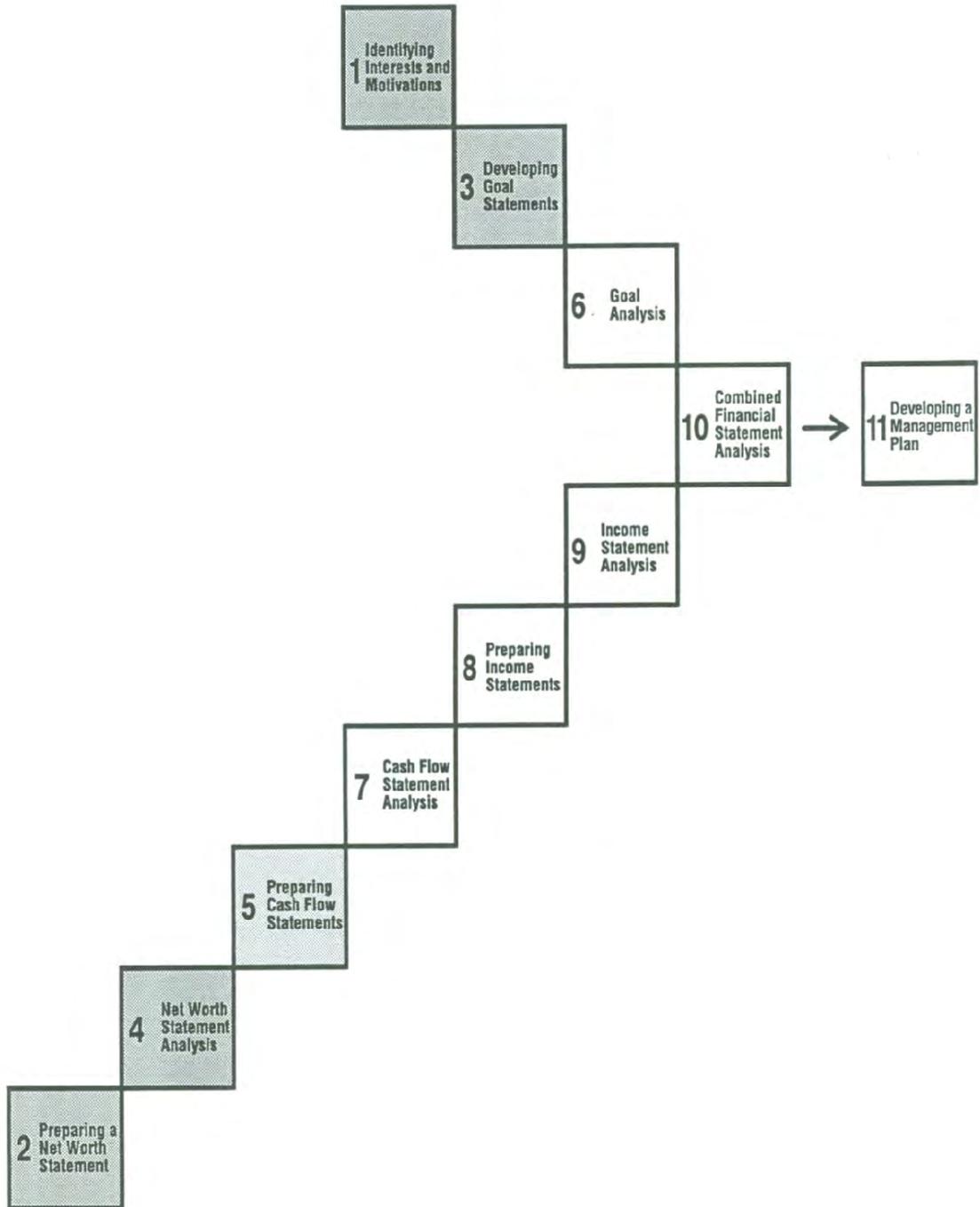




# COMPREHENSIVE GUIDE TO FARM FINANCIAL MANAGEMENT

## Module 5: Preparing Cash Flow Statements

# Course Map



# **Preparing Cash Flow Statements**

## **Introduction**

Cash Flow Statements record all the cash flowing into and out of the farm business each year. Well prepared, accurate Projected Cash Flow Statements allow the manager to keep the farm business on target and to identify periods of potential cash surplus or cash deficit. They act much like a budget that the farm manager strives to follow.

## **Performance Objectives**

Upon completing the material in this module you will be able to:

- define a Cash Flow Statement;
- describe the structure of a Cash Flow Statement;
- identify two types of Cash Flow Statements;
- identify the three Cash Flow Statement components;
- identify sources, uses, amounts and timing of cash inflow and outflow in your operation; and
- prepare your Projected Cash Flow Statement.

## The Cash Flow Statement

A Cash Flow Statement records all the cash flowing into and out of the farm business each year. The key words in the definition are **all** and **cash**. All cash coming in and all cash going out is recorded.

