUCATION						200							200	200	200	200
OPERATING INTEREST												572	572	132		
EQUIPMENT INTEREST													396	396	274	148
LONG TERM INTEREST																
TOTAL EXPENSES	78	805	489	2154	946	828	953	1033	559	646	460	978	9928	9647	9587	9489
CAPITAL EXPENDITURES:																
BOAT																
DOCK																
CAGES																
MISC.	1000												1000			1000
TOT. CAP. EXPENDITURE	1000												1000			1000
DEBT REPAYMENT:																
OPERATING PRINCIPAL												4000		1200		
EQUIPMENT PRINCIPAL												1112	1112	1197	1287	
LONG TERM PRINCIPAL																
TOTAL DEBT REPAID												5112		2397	1287	
YR END CASH BAL.	668	1907	2718	1814	1107	1206	821	1433	2528	3130	7122	3728	3728	19948	37338	55113

Accounting Methods
Single Entry vs. Double Entry
or
Cash vs. Accrual

Accounting Methods

Single Entry versus Double Entry or Cash vs. Accrual

Introduction

For many years, a debate has raged as to the "proper" method of accounting to be used by farmers and ranchers to maintain financial records. Unfortunately, the debate often becomes emotionally focused on the payment or deferral of income taxes, rather than being focused on whether or not the financial records are adequate to support basic business decisions.

To reconcile the debate, it is necessary to compare and contrast the two most frequently used but widely divergent accounting methods and then to look at the simple steps necessary to convert from one to the other.

Single Entry (or Cash Accounting)

The "single entry" accounting method is often referred to as "cash accounting". Record keeping for single entry accounting is based on the time the farmer receives or pays out cash, not the time goods or services are exchanged or a liability incurred. The resulting net income will therefore be based only on the difference between cash received and cash paid out in an accounting period.

Single entry accounting is widely used to calculate taxable income. The modern day obligation for individuals and business entities to pay income taxes traces back to ratification of the Sixteenth Amendment to the Constitution, after which Congress enacted the Revenue Act of 1913. However, early rules for calculating taxable income recognized that taxes must be paid with cash; therefore, it only made sense to calculate taxable income based on the difference between cash received and cash paid out. As time passed, the Internal Revenue Service Regulations for calculating taxable income have been changed, but individuals and family farming corporations (with gross income less than \$25,000,000) are generally still permitted to report taxable income based primarily on the difference between cash received and cash paid out.

The principal drawback to single entry accounting is that it may not record all the assets or all the liabilities. The shortcoming occurs if cash has not changed hands as part of the transaction. The result is that balance sheets may not record all assets and all liabilities and income statements may not report revenue correctly matched to the expenses incurred to create the revenues. For example: a corn and soybean producer may buy seed and fertilizer in year 19X1, actually plant the seed, grow and harvest the crops in 19X2, but not sell the grain and receive cash until 19X3. Because financial reports and tax reports are prepared on an annual basis, the "true profitability" in each of the three years could be seriously distorted if single entry accounting methods were used.

Double Entry (or Accrual Accounting)

The "double entry" accounting method is often referred to as "accrual accounting". Double entry accounting requires the recording of a transaction when goods or services are received or sold, and when liabilities are incurred, regardless of whether or not cash was received or paid out.

After being produced, a farmer's commodity can be sold immediately for cash, sold for credit, or held in inventory. Double entry accounting reflects all three possible stages in both the balance sheet and income statement, while single entry accounting does not.

Double entry accounting reflects all expenses incurred, whether paid or yet to be paid, in the production of a commodity in a given period. Single entry accounting does not record costs incurred that will be paid at a later date (i.e. accounts payable).

Double entry accounting effectively matches revenues with the expenses incurred to create those revenues, thereby giving a "true" measure of profitability. This matching of revenues with expenses will occur regardless of the timing of supply purchases and commodity sales.

Financial Report Impact

The following comparison of single entry and double entry accounting methods will be limited to the balance sheet and income statement because they are the two financial reports most widely prepared and most frequently relied upon for business decisions.

Balance Sheet -- single entry (or cash)

Figure 1 presents a balance sheet prepared by the single entry accounting methods.

