Developing a Cash Flow Plan

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A cash flow plan is a recorded projection of the amount and timing of all cash inflows and cash outflows expected to occur throughout the planning period. Larger farms, substitution of capital assets for labor, and inflation increase the amount of cash required to operate the farm or ranch and make the cash flow plan an increasingly valuable tool in farm financial management. The cash flow plan:

- establishes target levels for income and expenses, which can be used in monitoring progress towards goals
- points out potential problems in meeting financial obligations
- indicates when cash is available for new investments

Although the cash flow plan is important in farm management, it is most effective when used with the balance sheet (Extension Fact Sheet AGEC-752) and income statement (Extension Fact Sheet AGEC-753). These three statements, supported by good farm records, form the core of financial decision making information. Financial planning involves projecting the consequences and results of possible actions, using the financial statements, and then analyzing the projected results. Thus, the potential effect of actions and decisions can be analyzed prior to their implementation and the financial requirements can be evaluated in advance. Comparing budgeted flows with those that actually occur is a useful management technique for monitoring performance.

The Cash Flow Plan

A Cash Flow Statement form is provided with this fact sheet. The form may be used to **document actual cash flows or to develop a projected cash flow plan.** The cash flow may include only business cash flows or both business and personal cash inflows and outflows. Operations with multiple owners (partnerships, corporations) likely will use the business option, while sole proprietors are more likely to use the form as a consolidated statement. The user may designate at the top of the form which type of cash flow is being developed.

For a monthly cash flow plan, the columns can be used to denote the 12 months of the year. Alternatively, columns can be used to denote bi-monthly, quarterly, or semiannual periods. The last column can serve as a record of the previous year's total for each line. Or, it may be used to enter estimated prices, quantities, or other information pertaining to individual cash inflow or outflow estimates.

The rows correspond to individual cash inflow and outflow items. Additional rows provide space for determining the projected cash position, borrowing, operating loan payments, and the accumulated loan balance for each period of the year. Sums of each cash inflow and outflow item (rows) for the year are listed in the Totals column. Thus, the values in this column represent the projected annual sources (inflows) and uses (outflows) of cash. The Totals column is also useful as a check column for possible mistakes in the entries for each period.

Steps in Estimating Cash Flow

A cash flow projection should be prepared when farm plans for the coming year are being developed. A good time to plan and prepare the cash flow estimate is at the beginning of the accounting period. For many farm and ranch firms, this will be at the first of the year when information is summarized for income tax returns. For others, it may be during the planning period prior to planting crops, purchasing cattle, or seeking a loan.

Last year's actual entries from hand records, tax forms, or checkbook registers are useful in projecting the cash flow for the coming year. Some record keeping systems provide a complete cash flow summary of the previous year.[1] Another source of information is last year's projections, if available. If a cash flow has not previously been completed, or if major changes in the operation are planned, relying on previous estimates may not be adequate. Crop and livestock budgets also provide input for projecting cash flows. Budgets can be adjusted from last year's actual figures to reflect changes in cattle numbers, crop acreage, and expected costs and prices.

Once records and other available information such as enterprise budgets and a farm organization plan for the coming year are gathered, you are ready to begin entering data in the cash flow form. A good starting point is to complete last year's actual column (the last column). This will serve as a check for reasonableness in estimates for the coming year. Rows 1 to 57 may be completed several ways:

1. Estimates of the totals may be entered in the Totals column and then prorated to the periods of expected flow.

1 See OSU Extension Fact Sheet AGEC-302 for more detailed information about farm record systems available to Oklahoma farmers.

2. Entries may be made directly in the appropriate column for each period and summed across to get Totals.

Often, a combination of the two approaches is used. Each section of the Cash Flow Form will be discussed below using an example Oklahoma farm, the James and Dolly Madison case. The discussion and illustration will focus on line items on a section-by-section basis.

Cash Inflows

Cash Received from Operations

In this section, total cash receipts are estimated for items sold during the period. Whether the inflows are from sale of inventory or from current production makes no difference for the cash flow statement. Only cash transactions are reflected in the cash flow. Lines 1 through 5 document expected cash receipts from Livestock Sales (except breeding livestock, which is a capital asset sale), Sales of Livestock Purchased for Resale, Livestock Product Sales, and Crop Sales. Unused lines can be customized to separate receipts by enterprise.

Cash receipts from stockers, feeders, and any other livestock purchased to be resold are recorded on line 1. For cash flow planning, it is not essential to separate receipts for livestock purchased for resale from other cash receipts (after all, cash is cash). But, most record systems and the income tax schedules require separate entries for sales as well as purchases of livestock to be resold. To better conform to these uses of information, the livestock purchased for resale and raised livestock sales are listed on separate lines for both receipts and expenses in the OSU Cash Flow form. Stockers purchased last October are expected to be sold in March and are entered as Sales of Livestock Purchased for Resale (line 1). Estimated March receipts are $126,489 (before trucking and commissions). In the example, James Madison plans to sell calves from the cow-calf enterprise in October with expected cash income of $34,592. This figure is entered on line 3.