### Cash Flow Statement

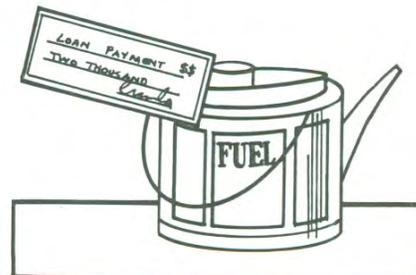
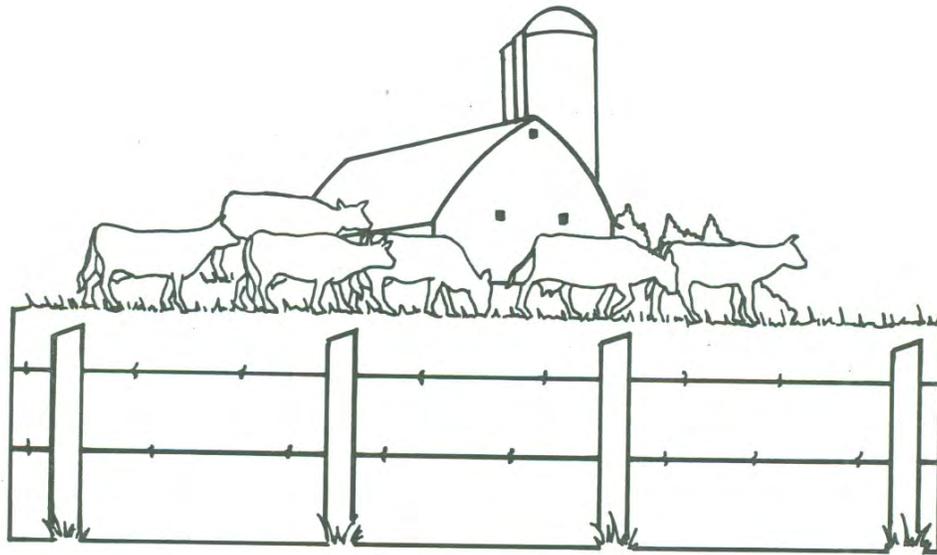
Name: Shady Bend Farm

Period Covered: Jan. 1 to Dec. 31, 20X1

<b>CASH INFLOW</b>	<b>Total</b>	<b>1<sup>st</sup> Quarter</b>	<b>2<sup>nd</sup> Quarter</b>	<b>3<sup>rd</sup> Quarter</b>	<b>4<sup>th</sup> Quarter</b>
Accounts Receivable	\$10,000	\$8,500	\$1,500		
Crop Sales	\$37,125	\$14,130	\$12,195	\$5,400	\$5,400
Livestock Sales	\$220,000	\$55,000	\$55,000	\$55,000	\$55,000
Other Farm Income	\$8,700				\$8,700
Government Payments and Rebates	\$2,500				\$2,500
New Borrowings	\$10,000		\$10,000		
Capital Sales					
Net Non-farm Income	\$12,000			\$6,000	\$6,000
<b>TOTAL CASH INFLOW</b>	<b>\$300,325</b>	<b>\$77,630</b>	<b>\$78,695</b>	<b>\$66,400</b>	<b>\$77,600</b>
<b>CASH OUTFLOW</b>					
Seeds and Cleaning	\$150	\$150			
Fertilizer and Chemicals	\$5,600		\$3,400		\$2,200
Hail and Crop Insurance	\$3,300				\$3,300
Machinery and Equipment Repairs	\$4,000		\$400	\$3,000	\$600
Fuel, Oil and Grease	\$6,000	\$2,000	\$1,000	\$1,000	\$2,000
Feeder Livestock Purchases	\$800		\$800		
Livestock Feed and Supplement	\$140,000	\$35,000	\$35,000	\$35,000	\$35,000
Livestock Supplies, Veterinary Fees and Drugs	\$5,000	\$1,250	\$1,250	\$1,250	\$1,250
Breeding Stock Purchases	\$25,000		\$25,000		
Land Rent	\$3,000		\$1,500		\$1,500
Property Taxes	\$2,200				\$2,200
Insurance and Licenses	\$2,950	\$400	\$2,200		\$350
Building and Fence Repairs	\$4,000	\$500	\$1,500	\$1,500	\$500
Utilities	\$4,800	\$1,200	\$1,200	\$1,200	\$1,200
Hired Labour	\$24,000	\$6,000	\$6,000	\$6,000	\$6,000
Accounting and Legal Fees	\$1,500		\$1,500		
Family Living Allowance	\$24,000	\$6,000	\$6,000	\$6,000	\$6,000
Income Tax (farm portion)	\$9,000		\$9,000		
Purchase of Capital Assets					

Debt Repayment (principal and interest)	\$27,585		\$11,295	\$3,495	\$12,795
<b>TOTAL CASH OUTFLOW</b>	\$292,885	\$52,500	\$107,045	\$58,445	\$74,895
<b>SUMMARY</b>					
Surplus (Deficit)	\$7,440	\$25,130	(\$28,350)	\$7,955	\$2,705
+ Previous Ending Balance (Opening Balance)	(\$12,250)	(\$22,250)	\$12,880	(\$15,509)	(\$7,900)
= Net Cash Balance	(\$4,810)	\$12,880	(\$15,470)	(\$7,554)	(\$5,195)
- Interest on Operating Loan	\$581	0	\$39	\$346	\$196
<b>= ENDING CASH BALANCE</b>	(\$5,391)	\$12,880	(\$15,509)	(\$7,900)	(\$5,391)

The sources and uses of cash illustrated in the Cash Flow Statement may contain items (purchase and sale of capital assets, new borrowings, debt repayment, off farm income, income tax, family living allowance, etc.) that may surprise you by their inclusion because they are not farm business income or expense items. They are however, sources of cash available to the farm or items that make claims on available cash. Remember the definition of a Cash Flow Statement - **it records all the sources and uses of cash flowing into and out of the farm business.**



## Structure of the Cash Flow Statement

The first area found in the Cash Flow Statement is the title. It indicates the name of the business or individual it was prepared for and the period for which it was prepared. This time period usually follows the calendar year.

