PURDUE AGRICULTURAL ECONOMICS

Preparing a Projected Cash Flow Statement

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Introduction

A projected cash flow statement is used to project and evaluate cash inflows and outflows for an economic entity in order to determine when, how much, and for how long cash deficits or surpluses will exist for that entity during an upcoming time period. That information can then be used to justify loan requests, determine repayment schedules, and plan for short-term investments. This publication focuses on preparing a projected cash flow statement. Its purpose is twofold, to serve as a teaching aid for Extension educators who may be asked to teach a program on preparing a cash flow statement and as a reference, with a step-by-step practical exercise, to guide producers who may need to review an example before preparing their own projected cash flow statement.

Perhaps the first decision needed when preparing a projected cash flow statement is to determine the entity for which the statement is prepared. The projected cash flow statement can be prepared for a business entity, which would exclude cash transactions for personal use. Or it could be prepared for a personal entity, such as a household, and exclude business transactions. Consequently, it is important for the preparer to designate the entity for which the statement is prepared and restrict cash inflows and outflows to those that apply only to that entity.

A projected cash flow statement is best defined as a listing of expected cash inflows and outflows for an upcoming period (usually a year). Anticipated cash transactions are entered for the sub-period when those transactions are expected to occur. For example, a cash flow statement could be prepared using monthly or quarterly sub-periods. The word "cash" is crucial in this definition, because the cash flow statement is used to project cash transactions. For example, cash operating expenses are included in a cash flow statement, and even though the depreciation expense would be an operating expense for the farm business, it would not be included in a projected cash flow statement because it is a non-cash expense.

Cash inflows that are included in a cash flow statement depend on the entity for which the statement is prepared. For example, if the statement is prepared for the farm business, it would include cash operating and capital receipts for the farm business and exclude off-farm wages. Whereas, if the cash flow statement is prepared for the household, it would likely include offfarm wages. Cash outflows usually include such things as farm operating and capital outlays, family living expenses if withdrawn from the farm business, and loan payments if paid from the farm business. However, if the farming operation is completely separate from the family and living expenses are not withdrawn from the farm business, those living expenses would not be included in the cash flow statement for the business. An example of such an arrangement would be a farm that is incorporated and pays salaries to family members. In that situation, salaries and any dividends paid would be included in the cash flow statement for the business, but not family living expenses. Hence, care is needed when preparing a projected cash flow statement to ensure only the cash inflows and outflows for the entity for which the statement is prepared are included in the statement.

What Information Is Provided?

Operating expenses are usually not paid evenly over the course of a year for many farm enterprises. Also, marketing patterns for many farm products are not evenly distributed throughout the year. Therefore, revenues usually do not flow into the farm business, and expenses do not flow out of the business on an equal and regular basis during the year. This results in periods of cash deficits and surpluses.

Knowledge of the amounts of cash deficits and surpluses and the timing and duration of each aid tremendously in setting up a line of credit with a lender.



The projected cash flow statement clearly identifies when loan funds will be needed and when the lender can expect to be repaid and in what amounts. This information is extremely useful in justifying loan requests.

In addition, a projected cash flow statement enables the user to identify the amount and duration of cash surpluses, which is useful when deciding among the various short-term deposit and investment instruments that may be available to the user (e.g., savings accounts, money market funds, etc.).

Of course, the accuracy of the information provided by a projected cash flow statement depends upon the accuracy of cash inflow and outflow projections, the detail included in the cash flow statement, and whether the statement is prepared for quarters, months, or even weeks. Even though it may lack accuracy because of being an estimate, a projected cash flow statement still provides a projection of expected cash deficits and surpluses that a preparer can use to plan for future periods.

How Is the Statement Organized?

Perhaps the best way to understand how a projected cash flow statement is organized is to think in terms of a calendar, with the columns representing the sub-periods for the planning period used in the projection. Usually the planning period is one year, but the sub-periods can be as detailed as one desires (e.g., quarters, months, and even weeks).

The rows represent various categories for the beginning cash balance, cash receipts, cash expenses, borrowing, saving, and ending cash balance. Of course, the beginning cash balance for each sub-period is the ending cash balance for the previous sub-period.