Cash receipts from crop sales are handled similarly to livestock. Make entries to reflect the marketing plan or estimated marketing each period. For example, if all wheat will be sold at harvest, enter the total for projected wheat sales in the column for the harvest month. Although the marketing plan may change, careful estimates are better in the long run than no plans or estimates at all. Finally, if share-rent arrangements are used for crops or livestock, only the cash portion of the producer's share of sales is included on the cash flow. Although James Madison has some wheat and hay storage, most crop sales occur at harvest. Wheat sales are expected to generate $50,800 (line 4) in July and $25,400 in October. Alfalfa sales are expected to generate $17,975 from September through January. Hay sales are expected to generate $4,800 in July.

Estimated Ag Program Payments (line 6) should be based on anticipated participation in government programs and expected payments for participation. The Madisons expect to receive $7,567 in Ag Program Payments during the plan year, split between October and December. Crop insurance indemnity payments might also be included or could be listed separately. Line 7 provides space to estimate cash inflows from Other Farm Income. Receipts from custom work, cash rental of farm business property, and miscellaneous receipts should be included. James Madison does custom work for neighbors and expects to receive $28,672 in June. Here, Patronage Dividends are entered on line 8, $280 in December. Line 9 is used to sum cash operating inflows.

Note: The designated lines of the cash flow statement may not provide sufficient space for the detail needed. For instance, you may want to keep three crop enterprises on separate lines on the cash flow. These enterprises can be accommodated on lines 7 or 8 or on unused livestock lines. Similar minor changes can be made throughout the cash flow to fit specific needs.

Cash Received from Capital Sales

Cash receipts from the sale of breeding livestock, machinery, equipment, vehicles, real estate and buildings, and nonfarm capital assets are entered in lines 10 through 12. While not all capital sales can be projected in advance, breeding livestock and machinery should be reviewed to anticipate cull cow or bull sales or changes in machinery and equipment that involve cash. Cash sales of any breeding livestock, whether purchased or raised, should be included. For machinery and equipment, record expected cash sales only. Trade transactions do not normally generate cash. In our example, James Madison expects to sell ten cows from the herd and replace them with raised heifers. Cash generated from the sale of culled cows is anticipated to be $15,000 in November. The Madisons plan to sell a combine for $85,000 in April.

Other Cash Received

Lines 13 to 15 represent nonfarm cash receipts that will be available for use in the farm or ranch business during the coming year. These include nonfarm income; sales of marketable securities; investment income; sale of personal assets/retirement account withdrawals; capital contributions; gifts and inheritances. Nonfarm income may include expected wages and salaries from off-farm work (operator and spouse) plus income from a nonfarm business. Income from the sale of marketable securities, interest and dividends from investments, and royalty payments are combined on the next line. Past experiences are useful in estimating nonfarm receipts. Dolly Madison works off-farm and earns $1,800 per month. The Madison's receive $80 per month in royalty income.

Total Cash Inflows

Total Cash Inflows (other than new borrowing), line 16, is derived by summing lines 9 through 15. The number in the Totals column ($491,935 in the example) should equal the sum across periods for line 16 as well as the sum of the totals in lines 9 through 15.

Cash Outflows

Projecting expenditures is generally easier than projecting revenues. Operating expense figures can come from many sources. The previous year's cash expenditures serve as a good starting point. If an actual past cash flow statement is not available, hand records, year-end summaries of computerized records, or tax forms from prior years are useful. The cash flow form is designed to be compatible with IRS Schedule 1040 F, farm record handbooks, and computerized record systems. While the order of line items may differ slightly, you will find each of these sources of information corresponds well with items listed on the form.

For some expenses, adjustments may be needed to reflect changes in the farm plan and expected prices. For other expenses, simply inflating or deflating the previous period's actual expenditures by an appropriate factor may adequately estimate upcoming expenditures. Use your judgment in applying one or both methods to develop good estimates of anticipated cash outflows. A cash flow plan helps the operator avoid potential cash management problems as well as prepare for possible opportunities as they occur.

Cash Paid for Operating Expenses

Operating expenses refer to those cash expenses incurred for the period to period operation of the business. If Car and Truck expenses are combined for tax purposes, line 17 may be used to sum the expenses for upkeep of vehicles used in the business (gas, oil, repairs, license tags, insurance, etc.). Alternatively, gas, fuel, oil, repairs, taxes and insurance can be summed with other like items in lines 25, 26, 30, and 34, as James Madison does.