### Cash Flow Statement

**Name:** Shady Bend Farm

**Period Covered:** Jan. 1 to Dec. 31, 20X1

To help you better identify times throughout the year when cash is either in a surplus or a deficit position, the Cash Flow Statement is broken down into smaller time periods - either months or quarters.

Farm business with a relatively stable and regular level of cash inflow and outflow (dairies, hog operations, laying hen operations, etc.) lend themselves well to monthly Cash Flow Statements.

However, other farm business (grain farms, cow/calf operations, etc.) do not enjoy such income regularity and are best served by a quarterly Cash Flow Statement.

Monthly and quarterly Cash Flow Statements are identical except for time period.

## Cash Inflow

All sources, amounts and timing of cash coming in are recorded in the cash inflow section. The sum of cash inflow for each source is recorded in the total for the year column. The cash inflow amounts entered are then added to create total cash inflow for each period.

<b>CASH INFLOW</b>	<b>Total</b>	<b>1<sup>st</sup> Quarter</b>	<b>2<sup>nd</sup> Quarter</b>	<b>3<sup>rd</sup> Quarter</b>	<b>4<sup>th</sup> Quarter</b>
Accounts Receivable	\$10,000	\$8,500	\$1,500		
Crop Sales	\$37,125	\$14,130	\$12,195	\$5,400	\$5,400
Livestock Sales	\$220,000	\$55,000	\$55,000	\$55,000	\$55,000
Other Farm Income	\$8,700				\$8,700
Government Payments and Rebates	\$2,500				\$2,500
New Borrowings	\$10,000		\$10,000		
Capital Sales					
Net Non-farm income	\$12,000			\$6,000	\$6,000
<b>TOTAL CASH INFLOW</b>	<b>\$300,325</b>	<b>\$77,630</b>	<b>\$78,695</b>	<b>\$66,400</b>	<b>\$77,600</b>

## Cash Outflow

The cash outflow section records all uses, amounts and timing of cash outflow for each period (as well as for the year). The entries are added to create total cash outflow for each period.

<b>CASH OUTFLOW</b>	<b>Total</b>	<b>1<sup>st</sup> Quarter</b>	<b>2<sup>nd</sup> Quarter</b>	<b>3<sup>rd</sup> Quarter</b>	<b>4<sup>th</sup> Quarter</b>
Seeds and Cleaning	\$150	\$150			
Fertilizer and Chemicals	\$5,600		\$3,400		\$2,200
Hail and Crop Insurance	\$3,300				\$3,300
Machinery and Equipment Repairs	\$4,000		\$400	\$3,000	\$600
Fuel, Oil and Grease	\$6,000	\$2,000	\$1,000	\$1,000	\$2,000
Feeder Livestock Purchases	\$800		\$800		
Livestock Feed and Supplement	\$140,000	\$35,000	\$35,000	\$35,000	\$35,000
Livestock Supplies, Veterinary Fees & Drugs	\$5,000	\$1,250	\$1,250	\$1,250	\$1,250
Breeding Stock Purchases	\$25,000		\$25,000		
Land Rent	\$3,000		\$1,500		\$1,500
Property Taxes	\$2,200				\$2,200
Insurance and Licenses	\$2,950	\$400	\$2,200		\$350
Building and Fence Repairs	\$4,000	\$500	\$1,500	\$1,500	\$500
Utilities	\$4,800	\$1,200	\$1,200	\$1,200	\$1,200
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## Cash Summary

The summary section examines the relationship between cash inflow and cash outflow for each period. This is done by subtracting cash outflow from cash inflow to create either a surplus or deficit for the period. This surplus or deficit is added to the period's Opening Cash Balance (Ending Cash Balance from the previous period) to create a Net Cash Balance for the period.

<b>SUMMARY</b>					
Surplus (Deficit)	\$7,440	\$25,130	(\$28,350)	\$7,995	\$2,705
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## **Types of Cash Flow Statements**

### **Actual Cash Flow Statement**

Actual Cash Flow Statement is developed at year end and records cash that actually flowed through the farm business in the year just completed. It is an accurate record of the sources, uses, amounts and timing of cash that flowed into and out of the business.

### **Projected Cash Flow Statement**

Projected Cash Flow Statement is identical in format and structure to the Actual Cash Flow Statement. It records the sources, uses, amounts and timing of cash that the manager projects to flow into and out of the business in the coming year. It is similar to a budget in that it provides a framework for the operation of the farm business.

You will focus mainly on the Projected Cash Flow Statement in this course.