A very simplified cash flow statement has been adapted from a statement developed by Thomas L. Frey and Danny A. Klinefelter (Coordinated Financial Statements for Agriculture) and is used to explain how a projected cash flow statement is organized (Worksheet 1 on page 3). The statement used in the example is a quarterly statement for one year and consists of five columns, a column for each of the four guarters plus one for projected annual totals. The number of lines necessary to list cash inflows and outflows depends on the number needed to account for all sources and uses of cash needed for the entity for which the cash flow statement is prepared. The simple organization of this statement would make it inadequate for use in many farming operations. It is used here to illustrate the mechanics of preparing a cash flow statement. However, there is a cash flow spreadsheet available for download on the University of Illinois farmdoc website http://www.farmdoc.illinois.edu/pubs/FASTtool. asp?category=financial that can be used. The Quick Cash

Flow Projections tool generates a quarterly cash flow projection and allows the user to conduct sensitivity analysis. Other cash flow software programs are also available.

Cash Inflows

The first line of any cash flow statement is usually the beginning cash balance for the period. That balance includes all readily available funds (e.g., checking account).

The next section is the receipt section, which is divided into three subsections: operating receipts, capital receipts, and nonfarm income. Operating receipts (lines 2-5) include receipts from crops, market livestock, custom work, government payments, hedging account withdrawals, and any other cash receipts to the farm business. Each projected cash receipt is entered in the quarter that the cash is expected. It is usually a good idea to include several blank lines throughout the form (line 5 for example), so that the statement can be tailored to meet your needs.

Capital receipts (lines 6-8) are cash inflows from the sale of capital items, such as breeding livestock, machinery, and equipment. Also, only the amount of cash expected to flow into the operation is entered. That amount is entered in the quarter that the cash is expected.

Nonfarm income (line 9) includes cash received from interest payments, dividends, patronage refunds, and cash received from other nonfarm sources. The total cash available for the quarter (line 10) is then calculated by adding the beginning cash balance, operating receipts, capital receipts, and nonfarm income.

Cash Outflows

The expense section is divided into four subsections: operating expenses, livestock and feed purchases, capital expenditures, and other expenditures. Operating expenses (lines 11-14) include such things as seed, fertilizer, labor, fuel, real estate and property taxes, insurance, utilities, etc. The amount of cash expended for each item is entered in the quarter when it is expected to be paid, which may be different from when you actually take possession of the item.

The next subsection is livestock and feed purchases (lines 16 and 17), and it includes cash expenses for feeder livestock that will then be fed to heavier weights and sold. Also included are cash outlays for feed.

The third subsection is capital expenditures (lines 18 and 19), and it includes cash outlays to purchase breeding livestock, machinery, equipment, buildings, and improvements. If the dealer is to be paid in full and you borrow the money from another lender (e.g., commercial bank, Farm Credit, etc.), the entire amount to be paid is

Worksheet 1. Projected Cash Flow Statement Projected Quarter Quarter Quarter Quarter Totals Entry Beginning cash balance (all available funds) 1. Operating receipts: xx xx xx xx xx Grain 2. Livestock 3. Custom work 4. 5. Capital receipts: хх хх хх хх ΧХ Breeding livestock 6. 7. Machinery/equipment 8. Nonfarm income: хχ хх хх хх хх 9. 10. Total cash available (add lines 1 thru 9) Operating expenses: xx xх xx xx xx 11. Fertilizer and lime 12. Seed and chemicals 13. Labor 14. 15. Total cash operating expense (add lines 11 thru 14) Livestock and feed purchases: xx xx xx xx xx 16. Feeder livestock 17. Capital expenditures: хх xx xx xx xx 18. Machinery and equipment 19. хх xx xx xx xx

Continued on page 4.

Worksheet 1 - continued from page 3.