The amount and timing of *Chemicals* (line 18) used will depend on crops grown, pests, disease, weather, and costs of treatment. If the crop and pest management plan is not expected to change significantly, use last year's figures as a guide for this year's cash flow plan with appropriate price adjustments. *Conservation* expenses may be entered on line 19 and include cash outlays for soil or water conservation or for the prevention of erosion (unless they are treated as capital expenses).

For line 20, *Custom Hire* (machine work), generate a total expenditure estimate based on the planned crop acreage and predicted or contracted cost per acre. (Note: If crop receipts in line 4 or 5 were listed net of custom work or costs do not include the deducted costs here as they would be double counted.) These costs may be prorated to months of expenditure. James Madison has an extensive machinery and equipment complement and does not custom hire any field work. He does however, have crop hauling costs included in the Custom Hire (line 20) because they occur as part of the harvest.

Feed expenditures (line 22) will greatly depend upon livestock enterprise plans and feed inventories. Major expenditures may be calculated on an estimated need and expected price basis. If major changes are planned in the livestock operations, the cost of expected requirements should be budgeted based on the new plan. This method is more complicated than the simple inflation mark-up, but also is more accurate. James Madison plans to stay with about the same plan used last year. Thus a major portion of the feed expense will be incurred from December through February. For the other months, last year's feed expenditures are adjusted upward to reflect expected cost increases.

Fertilizers and Lime (line 23) and *Seeds and Plants* (line 31) expenditures depend on planting intentions, soil tests, and input prices. If little change in varieties, planting rates, and application rates is planned, adjusting for acreage and predicted price differences is adequate. On the other hand, major changes require more explicit budgeting. If part or all of the expenses are shared in a rental arrangement, only cash expenditures for this business, not the total cost, should be included in the cash outflows. In the example, the seed is paid for at the time it is delivered for planting. If early purchases are made or late payment is planned, entries should be made accordingly. James Madison's cash outlay for fertilizer and lime occurs primarily during the application months of August, February, and March.

Freight and Trucking (line 24) depends primarily on how much and when crops and livestock are marketed. For example, James Madison pays trucking costs for stockers purchased in October. Often only the charges for cattle show up in line 24. The timing of freight and trucking expenditures should correspond to the marketing plans for those enterprises. If hauling is not custom hired, most of the cash expenses will appear on other lines such as gas, fuel, oil, labor hired, and repairs.

Projecting *Gasoline, Fuel, and Oil* costs (line 25) for the upcoming year may be quite a task. It may be easiest to take the costs from each period of last year and make a blanket adjustment estimate, based on expected changes in the production plan and input prices. For James Madison, 108 percent of last year's outlays served as an estimate for the coming period. If per acre fuel, oil, and lubricant cost accounts are kept, more accurate estimates may be made by multiplying acres of crops to be planted times estimated costs per acre.

Insurance (line 26) and *Taxes* (line 34) are straight forward. Taxes may include car licenses, state or local sales taxes, state and federal income taxes, federal use taxes, and self-employment taxes for the farm. The previous year's figures are a useful guide for the present year's plan.

Labor Hired (line 27) should include cash wages as well as cash expenditures for employee benefits and employer contributions to employee social security. James Madison expects to need part-time help June through September.

Rent or Lease (line 29) are generally predictable. Cash renting of crop land, pasture, and buildings will comprise the major expenses. Annual, quarterly, or monthly cash payments are entered in the appropriate month(s).

Line 30 allows for estimation of *Repairs and Maintenance* expenses (those not capitalized) in the coming period. The effect of major items on last period's actual repair cost should be considered in anticipating major outlays in the period ahead. For routine repairs, simply increasing or decreasing the previous year's figure based on expected price changes estimates outlays. Based on previous experience, James Madison expects most machinery repair to occur from wheat harvest through planting. While some minor machinery and equipment repair is forecast throughout the year, typically most breakdowns and equipment preparation occur in this period.

Repairs to buildings and fences are less obvious. If major building repairs are planned, the estimated cost should be entered for the appropriate period. Estimates of minor building repair and maintenance should be based on those experienced in the last few years. Since no major repairs are anticipated by James Madison, last period's expenditures were simply increased by 10 percent and prorated throughout the year.

Careful consideration of the entire crop program including expected quantities, the marketing schedule, and on-farm storage availability will serve as the basis for deciding on the cash expenses for *Storage and Warehousing* (line 32). Estimated crop size and cost of storage per unit should be easy to get. The greatest uncertainty may stem from the length of time the crops will remain in storage. Make your best estimate based on previous experience and the marketing plan at the time a cash flow budget is developed. James Madison plans to sell crops at harvest or use on-farm storage so no storage and warehousing costs are shown.