## **Components of the Projected Cash Flow Statement Cash Inflow**

### **Cash Inflow**

Cash inflow records the sources, amounts and timing of all cash projected to be received during the year. Items included are not strictly business income - **all cash coming into the farm from all sources is recorded.**

#### **Sources of Cash Inflow**

- accounts receivable
- crop sales
- CWB payments
- forage sales
- livestock sales
- livestock product sales
- custom work
- rental income
- rebates
- government payments
- insurance proceeds
- sale of capital assets
- new borrowings
- net non-farm income

## Cash Outflow

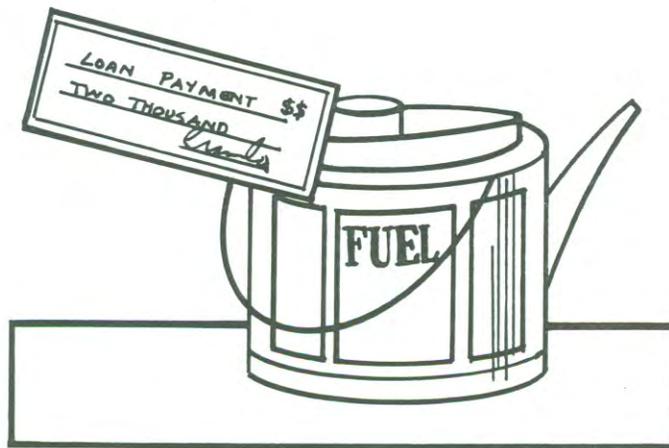
Cash outflow records the uses, amounts and timing of all cash expenditures projected during the year. The list contains more than just farm business expense items - **all cash leaving the farm is recorded.**

### Uses of Cash Outflow

- crop expenses
  - seed purchases
  - seed cleaning
  - fertilizer
  - sprays and insecticides
  - hail and crop insurance
  - custom charges
  
- machinery expenses
  - fuel, oil and grease
  - repairs and maintenance
  - equipment rental
  - lease payments
  - shop supplies
  
- livestock expenses
  - feeder purchases
  - feed purchases
  - salt, minerals, vitamins
  - veterinary fees and drugs
  - livestock supplies
  - breeding charges
  - twine
  - trucking and marketing
  - pasture rental

## Uses of Cash Outflow (continued)

- fixed expenses
  - breeding stock purchases
  - property taxes
  - labour
  - building and fence repairs
  - utilities
  - building and machinery insurance
  - licenses
  - accounting and legal fees
  - land rental
  
- family living allowance
  
- income tax (farm portion only)
  
- purchase of capital assets
  
- debt repayment (principal and interest)



## Cash Summary

The cash summary indicates the net effect of cash transactions for the period by measuring the difference between cash inflow and cash outflow. It also rolls the accumulated cash position forward to the next period creating the flow effect.

SUMMARY						
Surplus (Deficit)		\$7,440	\$25,130	(\$28,350)	\$7,955	\$2,705
+ Previous Ending Balance (Opening Balance)		(\$12,250)	(\$12,250)	\$12,880	(\$15,509)	(\$7,900)
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Opening Balance for the period

Surplus or Deficit created in the period

Summary of Cash Flow for the year

Cash Balance at the end of the period that flows forward to the next period as Previous Ending Balance

Sum of the Opening Cash Balance and the Surplus or Deficit created in the period

You will note that there is provision to include interest charged on an operating loan (if required) which is subtracted from the period's Net Cash Balance to produce the Ending Cash Balance for the period. You will determine how to calculate operating loan interest later in this module.

Now that you have identified cash inflow, cash outflow and cash summary as the three components of the Cash Flow Statement, let's look at how they are used in the preparation of the statement.

## **Preparation of the Projected Cash Flow Statement**

The first step in Projected Cash Flow Statement preparation is to determine the type of statement that best fits your current farm operation i.e. a monthly cash flow versus a quarterly cash flow. Choose a period which will produce a statement that will reflect the historic nature of cash flow in your operation.

Unlike the Net Worth Statement, there are no hard and fast rules dictating how to prepare a Projected Cash Flow Statement. It is difficult to predict what will happen in the future even more so in agriculture because of the uncertainty of production and related marketing opportunities.

**Good judgment and common sense are the best rules to live by.** Research past cash flow history and apply that knowledge to the creation of your new Projected Cash Flow Statement. It is the most useful information source available. An Actual Cash Flow Statement from the previous year will aid in the creation of a Projected Cash Flow Statement, particularly if the farm operation and its enterprises do not change appreciably. This is the reason you will find a previous year actual column on some Projected Cash Flow Statements.

Previous year actual figures are just a guide. If you plan to make changes in the operation that would affect either cash inflow or cash outflow significantly, make sure that you adjust your Projected Cash Flow Statement accordingly. Undertake extensive research about the change and apply the information learned when preparing the statement. Not only will this allow you to accurately incorporate new incomes and costs, but it will also allow you to determine if the proposed change is within the constraints of your projected cash flow situation.

Conversely, if your operation is not changing, determine if last year's actual cash flows were "normal" for your operation. Was there a large, unexpected repair, an unusual source of income, or an abnormal purchase of farm supplies to defer income tax?

Preparing an accurate Projected Cash Flow Statement is really a process of answering one basic question:

**How will your farm and family plans impact on the sources and uses of cash in terms of amounts of cash received or spent and the timing of each?**



Going through a “question process” about each aspect of cash inflow and cash outflow will help you when preparing your Projected Cash Flow Statement. Let’s look at the kinds of questions you should consider when completing the Cash Inflow and Cash Outflow sections.