<u> </u>				<u> </u>		<u> </u>
	Other expenditures:					
20.	Family living					
21.	Intermediate and long-term loan payments (principal)					
22.	(interest)					
23.	Total cash required (add lines 15 thru 22)					
24.	Cash available less cash required (line 10 minus line 23)					
25.	Inflows from savings (principal)					
26.	(interest)					
27.	Cash position before borrowing and after savings					
28.	Money to be borrowed: (operating loans) (Intermediate and long term loans)					
29.	Operating loan payments (principal)					
30.	(interest) Outflows to savings					
31.	Ending cash balance					
	Loan balances (at end of period):	xx	xx	xx	xx	xx
32.	Current year's operating loans					
33.	Previous year's operating loans					
34.	Intermediate and long-term loans					
35.	Total loans					

entered in the appropriate quarter. The cash flowing into the operation from the loan will be entered later.

Other expenditures (lines 20-22) can include hedging account deposits, gross family living withdrawals if withdrawn from the farm business, nonfarm business expenditures if not a separate entity, and income tax and social security payments. Also included in this section are principal and interest payments due for term loans, such as for machinery and real estate. The total cash required for the quarter (line 23) is calculated by adding all cash outflows projected for the quarter.

The Cash Position

Subtracting total cash required (line 23) from total cash available (line 10) yields the cash position before borrowing and inflows from savings. If the cash position is negative or below a specified amount that is desired in the checking account, you can transfer any money available in savings to the checking account (lines 25 and 26).

If the cash position before borrowing and after savings (line 27), is still negative or below some minimum amount desired in the checking account, you must borrow those funds needed to satisfy the deficit and/or maintain the minimum amount desired in the checking account. Line 28 provides a place to enter operating and longer-term borrowing.

A line is also needed to schedule principal and interest payments for operating loans (line 29), which lenders usually require to be repaid during the upcoming 12 months from the proceeds of the enterprises financed. For example, if operating funds are borrowed in the spring to plant the corn crop, those funds are usually scheduled to be repaid when the corn is expected to be sold. Of course, if the corn is stored and expected to be sold the next year, then the payment should be included in the cash flow projection for the next year.

Two additional lines are needed to account for any cash remaining at the end of the period (lines 30 and 31). First, when the amount of cash is greater than the minimum balance desired, the excess will likely be invested in a short-term alternative, such as a savings account, money market fund, etc. Therefore, a line is needed to account for funds flowing out of the farm business and into some type of savings or short-term investment (line 30). This line is necessary since that amount of cash will not be available for use by the farm business until either the investment matures or until the funds are transferred from the savings account back to the checking account. Line 31 is the ending cash balance for the quarter. This is also the beginning cash balance for the next quarter. The cash position for each quarter is then calculated sequentially as described above, until the ending cash balance for the last quarter is calculated. That amount then becomes the beginning cash balance for the first quarter of the next year's projected cash flow statement.

The last four lines (32-35) enable the borrower to keep a running total of the various loan balances. The lines are labeled to distinguish between current year operating loans (line 32) and operating loans remaining from a previous period (line 33). This information is extremely useful when applying for a line of credit from a lender, because the lender needs to know the maximum amount expected to be outstanding as well as amounts expected to be outstanding throughout the year. The balances for each period are increased or decreased as funds are disbursed and payments are made.

Balances for longer-term loans are on a separate line (line 34) and can be increased or decreased as additional funds are borrowed or payments made. The total loan balance outstanding each period can then be calculated by summing the loan balances outstanding for each type of loan and recording the total on line 35.

An Example—Fred Farmer

To illustrate how a projected cash flow statement is prepared, an example is used to describe anticipated cash transactions for a hypothetical farm operator, Fred Farmer. The information describing this farming operation is presented in Exercise 1 (below). To understand the mechanics of completing a projected cash flow statement, the example is used first to complete an annual projected cash flow statement. Therefore, information from Exercise 1 will be entered in Projected Totals.

In this simple example, transfer the information contained in Exercise 1 to the Projected Totals column for your projected cash flow statement (Worksheet 1 on page 3). To check yourself, refer to the Answer Key (below), as the transactions are discussed in the following paragraphs.