CASH FLOW

Business [ ] Consolidated [ ] Personal

Actual [X] Projected [X]

Covering the period: Mar 2014 through Feb 2015

			Totals	March	April	May	June	July
CASH RECEIVED FROM OPERATIONS								
1	Sale of Livestock Bought for Resale: Stockers		126,489	126,489	-	-	-	-
2	Sale of Livestock Products		-	-	-	-	-	-
3	Livestock Sales (raised)		34,592	-	-	-	-	-
4	Crop Sales: Wheat & Alfalfa		166,075	-	-	-	-	50,800
5	Prairie Hay		5,700	900	-	-	-	4,800
6	Ag Program Payments		7,567	-	-	-	-	-
7	Other Farm Income		28,952	-	-	-	28,672	-
8	Patronage Dividends		280	-	-	-	-	-
9	TOTAL CASH RECEIVED FROM OPERATIONS	(Sum 1 thru 8)	369,375	127,389	-	-	28,672	55,600
CASH RECEIVED FROM CAPITAL SALES								
10	Non-Real Property		100,000	-	85,000	-	-	-
11	Land, Buildings & Improvements		-	-	-	-	-	-
12	Non-Farm Property		-	-	-	-	-	-
OTHER INFLOWS								
13	Wages and Salaries		21,600	1,800	1,800	1,800	1,800	1,800
14	Other Contributed Capital		-	-	-	-	-	-
15	Royalty Income		960	80	80	80	80	80
16	TOTAL CASH INFLOWS	(Sum 9 thru 15)	491,935	129,269	86,880	1,880	30,552	57,480
OPERATING EXPENSES								
17	Car and Truck Expenses							
18	Chemicals		5,768	5,768				
19	Conservation Expenses							
20	Custom Hire (machine work)		1,066	-	-	-	-	1,066
21	Employee Benefits							
22	Feed		9,796	-	-	-	-	-
23	Fertilizers and Lime		38,018	15,602	1,235	-	-	-
24	Freight and Trucking		835	935	-	-	-	-
25	Gasoline, Fuel, and Oil		29,838	263	259	2,327	9,846	4,885
26	Insurance		7,001	-	-	-	3,502	2,088
27	Labor Hired		13,975	145	142	2,156	3,239	2,400
28	Pension and profit-sharing							
29	Rent or Lease		10,918	2,350	-	-	-	-
30	Repairs and Maintenance		28,408	332	327	2,638	10,584	3,806
31	Seeds and Plants		15,912	-	-	15,283	-	-
32	Storage and Warehousing		1,547	-	-	-	-	-
33	Supplies		163	-	-	163	-	-
34	Taxes		3,332	1,647	-	-	-	-
35	Utilities		1,320	110	110	110	110	110
36	Veterinary, Breeding and Medicine		1,251	26	166	48	107	-
37	Miscellaneous		607	-	-	-	-	-
38	Marketing Expenses		2,465	595				
39			-	-				
40	Cost of Livestock Purchased for Resale		85,000					
41	TOTAL CASH EXPENSES	(Sum 17 thru 40)	257,420	27,773	2,239	22,725	27,388	14,355
CAPITAL EXPENSES								
42	Non-Real Property		155,000	-	-	155,000	-	-
43	Land, Buildings & Improvements		-	-	-	-	-	-
44	Non-Farm Property		-	-	-	-	-	-
OTHER OUTFLOWS								
45	Family Living		53,000	4,417	4,417	4,417	4,417	4,417
46	Income & Social Security Taxes		10,350	-	-	-	-	-
47			-	-	-	-	-	-
48			3,000	250	250	250	250	250
SCHEDULED LOAN PAYMENTS								
49	Current Short Term -Interest		3,186	3,186	-	-	-	-
50	-Principal		85,000	85,000	-	-	-	-
51	Non-Real Estate -Interest		2,605	51	1,208	48	46	44
52	-Principal		10,767	208	4,183	211	213	215
53	Real Estate -Interest		11,376	-	-	2,232	-	-
54	-Principal		11,592	-	-	3,000	-	-
55	Non-Farm Loan -Interest		3,739	342	336	331	326	320
56	-Principal		8,104	645	651	656	661	667
57	TOTAL CASH OUTFLOWS	(Sum 41 thru 56)	615,139	121,872	13,284	188,870	33,301	20,268
NEW BORROWING								
58	Short Term		85,000	-	-	-	-	-
59	Non-Real Estate		150,000	-	-	150,000	-	-
60	Real Estate		-	-	-	-	-	-
CASH FLOW SUMMARY								
	Interest Rate: 7.00%							
	Minimum Cash Balance: 1500							
61	Beginning Cash Balance			3,421	1,500	12,870	1,500	1,500
62	Inflows - Outflows	(16 - 57)		7,397	73,596	(186,990)	(2,749)	37,212
63	Cash Position	(Sum 58 thru 62)		10,818	75,096	(24,200)	(1,249)	38,183
64	New Borrowing, Line of Credit			-	-	25,720	2,749	-
65	Interest Accrued, Line of Credit	Accrued Interest = 2,331		2,731	361	-	150	316
66	Line of Credit - Interest Payments		3,838	2,731	361	-	-	316
67	Line of Credit - Principal Payments			9,287	61,965	-	-	28,469
68	Ending Cash Balance			1,500	12,770	1,500	1,500	9.927
OUTSTANDING LOAN BALANCES			Feb 14					
69	Outstanding Credit Line Loans		68,552	61,965	-	25,720	28,469	-
70	Outstanding Short Term Loans		85,000	-	-	-	-	-
71	Outstanding Non-R.E. Loans		28,085	27,877	23,695	173,483	173,270	173,056
72	Outstanding Real Estate Loans		130,962	130,962	130,962	127,962	127,962	127,962
73	Outstanding Non-Farm Loans		41,624	40,979	40,328	39,672	39,011	38,344
74	TOTAL OUTSTANDING LOANS	(sum 64 thru 68)	354,223	261,783	194,985	366,837	368,712	339,362