HIGH PLAIN FARMS

Balance Sheet
December 31, 19XX
Single Entry (or cash) Accounting

ASSETS		LIABILITIES	
Current Assets		Current Liabilities	
Cash	\$ 23,000	Notes Payable	\$ 16,000
Supplies Purchased	<u>4,000</u>	Current Portion, Term Debt	32,000
Total Current Assets	27,000	Withheld Payroll Taxes	<u>4,000</u>
		Total Current Liabilities	52,000
Fixed Assets (net)		Long Term Debt	
Land	510,000	Notes	148,000
Buildings	190,000	Mortgages	<u>243,000</u>
Farm Equipment	150,000		
Office Equipment	5,000		
Truck & Autos	<u>30,000</u>		
Total Fixed Assets	885,000	Total Long Term Debt	391,000
		TOTAL LIABILITIES	<u>\$443,000</u>
		TOTAL NET WORTH	<u>\$469,000</u>
TOTAL ASSETS	<u>\$912,000</u>	TOTAL LIABILITIES & NET WORTH	<u>\$912,000</u>

Figure 1 .

Balance Sheet -- double entry (or accrual)

Figure 2 presents a balance sheet prepared by double entry accounting, method.

HIGH PLAIN FARMS

Accrual Balance Sheet
December 31, 19XX
Double Entry (or accrual) Accounting

ASSETS		LIABILITIES	
Current Assets		Current Liabilities	
Cash	\$ 23,000	Notes Payable	\$ 16,000
Supplies Purchased	4,000	Current Portion, Term Debt	32,000
Grain Inventory*	60,000	Withheld Payroll Taxes	4,000
Accounts Receivable*	10,000	Accounts Payable*	239,000
Prepaid Expenses*	5,000	Accrued Expenses*	20,000
Total Current Assets	<u>102,000</u>	Total Current Liabilities	<u>\$ 311,000</u>
Fixed Assets (net)		Long Term Debt	
Land	510,000	Notes	148,000
Buildings	190,000	Mortgages	<u>243,000</u>
Farm Equipment	150,000		
Office Equipment	5,000		
Trucks & Autos	<u>30,000</u>		
Total Fixed Assets	885,000	Total Long Term Debt	391,000
		TOTAL LIABILITIES	<u>\$ 702,000</u>
		TOTAL NET WORTH	<u>\$ 285,000</u>
TOTAL ASSETS	<u>\$ 987,000</u>	TOTAL LIABILITIES & NET WORTH	<u>\$ 987,000</u>

*Accounts that were absent from the balance sheet prepared using the single entry accounting method.

Figure 2.

Balance Sheet -- Compare Single Entry to Double Entry

Although both balance sheets were prepared for the same firm and as of the same date, they present a very different picture of financial position because of the accounting method used.

On the single entry balance sheet, the following accounts are not recorded at all.

- a. accounts receivable
- b. inventories (of products raised on the farm)
- c. prepaid expenses
- d. accounts payable
- e. accrued expenses

On the double entry balance sheet, there is now a complete list of all assets and all outstanding debts. Items marked with an asterisk are the accounts which were missing from the single entry balance sheet.

Compare Figure 1 and Figure 2. Total assets increased by \$75,000 (from \$912,000 to \$987,000) when comparing single entry to double entry accounting; but total net worth decreased by \$184,000 (from \$469,000 to \$285,000). These significant changes occurred because double entry accounting methods resulted in recordation of all assets and all liabilities regardless of whether or not cash had been paid.

Income Statement -- Single Entry (or cash)

Figure 3 is an income statement prepared by single entry accounting methods. Revenues (or receipts) and expenses are recorded only when cash is received or paid out.

MR. GRAIN FARMER

Income Statement
Year Ending 12/31/X5
Single Entry (or cash) Accounting

Receipts	
Cash collection of accounts receivable after 12/31/X4	\$ 50,000
Grain sold and cash payment received	<u>200,000</u>
Total Cash Receipts	<u>\$250,000</u>
Operating Expenses (paid for with cash)	\$ 76,000
Other Expenses	
Interest (paid)	15,000
Total Cash Expenses	<u>91,000</u>
Net "Cash" Profit	<u>\$159,000</u>

Figure 3.

Income Statement -- Double Entry (or accrual)

Figure 4 is an income statement for the same farmer as Figure 3, but now prepared by double entry accounting methods. Revenues and expenses are recorded when received or spent, regardless of when cash is actually received or paid out. The result is to match revenues with the expenses incurred to create those revenues.