Exercise 1. Projected Cash Flow Statement Exercise

Cash transactions expected during the upcoming 12-month period:

- 1. The cash balance on January 1 is \$128,750. (Line 1).
- 2. Grain to be sold during the upcoming year should generate \$1,227,500. (Line 2).
- 3. Nonfarm income for the upcoming year is expected to equal \$27,414. (Line 9).
- 4. Total operating expenses of \$964,225 are expected for the upcoming year. (Line 15).
- 5. A new piece of machinery costing \$50,000 will likely be purchased and the entire amount will be borrowed from the local bank. (Line 18).
- 6. Family living expenses and taxes of \$120,000 are expected during the upcoming year. (Line 20).
- 7. Principal payments on term loans are expected to equal \$71,028, with another \$29,223 due in interest. (Lines 21 and 22).
- 8. Fred plans to borrow and repay his operating loan of \$716,278, with \$24,865 paid in interest. (Lines 28 and 29).

On January 1, there is \$128,750 in cash or in the checking account. Remember, this balance is the amount at the end of the previous year. It is entered on line 1.

Next, expect \$1,383,664 to be available to the operation during the upcoming period. This is found by adding the beginning cash balance, \$128,750, the \$1,227,500 from the sale of grain (line 2) to the amount of money flowing into the operation from other sources, \$27,414 (line 9). Thus, the total cash available is \$1,383,664 (line 10).

Also, Fred expects \$1,234,476 to flow out of the operation during the upcoming year. This is found by adding the operating expenses of \$964,225 (line 15), capital expenditures of \$50,000 (line 18), family living expenses and taxes of \$120,000 (line 20), and long term loan payments of \$100,251; \$71,028 in principal (line 21) and \$29,223 in interest (line 22).

The cash position at the end of the year would be \$124,323 (line 31). At this time Fred must think about whether to keep all of that amount in cash, pay ahead on his term loans or invest some of it in short-term alternatives.

Answer Key - Projected Cash Flow Statement

Line No.	Item	Projected Totals	
1. 2. 9. 10. 15. 18. 20. 21. 22.	Beginning cash balance Grain Sales Nonfarm income Total cash available Total cash operating expenses Machinery and equipment Family living expenses and taxes Term loan payment (principal) Term loan payment (interest)	128,750 1,227,500 27,414 964,225 50,000 120,000 71,028 29,223	\$1,383,664
23. 24. 25. 27. 28. 29. 30. 31.	Total cash required Cash available less cash required Inflows from savings (principal) Cash position before borrowing and after savings Money to be borrowed (operating) Operating loan payments (principal) (interest) Outflows to savings Ending cash balance		\$1,234,476 \$149,188 0 \$149,188 716,278 716,278 24,865 0 124,323

Exercise 2. Projected Quarterly Cash Flow Statement Exercise

Enter cash transactions expected during the upcoming 12-month period by quarter.

- 1. Enter cash balance on January 1 is \$128,750.
- 2. Fred Farmer expects to sell the grain production for the upcoming year (\$1,227,500) in the following manner: \$165,000 the third quarter and \$1,062,500 the fourth quarter.
- 3. Continue to receive nonfarm income, with \$13,707 received in each of the first and fourth quarters.
- 4. Operating expenses for the upcoming year (\$964,225) are expected to be paid according to the following schedule: \$651,225 (quarter 1), \$33,000 (quarter 2), \$70,741 (quarter 3) and \$209,259 (quarter 4).
- 5. Fred expects to purchase a piece of machinery on January 2 that will cost \$50,000.
- 6. Family living expenses and taxes will be about \$120,000 during the upcoming year and will be spread evenly over the four quarters.
- Fred has principal payments on term loans of \$71,028, with \$50,000 due in quarter 2 and \$21,028 due in quarter
 Projected interest on term loans is projected to be \$4,510 in quarter 2 and \$24,713 in quarter 4.
- 8. The projected operating loan of \$716,278 is expected to be paid in the following manner; \$64,259 in quarter 3 and \$652,019 in quarter 4, with \$24,865 in interest paid in quarter 4.