STATEMENT

Name: James and Dolly Madison
Date Prepared: 3/1/2015

	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.		
	-	-	-	-	-	-	-	1	
	-	-	-	-	-	-	-	2	
	-	-	34,592	-	-	-	-	3	
	-	17,975	43,375	17,975	17,975	17,975	-	4	
	-	-	-	-	-	-	-	5	
	-	-	-	-	-	7,567	-	6	
	-	-	-	-	280	-	-	7	
	-	-	-	-	-	-	-	8	
	-	17,975	77,967	17,975	18,255	17,975	-	9	
	-	-	-	15,000	-	-	-	10	
	-	-	-	-	-	-	-	11	
	-	-	-	-	-	-	-	12	
	1,800	1,800	1,800	1,800	1,800	1,800	1,800	13	
	-	-	-	-	-	-	-	14	
	80	80	80	80	80	80	80	15	
	1,880	19,855	79,847	34,855	20,135	27,422	1,880	16	
								17	
								18	
								19	
	-	-	-	-	-	-	-	20	
								21	
	-	-	48	1	3,249	3,249	3,249	22	
	-	7,861	-	-	-	-	7,552	23	
	-	-	-	-	-	-	-	24	
	3,668	4,550	248	223	223	223	223	25	
	-	-	-	-	1,385	-	26		
	2,727	3,166	-	-	-	-	-	27	
								28	
	-	8,568	-	-	-	-	-	29	
	4,246	4,940	307	307	307	307	307	30	
	-	629	-	-	-	-	-	31	
	-	-	1,547	-	-	-	-	32	
	-	-	-	-	-	-	-	33	
	-	-	-	-	1,647	38	-	34	
	110	110	110	110	110	110	110	35	
	-	-	904	-	-	-	-	36	
	-	-	-	-	107	100	400	37	
				1,870				38	
								39	
			85,000					40	
	10,751	29,824	88,164	2,511	7,628	4,027	11,867	41	
	-	-	-	-	-	-	-	42	
	-	-	-	-	-	-	-	43	
	-	-	-	-	-	-	-	44	
	2,630	2,630	2,630	2,630	2,630	2,630	2,630	45	
	-	-	-	-	-	-	10,350	46	
	-	-	-	-	-	-	-	47	
	250	250	250	250	250	250	250	48	
	-	-	-	-	-	-	-	49	
	-	-	-	-	-	-	-	50	
	42	41	989	37	35	33	31	51	
	217	218	4.402	222	224	226	228	52	
	7,244	190	187	2,277	182	179	176	53	
	5,925	335	338	3,341	343	346	349	54	
	122	119	116	114	111	108	105	55	
	340	343	345	348	351	354	357	56	
	29,308	35,737	99,208	13,517	12,941	9,940	28,130	57	
	-	-	85,000	-	-	-	-	58	
	-	-	-	-	-	-	-	59	
	-	-	-	-	-	-	-	60	
	9,927	1,500	1,500	31,942	53,856	61,050	78,532	61	
	(27,428)	(15,882)	(19,361)	21,914	7,194	17,482	(26,250)	62	
	(17,501	(14,382)	67,169	53,856	61,050	78,532	52,282	63	
	19,001	15,882	-	-	-	-	-	64	
	-	111	314	-	-	-	-	65	
	-	-	314	-	-	-	-	66	
	-	-	-	-	-	-	-	67	
	1,500	1,500	34,883	53,856	61,050	78,532	52,282	68	
	19,001	34,883	-	-	-	-	-	69	
	-	-	85,000	85,000	85,000	85,000	85,000	70	
	172,839	172,621	168,218	167,996	167,772	167,546	167,318	71	
	145,726	145,391	145,053	141,712	141,369	141,023	140,674	72	
	14,315	13,972	13,627	13,279	12,927	12,573	12,216	73	
	350,881	366,867	411,898	407,987	407,068	406,142	405,208	74	