## **Cash Inflow**

Accounts receivable (CWB payments, deferred grain sales, etc.) can be a significant source of cash inflow.

- Can you determine the amounts owed to you?
- When will you receive them?

Be aware of how your production plans and accompanying market opportunities will affect cash flow.

- What are the price and yield expectations for your product?
- In which period do you expect to market your production?
- How much will you be able to sell in any given period?
- Are there quota restrictions?

Some operations perform custom work for others.

- What has been the “normal” amount received in past years?
- Is this year likely to be similar?
- Will your emphasis on custom work change?
- Will the prices you charge change?
- Will you offer new services?
- When will you receive the income?

Government payments and rebates may or may not be easy to estimate but they often have a major impact on cash inflow.

- Is there a prospect for any such payments?
- At what level would you qualify?
- When would they be received?

If you plan to sell any capital assets, include cash received in cash inflow.

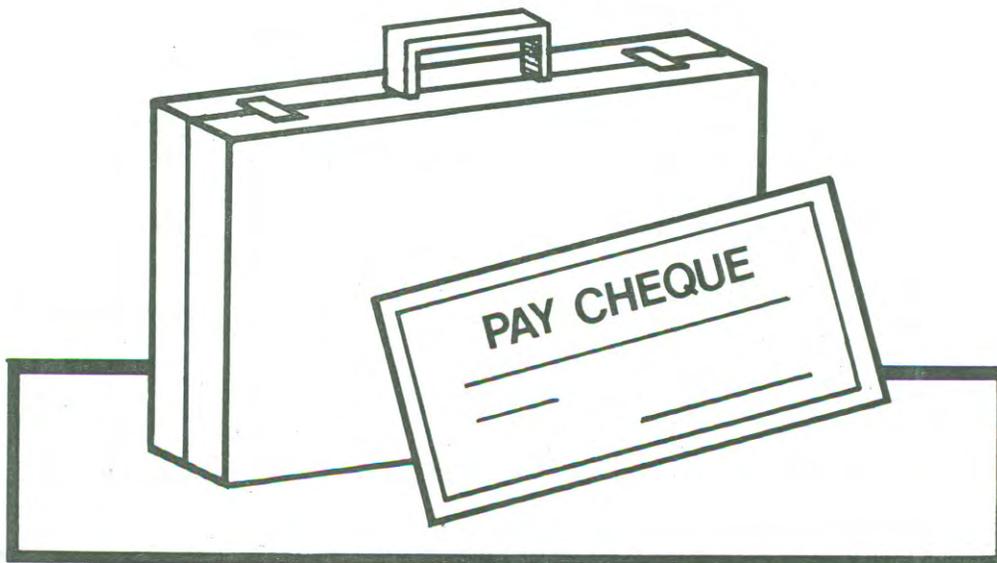
- What are your price expectations? Are they reasonable?
- Will you be required to pay commission to others for marketing the asset?
- When do you expect to receive the cash?

Term loans (not operating loans) and cash advances would be included in the cash inflow section as new borrowings.

- Are you planning a purchase that will require funding from a loan?
- How much will you borrow and when will it be received?
- Will you take a cash advance on your production?
- How much will you qualify for and when will it be received?

Net non-farm income is included in the Projected Cash Flow Statement because it is a source of cash available.

- Do you project to receive off-farm income this year?
- How much?
- When?



## Cash Outflow

In the cash outflow section, the variable cash expenses for crops, machinery and livestock are recorded first. Remember, these expenses are variable and will change significantly with changes in production levels and practices.

- Will you produce more this year?
- Will you increase production by increasing the size of the operation or increasing inputs?
- How will these changes affect your production costs?
- Are you anticipating an abnormal production cost (major equipment repair, special chemical treatment of a problem weed, additional pasture rental, etc.) this year?

Fixed cash expenses are recorded next in the cash outflow section. Cash outflow for these items is less likely to change from the previous year unless the size of the production plant changes or a major change occurs in the charges that others make to you for these expenses (taxes, utilities, insurance, licenses, etc.). Nevertheless, you still need to go through the “question process” to ensure accuracy.

- Will you change the size of the production plant this year?
- How will this affect cash outflow? When?
- Are you planning a major building repair this year? How much will it cost? When?
- Has there been a major increase in the cost of services you purchase from others? How much? When do you pay for them?

Inclusion of capital purchases (machinery and land) in the cash outflow section may or may not be an easy task depending upon the nature of the purchase and your current knowledge of the particulars involved with it.

- How accurate is your estimate of the purchase price?
- If you are trading an asset what will be the cash difference in the purchase price?
- When will you purchase the asset?