MR. GRAIN FARMER

Income Statement
Year Ending 12/31/X5
Double Entry (or accrual) Accounting

Revenues

Collected (for grain sold and cash received)	\$200,000	
Reflected in Accounts Receivable	<u>10,000</u>	
Total Revenue		<u>\$210,000</u>

Cost of Sales

Beginning Inventory (Grain)	60,000	
Outside Purchases of Grain (for cash)	10,000	
Add: Operating Expenses (Cash)	76,000	
Increased Accounts Payable	<u>70,000</u>	146,000
Less: Ending Inventory (Grain)	<u>(40,000)</u>	
Cost of Sales		\$176,000

Other Expenses

Interest (paid during year)	15,000	
Accrued Expenses (not yet due, but incurred)	<u>20,000</u>	
Total Other Expenses		<u>\$ 35,000</u>
Total Expenses		<u>\$211,000</u>
Net "Accrual" Loss		<u>(\$ 1,000)</u>

Figure 4.

Income Statement -- Compare Single Entry to Double Entry

Mr. Grain Farmer appears to run a very profitable operation according to his single entry income statement, in which only cash transactions are recorded. The net cash profit reported for the calendar year ending 19X5 is \$159,000. However, using the double entry method for the same period shows a net loss of \$1,000. A number of questions will identify major transactions not recorded by single entry accounting that result in the \$160,000 difference in reported earnings.

- a. Was any grain sold and delivered on credit (accounts receivable)?
- b. What operating expenses for this year's crop were paid for with credit and remain unpaid as an open account (accounts payable)?
- c. What other expenses were incurred but have not yet been paid with either cash or credit (accrued expenses)?
- d. What is the value of any grain produced that has not been sold but is currently being stored (inventory)?
- e. Are there any expenses that were paid for with cash in 19X4, but that were actually incurred for production of crops in 19X5 (deferred or prepaid expenses)?

The answers to the above questions determine that:

- a. sales are overstated \$40,000 by using the single entry method. Of the \$50,000 collected for accounts receivable, only \$10,000 was for sales of grain grown during the period. The remaining \$40,000 was collected on accounts receivable from grain physically produced and actually sold in previous years.
- b. two significant noncash accounts are distorted -- inventory and accounts payable. Distorting these accounts results in a \$100,000 understatement of cost of sales (the expenses incurred in connection with sales).
- c. other expenses were understated. Unpaid accrued expenses increased by \$20,000 during the year 19X5, but were not recorded on the single entry statement.

Subtracting expenses from revenue on the double entry income statement, Mr. Grain Farmer is clearly in a net income position far less favorable than the one portrayed in the single entry income statement.

Converting Single Entry to Approximate Double Entry

The first step in converting a single entry income statement to approximate a double entry income statement is to obtain complete (i.e. double entry) balance sheets prepared as close as possible to the beginning and the end of the time period covered by the income statement. It would be pointless, for example, to attempt to develop a double entry income statement for the calendar year, if the only available balance sheets were dated eighteen months apart, since six months of operations reflected in the balance sheets would be outside the period covered by the calendar year income statement.

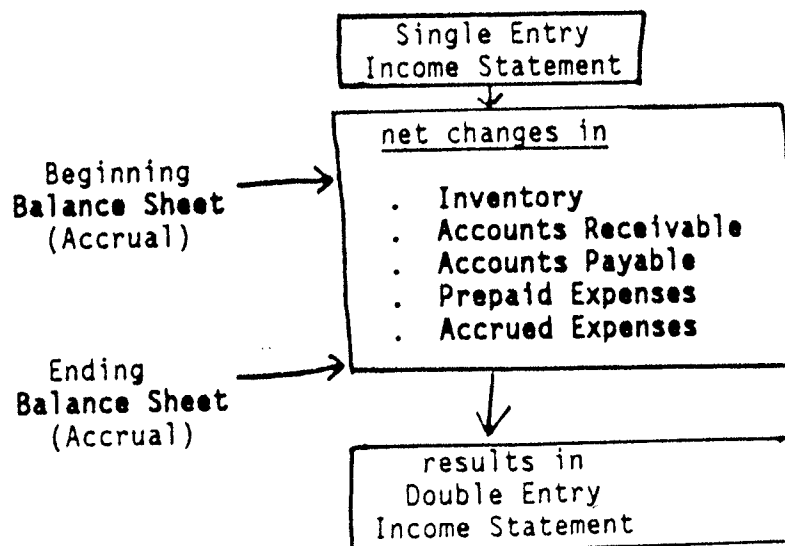
Second, determine whether current assets and current liabilities are all recorded and have been consistently treated on the balance sheets. Discrepancies sometimes occur when farmers present balance sheets "off the cuff", without carefully reviewing their financial records. Also, remember that single entry balance sheets and income statements do not reflect the following accounts because cash has not been received or paid:

- . inventory
- . accounts receivable
- . prepaid expenses
- . accounts payable
- . accrued expenses

These accounts are always found on double entry balance sheets, and they are always missing from balance sheets prepared by the single entry accounting method. (For balance sheets prepared from "memory", without good records, prepaid and accrued expenses are usually missing, and inventory, accounts receivable, and accounts payable are often incomplete.) Regardless, changes in these accounts must be included in order to arrive at a reasonably accurate double entry net income figure.

Figure 5 is a simple illustration of the financial statements needed and the path to be followed in converting a single entry income statement to a double entry income statement.

Converting Income Statements from Single Entry to Double Entry Basis



Adjustments to Single Entry Income Statements

<u>Cash Basis</u>	<u>Adjustments</u>	<u>Accrual Basis</u>
Cash receipts	<div style="display: flex; align-items: center;"> <div style="font-size: 4em; margin-right: 10px;">{</div> <ul style="list-style-type: none"> - Beginning accounts receivable + Ending accounts receivable + Beginning unearned revenue - Ending unearned revenue </div>	Gross revenues
Cash payments for expenses	<div style="display: flex; align-items: center;"> <div style="font-size: 4em; margin-right: 10px;">{</div> <ul style="list-style-type: none"> + Beginning inventory - Ending inventory - Beginning accounts payable + Ending accounts payable + Beginning prepaid expenses - Ending prepaid expenses - Beginning accrued expenses + Ending accrued expenses </div>	Operating expenses (before depreciation and similar write-offs)
Cash payments for property, plant, and equipment	<div style="display: flex; align-items: center;"> <div style="font-size: 4em; margin-right: 10px;">{</div> <ul style="list-style-type: none"> - Cash payments for property, plant, and equipment + Periodic write-off of the asset cost </div>	Depreciation or amortization expenses
Cash Net Income		Accrual Net Income

Figure 5.

From Cash Receipts to Revenues

As Figure 5 shows, cash receipts are converted to **gross revenues** by subtracting beginning accounts receivable and adding ending accounts receivable. By expanding the formula to include all of the accounts related to sales, cash receipts can be converted to **gross sales**, as shown below.

Cash receipts from customers		\$100
<u>Plus:</u> Cash discounts	\$ 5	
Sales returns and allowances	2	
Accounts written off	3	
Ending accounts receivable	<u>15</u>	<u>25</u>
		\$125
<u>Less:</u> Beginning accounts receivable		<u>(50)</u>
Gross sales or gross revenues		\$ 75

Gross sales can be very different from total cash receipts, especially if there has been a big change in accounts receivable. Suppose accounts receivable increase during the year, and this increase is not recognized as noncash revenue from this year's production. Net income will be understated as a result. Likewise, if accounts receivable decrease, then net income will be overstated by the amount of this decrease. This overstatement of net income is because cash is being received when customers make payments on their year-old accounts, while accounts receivable are decreasing. However, the cash receipt from an old account receivable should have already been recognized as revenue from last year. So, in order to avoid double-counting of revenue, the decrease in accounts receivable must be subtracted from this year's cash receipts.

Cash receipts from customers can also be converted to **net sales**. Unlike gross sales, net sales do not include cash discounts, sales returns and allowances, or accounts written off. Net sales are derived by taking cash receipts and adding or subtracting the net change occurring in accounts receivable on the balance sheet from the beginning to the end of the year, as shown below.

Cash receipts from customers	+ Increase in accounts receivable	
	or	= Net Sales
	- Decrease in accounts receivable	

From Cash Payments for Expenses to Operating Expenses

Cash payments for goods can be converted to "cost of goods sold" by adding or deducting the change occurring from the beginning to the end of the year in accounts payable and inventory.

Cash payments for goods only	+ Increase in accounts payable or - Decrease in accounts payable	= Net Purchases
Net purchases Sold	+ Decrease in inventory or - Increase in inventory	= Cost of Goods

Cash payments for all other expenses are converted to double entry basis operating expenses in the aggregate, and the process therefore involves both prepaid and accrued expenses. Generally, each expense item is affected by a related accrual expense or a related prepayment, but not both. This rule is shown below for the conversion of wages expense and the conversion of insurance expense.