CASH FLOW

Business ☐
Consolidated ☐
Personal ☐

Actual ☐
Projected ☐

Covering the period: _____ through _____

			Totals	March	April	May	June	July	
CASH RECEIVED FROM OPERATIONS									
1	Sale of Livestock Bought for Resale:								
2	Sale of Livestock Products								
3	Livestock Sales (raised)								
4	Crop Sales: Wheat								
6	Ag Program Payments								
7	Other Farm Income								
8	Patronage Dividends								
9	TOTAL CASH RECEIVED FROM OPERATIONS	(Sum 1 thru 8)							
CASH RECEIVED FROM CAPITAL SALES									
10	Non-Real Property								
11	Land, Buildings & Improvements								
12	Non-Farm Property								
OTHER INFLOWS									
13	Wages and Salaries								
14	Other Contributed Capital								
15	Royalty Income								
16	TOTAL CASH INFLOWS	(Sum 9 thru 15)							
OPERATING EXPENSES									
17	Car and Truck Expenses								
18	Chemicals								
19	Conservation Expenses								
20	Custom Hire (machine work)								
21	Employee Benefits								
22	Feed								
23	Fertilizers and Lime								
24	Freight and Trucking								
25	Gasoline, Fuel, and Oil								
26	Insurance								
27	Labor Hired								
28	Pension and profit-sharing								
29	Rent or Lease								
30	Repairs and Maintenance								
31	Seeds and Plants								
32	Storage and Warehousing								
33	Supplies								
34	Taxes								
35	Utilities								
36	Veterinary, Breeding and Medicine								
37	Other Expenses								
38									
39									
40	Cost of Livestock Purchased for Resale								
41	TOTAL CASH EXPENSES	(Sum 17 thru 40)							
CAPITAL EXPENSES									
42	Non-Real Property								
43	Land, Buildings & Improvements								
44	Non-Farm Property								
OTHER OUTFLOWS									
45	Family Living								
46	Income & Social Security Taxes								
47									
48									
SCHEDULED LOAN PAYMENTS									
49	Current Short Term	-Interest							
50		-Principal							
51	Non-Real Estate	-Interest							
52		-Principal							
53	Real Estate	-Interest							
54		-Principal							
55	Non-Farm Loan	-Interest							
56		-Principal							
57	TOTAL CASH OUTFLOWS	(Sum 41 thru 56)							
NEW BORROWING									
58	Short Term								
59	Non-Real Estate								
60	Real Estate								
CASH FLOW SUMMARY									
	Interest Rate:								
	Minimum Cash Balance:								
61	Beginning Cash Balance								
62	Inflows - Outflows	(16 - 57)							
63	Cash Position	(Sum 58 thru 62)							
64	New Borrowing, Line of Credit								
65	Interest Accrued, Line of Credit	Accrued Interest =							
66	Line of Credit - Interest Payments								
67	Line of Credit - Principal Payments								
68	Ending Cash Balance								
OUTSTANDING LOAN BALANCES									
69	Outstanding Credit Line Loans								
70	Outstanding Short Term Loans								
71	Outstanding Non-R.E. Loans								
72	Outstanding Real Estate Loans								
73	Outstanding Non-Farm Loans								
74	TOTAL OUTSTANDING LOANS	(Sum 64 thru 68)							

STATEMENT

Name: ____________________________
Date Prepared: _____________________

	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.		

Supplies (line 33) are likely to be less predictable than some other expenses. Last year's figures should be a reasonable starting point. One way to avoid making inaccurate estimates is to use this line only for supplies rather than as a catch-all for every small expense item. Try to include most small items in other more descriptive lines. By limiting the sort of items typically included in Supplies, the estimate will be much improved. For James Madison, most of the planned supply costs are for baler twine.

Utilities (line 35) refers to the business portion of the expected utility bills. If this figure has been budgeted in the past, simply adjusting for expected changes in price and use is adequate. It is important to identify the business portion of the utility bill for tax purposes and to prevent double-counting in family living expenses. Since no major changes are planned in James Madison's operation, utilities were marked up 10 percent from last year and rounded to the nearest dollar.

Although *Veterinary, Breeding, and Medicine* (line 36) may vary from year to year, certain procedures like vaccinations, insect control, worming, and artificial insemination may be done each year and the projected costs will be based primarily on animal numbers and cost per unit. For less predictable veterinary and medicine expenses, an inflation adjusted typical or average from the past several years is useful.

Any unused lines from 17 to 40 can be relabeled and used for a specific purpose. If you minimize the items included in the *Miscellaneous* line, analyzing the plan and presenting it to outsiders (e.g. lenders) will be less difficult. In the Madison case, *Miscellaneous* includes tax consulting fees, producer magazine subscriptions, and memberships in a farm organization and a cattlemen's association. Because sales commissions are not subtracted from cattle sales, line 39 is used for *Sale Commission* in the Madison example. Line 41 is used to sum monthly requirements for cash operating expenses, lines 17 to 40.