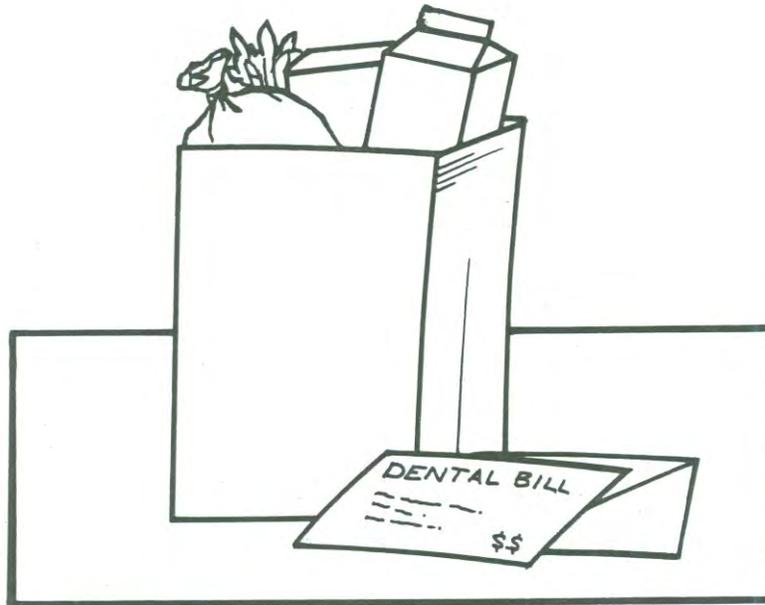
Cash outflow for debt repayment (principal and interest) can readily be determined, especially for existing loans. Principal and interest payment amounts can be transferred from your liability listing for current, intermediate and long term debt to the Projected Cash Flow Statement.

- If you are anticipating new borrowing this year, what is the amount of the payment (principal and interest) and when is it due?

## Family Living Expense

An accurate measurement of family living costs to be included in the cash outflow section often presents the biggest problem for farm managers. Raising a family and maintaining a given lifestyle is an expensive proposition. Unless you keep accurate records of your family living costs your estimate included in the Projected Cash Flow Statement is likely to be inaccurate - likely on the low side.

- Can you accurately determine last year's living costs and use them for a guide?
- Is there likely to be an abnormal change (major trip, house addition, tuition fees, etc.) this year? How much? When?



If you haven't been keeping a record of family living costs up to this point, we encourage you to start. Set up a separate area in your record keeping system using this format:

### Family Living Expenditure Record

**Name:** \_\_\_\_\_ **Period Covered:** \_\_\_\_\_

DESCRIPTION	Previous Year Actual Amount	Annual Amount Estimate	This Year Actual Amount
Groceries including home produced meat and produce			
Clothing			
Housing - Rent or personal share of housing debt			
Auto expenses - personal share of gas, repairs, insurance			
Utilities - personal share of power and telephone			
Heating fuel - personal share			
House repair- personal share			
Insurance - personal share of house and contents			
Life insurance - all family members			
Gifts - birthdays, weddings, Christmas			
Medical and dental fees			
Leisure and recreation - holidays, shows, parties, etc.			
Recreation equipment - license, fuel, repairs, etc.			
Upkeep of recreational property			
Liquor, tobacco, meal away from home			
Supplies for school children			
Support for children away from home			
Fees for family activities - clubs, sports, etc.			
Sports equipment			
Hobbies			
Children's allowance			
Payments on consumer debt			
Subscriptions - papers, magazines, etc.			
Personal care items - soap, ointments, cosmetics, etc.			
Charitable donations and church			
Garden equipment and supplies			
Household hardware - nails, screws, tools, glue, etc.			
Income tax			
Pets - food, vaccination, medication, veterinary, etc.			
Other			
Other			
<b>TOTALS</b>			

If you are having trouble estimating family living costs, you can develop a fairly accurate estimate of past living costs by following these steps:

1. Determine the total amount of all previous year's income - farm and non-farm. You can get this information from the income tax statements of all team members who contribute to family living expenses.
2. Determine the total amount of previous year farm cash expenditures. Again, check your income tax statement (don't include capital cost allowance).
3. Determine the total amount of principal payments made in the previous year. Check with your lender if you need assistance.
4. Determine the amount of cash used for capital purchases in the previous year.
5. Determine the total amount of cash used for savings in the previous year.
6. Determine the amount of cash used for previous year farm and personal income tax.

This information should be fairly easy for you to access. Now simply subtract items 2 through 6 from item 1. The result should be a fairly close approximation of your previous year family living costs.

It is a good idea to pay all expense, farm and family, by cheque. Cancelled cheques will provide an information source for developing farm and family expense records.

## Cash Summary

Once you are confident that the figures recorded in the cash inflow and cash outflow sections are all inclusive and accurate in terms of amount and timing, you can focus your attention on the development of the cash summary section. This is a mathematical exercise to determine the relationship between cash inflow and cash outflow, the resulting surplus or deficit created and the transfer of the accumulated cash position forward to the next time period.

Let's examine the summary section for the Shady Bend Farm to determine how it was prepared.

Cash outflow for the period (start with the first time period) is subtracted from cash inflow for that same period. This will result in either a surplus (more cash flowed in than out during the period) or a deficit (more cash flowed out than in).

	Total	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter
<b>TOTAL CASH INFLOW</b>	\$300,325	\$77,630	\$78,695	\$66,400	\$77,600
<b>TOTAL CASH OUTFLOW</b>	\$292,885	\$52,500	\$107,045	\$58,445	\$74,895
<b>SUMMARY</b>					
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Surplus or Deficit  
created in the year

Surplus or Deficit  
created in the period

The surplus or deficit is added to the Opening Cash Balance for the period (Ending Cash Balance from the previous period) to create the Net Cash Balance for the period. If you are dealing with the first period of the Projected Cash Flow Statement, the Opening Cash Balance will come from the previous year. It will be the amount of cash on hand on December 31 less any outstanding operating funds at that time.