	Entry					Projected
1	Reginning cash halance	Q1	Q2	Q3	Q4	Totals
	Operating receipts:	128,750				128,750
2	Grain	xx	xx	xx	xx	XX 1 227 500
- .	liverte ele					1,227,500
s.	Livestock					
ł.	Custom work					
5.						
5.	Capital receipts: Breeding Livestock	xx	xx	xx	xx	xx
<i>'</i> .	Machinery and Equipment					
3.						
Э.	Nonfarm income:	xx 13,707	xx 0	xx 0	xx 13,707	xx 27,414
10.	Total cash available (add lines 1 thru 9)	142.457				1,383,664
	Operating Expense:	xx	XX	xx	XX	xx
1.	Fertilizer and Lime					
2.	Seeds and chemicals					
13.	Machine operations and drying					
4.						
5.	Total cash operating expenses (add lines 11 thru 14)	651 225	33.000			964 225
	Livestock and feed purchases:	XX	xx	хх	хх	XX XX
б.	Feeder livestock					
17.						
	Capital expenditures:	xx	xx	xx	хх	xx
18.	Machinery and equipment	50,000				50,000
19.						
	Other expenses:	xx	хх	xx	xx	xx
20.	Family living	30,000	30,000	30,000	30,000	120,000
	land and the second land to the second land					
1.	ntermediate and long-term loan payments (principal)					71,028

23.	Total cash required (lines 15 thru 22)	731,225	1,234,476
24.	Cash available less cash required (line 10 minus line 23)	(588,768)	149,188
25.	Inflows from savings (principal)		
26.	(interest)		
27.	Cash position before borrowing and after savings	(588,768)	149,188
28.	Money to be borrowed: (operating loans) (term loans)	598,768	716,278
29.	Operating loan payments (principal) (interest)		716,278 24.865
30.	Outflows to savings		0
31.	Ending cash balance	10,000	124,323

An Example—Fred Farmer - continued

- 1. We know the beginning cash balance for the year and the first quarter is \$128,750 (line 1).
- 2. There were no cash receipts from the sale of grain in the first quarter.
- 3. Nonfarm income for the year is expected to equal \$27,414, of which \$13,707 is expected to be received in the first quarter (line 9).
- 4. The operating expenses for the first quarter are projected to be \$651,225 (line 15).
- 5. Fred expects to spend \$50,000 for a piece of equipment during the first quarter (line 18).
- 6. Family living expenses and taxes of \$30,000 are expected in every quarter (line 20). Now let's calculate our total cash available for the first quarter:

Line

1.	Beginning cash balance	\$ 128,750
9.	Nonfarm income	+ 13,707
10.	Total cash available	\$142,457

Now let's calculate our total cash required for the first quarter

Line

19.	Operating expenses	\$ 651,225
18.	Machinery and equipment	50,000
20.	Family living	30,000
23.	Total cash required	\$ 731,225

Cash available less cash required is:

Line	
10.	\$ 142,457
23.	731,225
24.	-\$ 588,768

An Example—Fred Farmer - continued

Fred wants to keep at least \$10,000 in his checking account to meet current cash obligations, so he borrows \$598,768 on his operating loan (line 29). Consequently, he has a beginning cash balance for the second quarter of \$10,000.

Next, you should complete the second quarter. To check your answers, refer to Worksheet 3 on page 11. The following steps list the sequence of events.

- 1. During the second quarter we again notice that no grain or livestock is expected to be sold.
- 2. There is no nonfarm income.
- 3. Operating expenses during the second quarter total \$33,000.
- 4. Principal payment on term debt is \$50,000, plus \$4,510 in interest.
- 5. Family living expenses and taxes are again equal to \$30,000 for the quarter.

Now it is time to total.