Cash Paid for Items for Resale

Any livestock purchased for resale, such as stockers and feeder cattle, should appear on line 40, Livestock Purchased for Resale. Although it is difficult to predict these figures due to the uncertainties of prices, weights, numbers purchased, feed and pasture availability, and the timing of the purchase, the plan should be based on the best information available at the time.

Cash Paid to Purchase Capital Assets

Lines 42 and 43 are for cash outlays to acquire assets with a productive life typically longer than one year, e.g. breeding livestock, machinery, equipment, buildings, fences, land, and major repairs or improvements that depreciate. Entry for these items is straight forward. Simply enter whatever cash outlay is necessary for the appropriate periods of the year. In the Madison example, a used combine purchase is planned in May for $155,000 (line 42). The down payment of $5,000 will come from this year's cash flow and the remaining $150,000 will be recorded as new term debt (line 59).

Line 44 is used to record the purchase of nonfarm capital assets.

Other Cash Payments

Cash Withdrawals for Family Living (line 45) and Income and Social Security Taxes (line 46) are intended to be used by those completing a consolidated business and personal cash flow. If this is a business-only cash flow, these lines could be used to reflect salary withdrawals in a partnership. A corporation may want to separate out dividends and salary paid to officers or stockholders and enter these flows on line 47.

Cash Withdrawals for Family Living can be based on past cash withdrawals, adjusted for general increases in costs, and any major changes in expenditures (child starting college, major furniture or appliance purchases, non-typical medical expenses, etc.). The checkbook or farm records supply important information for this estimate. James Madison keeps a separate checking account for family expenditures, which makes estimation easier as well as more accurate. The Madisons expect to use $53,000 in cash during the upcoming year. Although the flows will not be the same every month, an average of $4,417 per month was considered sufficiently accurate.

The ability to accurately predict Income and Social Security Taxes (line 46) likely will depend on the time of year the cash flow is completed. Because James Madison's cash flow estimates start in March, income and self employment tax estimates can be based on last year's income.

Line 47 will be used to enter dividends and capital distributions if the farm or ranch is incorporated and payments are made to stockholders or if cash generated by the farm will be channeled to an off-farm business. Line 48 shows a transfer of $250 per month to the Madison's savings account.

Scheduled Loan Payments

Lines 49 to 56 list scheduled interest and principal payments on loans. In projecting these payments, the previous year's balance sheet, current loan schedules, or a liabilities schedule (OSU Extension Fact Sheet AGEC-792) should be useful in determining balances of principal and interest due by the end of the year. Check your loan schedule to see if the interest portion of payments due is listed separately from principal payments. If other than annual payments are to be made, the amounts must be prorated to the proper periods. A loan schedule or a copy of the original note should indicate the exact amount and timing of the payments.

To estimate payments for this coming year on new term loans, review capital asset purchase plans and expense categories. If financing payments are expected on new loans for capital purchases, make the proper entry(s). A discussion with the lender and use of OSU Extension Fact Sheet AGEC-792 "Liabilities Schedule," should increase the accuracy of this estimate.

Total Cash Outflow

Line 57 represents the Total Cash Outflow expected for each period. This line is calculated by adding lines 41 to 56 for each column. If you have been entering estimated year totals only (last column) for some outflows, you should prorate those totals among the months before calculating line 57.

This is a good point to check arithmetic. The sum of lines 17 to 41 in the Totals column should equal the sum across all periods for line 41. In the example, $248,652 checks as the sum of each set of figures. To check Total Cash Outflow, add the Totals for lines 41 through 56 then compare this figure to the sum across periods for line 57. Both equal $606,371 for James Madison.

New Borrowing

Lines 58 through 60 summarize money flowing into the operation from new loan obligations. New short term notes of less than one year are entered on line 58, new non-real estate debt is entered on line 59, and new real estate debt is entered in line 60.

Cash Flow Summary

The cash flow summary section is used to calculate expected line of credit borrowing (if any). The cash position at the end of the month (line 63) is equal to new borrowing plus the beginning cash balance plus monthly net cash flow (the sum of lines 58 to 62).

If the Cash Position is positive but less than the minimum desired ending cash balance, money must be borrowed to bring the Ending Cash Balance up to the minimum level. The amount borrowed is listed in line 64, New Borrowing: Line of Credit. If the Cash Position is positive and greater than the minimum desired cash balance, funds are available to apply to Line of Credit: Interest Payments (line 66) and Line of Credit: Principal Payments (line 67). At times, only enough cash to pay accrued interest and part of principal may be available. Before the amount of principal payment is determined, interest payable should be calculated. If there is no line of credit debt, excess funds are added to the cash balance.