Wages paid during the year	+ Ending accrued wages - Beginning accrued wages	= Wages expense for the year
Insurance premiums paid during the year	- Ending prepaid insurance + Beginning prepaid insurance	= Insurance expensed for the year
All other cash payments	+ Beginning prepaid expenses - Ending prepaid expenses or - Beginning accrued expenses + Ending accrued expenses	= All other operating expenses

From Cash Payments for Assets to Depreciation Expense

Depreciation expense is a noncash expenditure. Therefore, depreciation is not reflected as an expense in true single entry income statements. To complete the conversion of a true single entry income statement to a double entry income statement, include a depreciation expense and eliminate all cash payments for purchases of assets with a useful life of longer than one year.

Usually, single entry income statements prepared for filing tax returns will show depreciation as an expense item, but will not show capital purchases as an expense item. This deviation from true single entry accounting occurs because tax laws do not allow expensing of capital purchases but do allow a deduction for the noncash expense of depreciation.

Depreciation expense can be determined by a number of different formulas. However, the fundamental concept is to match the depreciation expense to the actual physical depletion, or "wearing out", of the fixed asset.

	- Cash payments for fixed assets	Depreciation or = amortization expense
Cash payments for fixed assets	+ Periodic write-off of the asset cost	

Example: Open Space Farms

To illustrate the detailed conversion of a single entry income statement to a double entry basis, we will use Open Space Farms, a proprietorship owned by Joe Softlee, for which income and expense records are maintained by the single entry accounting method. See Figure 6.

OPEN SPACE FARMS	
Income Statement	
January 1, 19XX to December 31, 19XX	
<u>(Single Entry Basis)</u>	
SALES	
Cash collection of accounts receivable from previous year	\$ 45,000
Grain sold and cash payment received	<u>205,000</u>
Total Cash Receipts	\$250,000
OPERATING EXPENSES AND GRAIN PURCHASES (paid for with cash)	\$ 85,000
OTHER EXPENSES	
Interest (paid in cash)	<u>16,000</u>
Total Cash Expense	\$101,000
NET CASH PROFIT	<u>\$149,000</u>

However, Mr. Softlee's Balance Sheets (prepared by the double entry accounting method so as to record all assets and debts) at January 1 and December 31, 19XX reflected inventories, accounts receivable, accounts payable, and accrued expenses as follows:

	<u>1/01/19XX</u>	<u>12/31/19XX</u>
Inventories	\$60,000	\$40,000
Accounts Receivable	45,000	5,000
Accounts Payable	10,000	80,000
Accrued Expenses	5,000	25,000

Figure 6.

We can combine the information from the single entry income statement and the supplemental balance sheet information provided by Mr. Softlee into the following worksheet (Figure 7).

OPEN SPACE FARMS

Conversion of Income Statement from Single Entry Basis to
Double Entry Basis for the year 19XX

	<u>Single Entry</u>	<u>Adjustments</u> <u>Add</u> <u>(Deduct)</u>	<u>Double Entry</u>
Revenue from Sales	\$250,000		
- Accounts Receivable, Jan. 1			(\$45,000)
+ Accounts Receivable, Dec. 31		\$5,000	
Restated			\$210,000
Operating Expenses & Purchases	86,000		
- Accounts Payable, Jan. 1			(10,000)
+ Accounts Payable, Dec. 31		80,000	
+ Inventory, Jan. 1		60,000	
- Inventory, Dec. 31			(40,000)
Restated			176,000
Other Expenses	15,000		
- Accrued Expenses, Jan. 1			(5,000)
+ Accrued Expenses, Dec. 31		25,000	
Restated	<u> </u>		<u>\$ 35,000</u>
Total Expenses	\$101,000		\$211,000
Net Income - Single Entry (i.e. cash)	<u>\$149,000</u>		
Net Income - Double Entry (i.e. accrual)			<u>\$ (1,000)</u>

Figure 7.

From the preceding worksheet (Figure 7), a double entry income statement can be prepared for Open Space Farms (Figure 8).