Line

1	Beginning cash balance	\$10,000
10	Total cash available	\$10,000
15	Total cash operating expenses	\$ 33,000
21	Payments on term debt (princ.)	50,000
	(interest)	4,510
20	Family living and taxes	<u>30,000</u>
23	Total cash required	\$117,510
	Cash available less cash required is:	
Line		
10	\$ 10,000	
23	<u>\$117,510</u>	
24	(\$107,510)	

The cash position before borrowing and after savings (line 27) is now minus \$107,510. At this time Mr. Farmer decides to borrow \$117,510 in the form of an operating loan. This is used to cover the cash deficit and to cover any unexpected expenses that may have been omitted. The operating loan is entered on line 28. So the ending cash balance is \$10,000, which is also the beginning cash balance for the third quarter.

At this time, you should complete quarters 3 and 4. The answer sheet for Fred Farmer's projected cash flow statement is presented in Worsheet 4 on page 13. Check your answers with the answer sheet. If there is a difference and you do not understand the reason for that difference, please contact your county agriculture Extension educator.

There is one additional point that should be made. When you prepared the annual projected cash flow statement, did it show that Fred would need an operating loan? The answer is "no." That was found only when the quarterly cash flow statement was prepared. This illustrates one of the benefits of preparing a projected cash flow statement on a more frequent basis; it provides more detailed information. Many people prepare a monthly projected cash flow statement. The monthly cash flow provides an even better indication of the timing of cash inflows and outflows and cash surplus and deficit amounts.

Wor	ksheet 3. Projected Cash Flow Statemer	nt				
	Entry	Q1	Q2	Q3	Q4	Projected Totals
1.	Beginning cash balance	128,750	10,000			128,750
2.	Operating receipts: Grain and feed	xx	xx	xx	хх	xx 1,227,500
3.	Livestock and poultry					
4.	Custom work					
5.						
б.	Capital receipts: Breeding Stock	XX	XX	XX	XX	ХХ
7.	Machinery and equipment					
8.						
9.	Nonfarm income:	xx 13,707	xx 0	xx	хх	xx 27,414
10.	Total cash available (add lines 1 thru 9)	142,457	10,000			1,383,664
11.	Operating expenses: Fertilizer and lime	XX	xx	xx	XX	xx
12.	Seed and chemicals					
13.	Machine operation and drying					
14.						
15.	Total cash operating expenses (add lines 11 thru 14)	651,225	33,000			
	Livestock and feed purchases:	XX	XX	хх	ХХ	хх
16.	Feeder livestock					
17.						
	Capital expenditures:	xx	ХХ	ХХ	хх	xx
18.	Machinery and equipment	50,000				50,000
19.						
20.	Other expenses: Family living	xx 30,000	xx 30,000	xx	хх	xx 120,000

Continued on page 12.

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Worksheet 3 - continued from page 11.

 Intermediate and long-term loan payments (principal) 	0	50,000	71,028
22. (interest)			
	0	4,510	29,223
23. Total cash required (lines 15 thru 22)			
	731,225	117,510	1,234,476
 Cash available less cash required (line 10 minus line 23) 	(\$588,768)	(\$107,510)	\$149,188
25. Inflows from savings (principal)			
26. (interest)			
27. Cash position before borrowing and after	(4500 540)	(4.4.5.5.4.6)	
savings	(\$588,768)	(\$107,510)	\$149,188
 Money to be borrowed: (Operating loans) (Intermediate and long-term loans) 	598,768	117,510	716,278
29. Operating loan payments (principal)			
(interest)			
30. Outflows to savings			0
31. Ending cash balance			
	10,000	10,000	124,323