For planning purposes, it may be assumed that all line-of-credit transactions are made at the end of each month. A running total of interest accrued to the line of credit is recorded on line 65. To calculate the interest accrued, multiply the previous month's balance (line 69) by the interest rate and divide by 12 to estimate the accrued interest for the current month. Add this amount to the interest accrual recorded in the previous month. The Madison's accrued interest is $2,331 at the beginning of the fiscal year (line 65), the principal balance is $68,552 (line 69), and the interest rate is 7 percent. An additional $400 interest is accrued during March (68,552 x .07/12); hence, accrued interest on the line of credit is $2,731 at the end of March. Subtracting the interest payment and $1,500 desired minimum balance from the March cash position (10,818 - 2,731 - 1,500) allows $6,587 to be paid on the loan principal balance (line 67).

When the Cash Position is at least as large as the minimum desired balance, the negative Inflows - Outflows are simply covered from the Beginning Cash Balance. No new borrowing occurs and the difference is the Ending Cash Balance. When the Beginning Cash Balance is greater than the minimum desired but not enough to offset a negative net cash flow (outflows exceed inflows) additional capital must be borrowed.

To complete the cash flow summary, begin at the first period and repeat the calculations for each successive period. The Ending Cash Balance from one period becomes next period's Beginning Cash Balance.

Debt Outstanding

When principal payments are made for notes and term debt (lines 50, 52, 54, and 56) or line of credit loans (line 67), the debt outstanding at the end of the period is reduced by that amount. In the James Madison example, principal payments of $208 for non-real estate notes and $645 for nonfarm, are made on term debt in March. Additional principal payments are made in April. New term debt is added when the combine is purchased in May.

Uses of Cash Flow Plan

Projecting the cash flow establishes a plan for the coming year. The farm business operator knows which months borrowing or withdrawal from savings will be necessary and when loan payments or new investments can be made. The cash flow plan provides information needed to establish a loan or line of credit with the lender. If no major operational changes are planned, the lender may expect that the operating loan will be completely paid off at some point during the year. While operations with several enterprises that have overlapping seasonal financing requirements may never completely pay off an operating loan, the projection should indicate the ability for one enterprise's marketing to substantially reduce the financing attributable to that enterprise.

Projecting the cash flow may point out potential liquidity problems. Liquidity refers to the ability of the business to meet its financial obligations as they come due. One indicator of liquidity from the completed cash flow plan is the Current Credit Line balance (line 69). A comparison of the operating loan balance at the beginning and the end of the projection period may also signal potential problems. If the cash flow projection indicates that the operator cannot pay all operating expenses, previous debt commitments, taxes, and family living expenses without an increase in the ending operating loan balance, then liquidity problems exist. The operator should consider, and the lender may suggest, changes in the production plan, reductions in family living expenses, delaying a planned machinery purchase, or refinancing existing debt to reduce the liquidity problem.[2] James Madison's cash flow projects the ability to reduce the line of credit loan to zero in March and doesn't require new line of credit borrowing during the plan year.

Projecting the cash flow can also indicate when cash is available for investment purposes. It helps analyze the feasibility of capital purchases and major changes in the farm or ranch operation. Although cash is certainly not the only aspect of investment analysis, it is extremely important in today's business world. One may wish to project cash flows for several years when considering a substantial capital outlay, such as a land purchase.

As capital requirements increase, more farm investments and operating inputs are being financed with borrowed funds. Increases in the level of debt add to risk for both the operator and the lending institution. Thus, it is important that both the farmer or rancher and the lender know when outstanding debts can be paid and the amount of additional debt that the farm or ranch business can support. By projecting the flow of cash in and out of the business, the farm operator can estimate when and how much annual operating debt will be required, make provisions for its repayment, and determine the business' loan repayment capacity for longer term debt obligations. Finally, the lender can determine how much credit the borrower needs month by month during the year and when the borrower plans to make payments on the operating loan.

Cash flow information is especially useful when the debt repayment schedule is being negotiated at the time a loan is

[2] See OSU Fact Sheet AGEC-208 "Farmers in Transition: Evaluating Options for Change" for additional suggestions.

made. For example, if James Madison were using the projected cash flow to establish fixed repayment dates with the lender (rather than the line of credit arrangement portrayed in the example), payments ought to be scheduled in March in conjunction with cattle sales, in July with wheat sales or in October with wheat and cattle sales. Each individual should review the cash flow plan with the lender to establish the best timing for repayment. Also, the manager should discuss with the lender the possibility of modifying repayment dates if, as the year progresses, changes occur in expected prices or market readiness of livestock and crops.

Care should be taken in projecting inflows, particularly when they rely on uncertain yields and prices. The ultimate success of cash flow planning depends upon the accuracy of the information and the effort that goes into it. Cash flow planning helps avoid cash flow crises.

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