	Total	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter
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Opening Cash Balance  
from the end of the previous year  
calculated by subtracting operating  
loan from cash on hand on Jan. 1

Ending Cash Balance  
flows forward to the next  
period to become the  
Previous Ending Balance (Opening Balance)

Here's a handy hint you can use when completing the summary section of a Projected Cash Flow Statement. Once you've created an Ending Cash Balance for a period, immediately transfer it to the next time period as the Previous Ending Balance (Opening Balance).

If a deficit Net Cash Balance is found in the cash summary section, the farm is not generating sufficient cash inflow to meet the demands of cash outflow.

	Total	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter
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+ Previous Ending Balance	(\$12,250)	(\$12,250)	\$12,880	(\$15,509)	(\$7,900)
= Net Cash Balance	(\$4,810)	\$12,880	(\$15,470)	(\$7,554)	(\$5,195)
- Interest on Operating Loan	\$581	0	\$39	\$346	\$196
<b>= ENDING CASH BALANCE</b>	<b>(\$5,391)</b>	<b>\$12,880</b>	<b>(\$15,509)</b>	<b>(\$7,900)</b>	<b>(\$5,391)</b>

Net Cash Balance  
created by adding  
Surplus or Deficit to  
Previous Ending Cash Balance

In this example, additional funds are required to make up Net Cash Balance deficits. These funds can only come from savings or an operating loan.

## Average Cash Balance

It is possible to estimate operating loan interest charges at a given interest rate by first determining the Average Cash Balance for the period.

$$\text{Average Cash Balance for Period} = \frac{\text{Opening Cash Balance} + \text{Net Cash Balance}}{2}$$

This formula indicates that “on average” the cash balance during the period was halfway between the cash balance at the beginning of the period (the Previous Ending Balance) and the Net Cash Balance for the period (created by adding either a surplus or a deficit to the Opening Cash Balance).

Let’s look at the second quarter of the summary section for the Shady Bend Farm. Even though the Opening Cash Balance was positive, there was a sufficient deficit created in the period to cause the Net Cash Balance to be negative. The Average Cash Balance for the period can be calculated by using the formula given above:

	Total	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter
TOTAL CASH INFLOW	\$300,325	\$77,630	\$78,695	\$66,400	\$77,600
TOTAL CASH OUTFLOW	\$292,885	\$52,500	\$107,045	\$58,445	\$74,895
<b>SUMMARY</b>					
Surplus (Deficit)	\$7,440	\$25,130	(\$28,350)	\$7,955	\$2,705
+ Previous Ending Balance	(\$12,250)	(\$12,250)	\$12,880	(\$15,509)	(\$7,900)
= Net Cash Balance	(\$4,810)	\$12,880	(\$15,470)	(\$7,554)	(\$5,195)
- Interest on Operating Loan	\$581	0	\$39	\$346	\$196
= ENDING CASH BALANCE	(\$5,391)	\$12,880	(\$15,509)	(\$7,900)	(\$5,391)

$$\text{Average Cash Balance} = \frac{\$12,880 + (\$15,470)}{2} = (\$1,295)$$

Therefore, “on average”, the cash balance for the Shady Bend Farm in the second quarter was a deficit of \$1,295.

## Interest Charged for Period

An interest charge for the period can be determined, based on a given rate of interest and knowledge of the time periods used in the Projected Cash Flow Statement (monthly or quarterly), using the following formula:

$$\text{Interest Charged for Period} = \frac{\text{Average Deficit Cash Balance} \times \text{Interest Rate}}{\text{Time Period}}$$

Look at the second quarter of the summary section of the Shady Bend Farm for an example.

The Average Cash Balance in the second quarter was a deficit of \$1,295. If you assume the operating loan interest rate is 12%, then the interest charged on the operating loan required in the second quarter would be:

$$\text{Interest Charged for Period} = \frac{\$1,295 \times 12\%}{4} = \$39$$

	Total	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter
TOTAL CASH INFLOW	\$300,325	\$77,630	\$78,695	\$66,400	\$77,600
TOTAL CASH OUTFLOW	\$292,885	\$52,500	\$107,045	\$58,445	\$74,895
<b>SUMMARY</b>					
Surplus (Deficit)	\$7,440	\$25,130	(\$28,350)	\$7,955	\$2,705
+ Previous Ending Balance	(\$12,250)	(\$12,250)	\$12,880	(\$15,509)	(\$7,900)
= Net Cash Balance	(\$4,810)	\$12,880	(\$15,470)	(\$7,554)	(\$5,195)
- Interest on Operating Loan	\$581	0	\$39	\$346	\$196
= ENDING CASH BALANCE	(\$5,391)	\$12,880	(\$15,509)	(\$7,900)	(\$5,391)

Note that if you were dealing with a monthly Projected Cash Flow Statement, the time period would be 12.

Interest charges (if applicable) are subtracted from the Net Cash Balance for the period to create the Ending Cash Balance for the period.

When examining the Ending Cash Balances for each of the quarters, the largest deficit for the Shady Bend Farm is found in the second quarter. Therefore, the Shady Bend Farm needs a minimum of \$15,509 in operating funds for the projected year. You could also state that the operating loan would reach its peak requirements in the second quarter.