OPEN SPACE FARMS

Income Statement
January 1, 19XX to december 31, 19XX

(Double Entry Basis)

SALES

Collected	\$205,000	
Reflected in Accounts Receivable	<u>5,000</u>	
Total Revenue		<u>\$210,000</u>

COST OF SALES

Beginning Inventory (grain)		\$ 60,000	
Add: Purchases (grain for cash)	\$10,000		
Operating Expenses	75,000		
Increased Accounts Payable	<u>70,000</u>	155,000	
Less: Ending Inventory (grain)		<u>(40,000)</u>	
Cost of Sales			175,000

OTHER EXPENSES

Interest (paid during year)	\$ 16,000		
Accrued Expenses (not yet due, but incurred)	<u>20,000</u>		
Total Other Expenses			<u>\$ 36,000</u>
Total Expenses			<u>\$211,000</u>
NET PROFIT (LOSS)			<u>(\$ 1,000)</u>

Figure 8.

As this illustration shows, computing income on a single entry basis can materially misrepresent "true" profitability when there is a time lag between the exchange of goods and services and the related cash receipt or cash payout. Furthermore, three items usually account for over 90 percent of the difference between single entry income and "true" profitability:

- . accounts receivable
- . accounts payable
- . inventories

However, only the net changes in these three accounts are necessary to reach the correct conclusion. The appropriate adjustments are the following:

- . In inventories and accounts receivable, a net increase from one period to the next must be added to cash-basis income; and a net decrease must be subtracted from cash-basis income
- . In accounts payable, a net increase from one period to the next must be subtracted from cash-basis income; and a net decrease must be added to cash-basis income.

Return to the example of Open Space Farms. A quick way to convert the single entry net income figure of \$149,000 to the double entry net loss of \$1,000 is to simply add or subtract the various net changes in inventories, accounts receivable, accounts payable, and other noncash transactions affecting the "true" profitability of the operation. The net changes affecting Open Space Farms' real income for the year 19XX are shown below.

	<u>1/1/19XX</u>	<u>12/31/19XX</u>	<u>Net Changes</u>
Inventories	\$60,000	\$40,000	\$-20,000
Accounts Receivable	45,000	5,000	-40,000
Accounts Payable	10,000	80,000	+70,000
Accrued Expenses	5,000	25,000	+20,000

Figure 9 presents a standard, simplified format for converting a single entry income statement to a double entry income statement using the net changes in the balance sheet accounts. This abbreviated format is useful if the objective of the analysis is only to determine the approximate level of profitability after matching revenues with the expenses incurred to create the revenues.

OPEN SPACE FARMS

Using the Net Changes in Noncash Transactions
to Convert Net Income from Cash to Accrual
January 1 to December 31, 19XX

	Year Ending <u>19XX</u>
Single Entry (or cash) net income	<u>\$149,000</u>
Inventory increase	<u> </u>
Inventory decrease	(<u>20,000</u>)*
Increase in investment in crops	<u> </u>
Decrease in investment in crops	(<u> </u>)*
Increase in prepaid expenses	<u> </u>
Decrease in prepaid expenses	(<u> </u>)*
Decrease in accrued expenses	<u> </u>
Increase in accrued expenses	(<u>20,000</u>)*
Increase in accounts receivable	<u> </u>
Decrease in accounts receivable	(<u>40,000</u>)*
Decrease in accounts payable	<u> </u>
Increase in accounts payable	(<u>70,000</u>)*
Double Entry (or accrual) net income (sum of above)	<u>\$ (1,000)</u>

* The parentheses signify changes in the balance sheet accounts that decrease "true" net income. These entries are to be subtracted when calculating the double entry net income from a beginning single entry net income.

Figure 9.

Summary

The preceding discussion focuses on the two extremes: single entry (or cash) and double entry (or accrual) accounting methods.

Single entry accounting methods are relatively simple and easy to maintain because the checkbook is the primary source of all data entries. Remember: no transaction is recorded unless cash is paid or received (checks and cash are considered the same for this purpose). However, single entry accounting can present a distorted financial position (because the balance sheet may not present all assets or liabilities) and a materially misleading profitability picture (because revenues are not matched with expenses incurred to create those revenues).

Double entry accounting methods require more complex record keeping systems. However, double entry accounting presents a correct financial position (because all assets and all liabilities are recorded on the balance sheet) and a "true" profitability picture (because revenues are matched against the expenses incurred to create those revenues).

A farmer can enjoy both the simplicity of single entry accounting and the correctness of double entry accounting. The best of both worlds can occur by:

- a. maintaining complete single entry income and expense records throughout the year;
- b. preparing a complete double entry balance sheet at the beginning (usually January 1) and end (usually December 31) of each year; and
- c. then making the simple "conversion" of the resulting single entry net income to determine the approximate double entry or "true" net income.