Wor	ksheet 4. Projected Cash Flow Statement					
	Entry	QI	Q2	Q3	Q4	Projected totals
	Beginning cash balance	128,750	10,000	10,000	10,000	Total:8,750
1.	Operating receipts:	xx	xx	xx	xx	XX
2.	Grain and feed			165,000	1,062,500	1,227,500
3.	Livestock and poultry					
4.	Custom work					
5.						
6.	Capital receipts: Breeding stock	XX	XX	XX	XX	XX
7.	Machinery and equipment					
8.	-					
	Nonfarm income:	XX	XX	xx	xx	XX
9.		13,707	0	0	13,707	27,414
10.	Total cash available (add lines 1 thru 9)	142 457	10.000	175.000	1.086.207	1.383.664**
	Operating expenses:	XX	xx	xx	XX	xx
11.	Fertilizer and lime					
12.	Seed and chemicals					
13.	Machinery operation and drying					
14.	-					
15.	Total cash operating expense	651 225	22.000	70 741	200.250	064 225
	Livestock and feed purchases:	xx	33,000 XX	xx	209,259 XX	904,225 XX
16.	Feeder livestock					
17.						
	Capital expenditures:	XX	XX	XX	xx	XX
18.	Machinery and equipment	50,000				50,000
19.						
	Other expenses:	xx	xx	ХХ	XX	XX
20.	Family living	30,000	30,000	30,000	30,000	120,000
21.	Intermediate and long-term loan payments (principal)		50,000		21,028	71,028
22.	(interest)		4,510		24,713	29,223
23.	Total cash required (lines 15 thru 22)	731.225	117.510	100.741	285.000	1,234,476
			117,010		200/000	.,

Continued on page 14.

Worksheet 4 - continued from page 13.

Cash available less cash required (line 10 minus line 23)	(588,768)	(107,510)	74,259	801,207	149,188**
Inflows from savings (principal)					
(interest)					
Cash position before borrowing and after savings	(588,768)	(107,510)	74,259	801,207	149,188**
Money to be borrowed: (operating loans) (Intermediate and long-term loans)	598,768	117,510	0	0	716,278
Operating loans (principal)			64,259	652,019	716,278
(interest)				24,865	24,865
Outflows to savings					0
Ending cash balance					
	Cash available less cash required (line 10 minus line 23) Inflows from savings (principal) (interest) Cash position before borrowing and after savings Money to be borrowed: (operating loans) (Intermediate and long-term loans) Operating loans (principal) (interest) Outflows to savings Endiace and bolige the second se	Cash available less cash required (line 10 minus line 23) (588,768) Inflows from savings (principal) (interest) Cash position before borrowing and after savings (588,768) Money to be borrowed: (operating loans) (Intermediate and long-term loans) 598,768 Operating loans (principal) (interest) Outflows to savings	Cash available less cash required (line 10 minus line 23) (588,768) (107,510) (interest) Cash position before borrowing and after savings (principal) (Intermediate and long-term loans) (Intermediate and long-term loans) 598,768 117,510 Operating loans (principal) (interest) Outflows to savings	Cash available less cash required (line 10 minus line 23) (588,768) (107,510) 74,259 Inflows from savings (principal) (interest) (107,510) 74,259 Cash position before borrowing and after savings (588,768) (107,510) 74,259 Money to be borrowed: (operating loans) (Intermediate and long-term loans) 598,768 117,510 0 Operating loans (principal) 64,259 (interest) 0 0 Outflows to savings 5 117,510 0	Cash available less cash required (line 10 minus line 23)(588,768)(107,510)74,259801,207Inflows from savings (principal)(interest)(interest)(interest)(interest)Cash position before borrowing and after savings(588,768)(107,510)74,259801,207Money to be borrowed: (operating loans) (Intermediate and long-term loans)598,768117,51000Operating loans (interest)64,259652,01964,259652,019Cash positions to savings598,768117,51000

** These lines cannot be totaled across the four quarters to arrive at the projected total. This is because of the carryover effect of taking the ending cash balance for a previous quarter and transferring that balance to the beginning balance for the next quarter.

Where Do You Get the Numbers?

The most precise approach for arriving at the numbers to use in a projected cash flow statement is to calculate the amount of each input item needed for the various crop or livestock enterprises, and the projected production levels for those enterprises. Then an estimate is needed for prices and the timing of expenses and revenues. Those amounts would then be entered in the appropriate quarter. This approach assumes the farm business is operating with a marketing plan to arrive at projected sale dates and prices. A review of last year's actual cash flow statement would help tremendously in estimating receipts and expenses and in projecting the timing of those receipts and expenses for the upcoming year.

However, some farming operations do not keep detailed records, so a less precise approach would be needed. In that case, the best place to get the estimates is from last year's totals. Those numbers can then be prorated to the appropriate quarter and adjusted to reflect expected changes in production, prices, buying dates, and selling dates. Checking account entries from last year can aid in deciding when expenses were paid and receipts received.

How Do I Monitor a Projected Cash Flow Statement?

The most precise method for monitoring a projected quarterly cash flow statement is to add 12 columns to the 5 that are already included in the statement. One additional column each quarter allows you to record actual cash flow entries each quarter. A year-to-date column for projected and actual totals allows the user to monitor year-to-date totals for receipts and expenses. An example of these additions is presented in Worksheet 5 on page 16.

The additions allow comparison of actual cash flow entries to projected amounts, which enable calculation of differences between them. This enables you to monitor the cash position of the operation throughout the upcoming year.

However, a projected cash flow statement can be used without any of the three columns. The key point to remember is a projected cash flow statement can be tailored to fit the needs of each individual operation. It can be as simple or as complex as is needed to be workable and useful.

Worksheet 5. Projected Cash Flow Statement Comparison Statement

	0	Quarter			
	Entry	Projection	Actual	Year-to-date	Year-to-date
1.	Beginning cash balance (all readily available funds)			Projection	Actual
	Operating receipts:	xx	xx	xx	xx
2.	Grain and feed				
3.	Livestock and poultry				
4.	Custom work				
5.					
	Capital receipts:	XX	XX	хх	XX
б.	Breeding stock				
7.	Machinery and equipment				
8.					
9.	Nonfarm income:	XX	xx	хх	хх
10.	Total cash available (add lines 1 thru 9)				
11.	Operating expenses: Fertilizer and lime	XX	хх	xx	хх
12.	Seed and chemicals				
13.	Machinery operating and drying				
14.					
15.	Total cash operating expenses (add lines 11				
	Livestock and feed purchases:	XX	xx	XX	XX
16.	Feeder livestock				
17.					
18.	Capital expenditures: Machinery and equipment	XX	xx	xx	хх
19.					
20	Other expenses:	ХХ	ХХ	хх	хх
20.	Family living				
21.	Intermediate and long term loan payments (principal)				
22.	(interest)				
23.	Total cash required (add lines 15 thru 22)				
24.	Cash available less cash required (line 10 minus line 23)				
25.	Inflows from savings (principal)				
26.	(interest)				

Continued on page 17.

Worksheet 5 - continued from page 16.

27.	Cash position before borrowing and after savings				
28.	Money to be borrowed: (operating loans) (Intermediate and long term loans)				
29.	Operating loan payments (principal)				
	(interest)				
30.	Outflows to savings				
31.	Ending cash balance				
32.	Loan balance at end of period: Current year's operating loans	xx	xx	xx	xx
33.	Previous year's operating loans				
34.	Intermediate and long-term loans				
35.	Total				

Summary

The focus of this publication is on preparing a projected cash flow statement to determine when, how much, and for how long cash deficits and surpluses are likely to exist for a farm business during some future period. A projected cash flow statement is described as a listing of all expected cash inflows and outflows for the coming year. The statement can be prepared for whatever time period is deemed to be most useful to the user; quarterly, monthly, and even weekly if desired. This information enables you to communicate borrowing needs to your lender and to establish a repayment schedule. In addition, the information can be used to identify possible investment opportunities during the planning period.

An additional column each quarter enables you to record actual cash inflows and outflows in the quarter those transactions occur. That information can then be compared to projected amounts to determine differences that may exist. Projected and actual year-to-date columns can also be added to determine how year-to-date totals for receipts and expenses compare to projections.

Finally, cash flow planning will continue to be a major concern for lenders and borrowers. A projected cash flow statement will greatly aid attempts to plan cash inflows and outflows for a farm business. Often the statement provides only a rough estimate of the cash position for the business, since marketing plans, prices, production levels, and even expenses often differ from what is projected. However, even though a projected cash flow is a rough estimate--if compared to no estimate--it is a great help in planning ahead.

Reference

Frey, Thomas L. and Danny A. Klinefelter, 1980. *Coordinated Financial Statements for Agriculture*, Second Edition. Skokie, Illinois: Agri Finance.

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