	Total	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter
<b>TOTAL CASH INFLOW</b>	\$300,325	\$77,630	\$78,695	\$66,400	\$77,600
<b>TOTAL CASH OUTFLOW</b>	\$292,885	\$52,500	\$107,045	\$58,445	\$74,895
<b>SUMMARY</b>					
Surplus (Deficit)	\$7,440	\$25,130	(\$28,350)	\$7,955	\$2,705
+ Previous Ending Balance	(\$12,250)	(\$12,250)	\$12,880	(\$15,509)	(\$7,900)
= Net Cash Balance	(\$4,810)	\$12,880	(\$15,470)	(\$7,554)	(\$5,195)
- Interest on Operating Loan	\$581	0	\$39	\$346	\$196
<b>= ENDING CASH BALANCE</b>	<b>(\$5,391)</b>	<b>\$12,880</b>	<b>(\$15,509)</b>	<b>(\$7,900)</b>	<b>(\$5,391)</b>

Ending Cash Balance  
created by subtracting  
operating loan interest from  
Net Cash Balance

Largest Ending Cash Balance deficit  
is minimum amount of operating funds required

### Exercise 14

Given that operating loan interest is 12%, complete the summary section for the Projected Cash Flow Statement the Blakes have prepared. Hint: determine the Blake's beginning cash balance for the year from the Net Worth Statement you have prepared for them in Exercise 5 (page 2-58).

Compare your answer with that given on page 5-35.

	Total	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter
TOTAL CASH INFLOW	\$80,255	\$20,727	\$15,220	\$11,554	\$32,754
TOTAL CASH OUTFLOW	\$64,496	\$13,025	\$15,575	\$14,721	\$21,175
<b>SUMMARY</b>					
Surplus (Deficit)					
+ Previous Ending Balance					
= Net Cash Balance					
- Interest on Operating Loan					
= ENDING CASH BALANCE					

What would be the minimum operating loan required for their operation?

In which quarter would they require this amount?

**Exercise 15**

Pages 20 to 23 of the Farm Business Planner contain cash inflow and cash outflow forms for you to prepare a Projected Cash Flow Statement. You may choose either a monthly (all pages) or a quarterly (pages 20 and 22) format.

Before you complete your Projected Cash Flow Statement, divide each time period vertically into two sections - projected and actual - by drawing a vertical line through the middle of each column. Follow the example below. Label the columns appropriately. When you have divided the time periods as indicated, complete the **Projected** column for all time periods.

**Cash Flow Statement**

Name: \_\_\_\_\_ Period Covered: \_\_\_\_\_

CASH INFLOW	Total		1 <sup>st</sup> Quarter		2 <sup>nd</sup> Quarter		3 <sup>rd</sup> Quarter		4 <sup>th</sup> Quarter	
	Projected	Actual	Projected	Actual	Projected	Actual	Projected	Actual	Projected	Actual
<b>TOTAL CASH INFLOW</b>										
<b>CASH OUTFLOW</b>										
<b>SUMMARY</b>										
Surplus (Deficit)										
+ Previous Ending Balance										
= Net Cash Balance										
- Interest on Operating Loan										
= ENDING CASH BALANCE										
= ENDING CASH BALANCE										

## Summary

Cash Flow Statements are commonly used in agriculture to identify sources and uses of cash flowing into and out of the business.

Since they record all sources and uses of cash, Projected Cash Flow Statements can serve as a budget for the farm to operate under. Monitoring actual cash flow figures to those projected, allows the manager to identify if the operation is on track.

Creating accurate Projected Cash Flow Statements requires research into past inflows and outflows and determining if the pattern is likely to remain similar in the coming year. If new enterprises are added or if a major farm or family expense is anticipated, extensive research into the costs and returns of the proposed change should be undertaken.

Use caution when preparing the Projected Cash Flow Statement. It is not an exact science. Use your best judgment about historic costs and returns and how they can serve as a guide for preparing new projections. Make sure that all sources and uses of cash (farm and family) are included.

Although Cash Flow Statements do not provide a measure of profitability, they do reflect the cash position of the farm at any given time. Cash flow is important to meet the many cash requirements of the farm and family.

In Module 7, you will examine the Cash Flow Statement further. This analysis will improve your farm management decision making knowledge.

## **Module 5 Exercise Answers**

**Exercise 14**

	Total	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter
<b>TOTAL CASH INFLOW</b>	\$80,255	\$20,727	\$15,220	\$11,554	\$32,754
<b>TOTAL CASH OUTFLOW</b>	\$64,496	\$13,025	\$15,575	\$14,721	\$21,175
<b>SUMMARY</b>					
Surplus (Deficit)	\$15,759	\$7,702	(\$355)	(\$3,167)	\$11,579
+ Previous Ending Balance	(\$18,415)	(\$18,415)	(\$11,150)	(\$11,845)	(\$15,415)
= Net Cash Balance	(\$2,656)	(\$10,713)	(\$11,505)	(\$15,012)	(\$3,836)
- Interest on Operating Loan	\$1469	\$437	\$340	\$403	\$289
<b>= ENDING CASH BALANCE</b>	<b>(\$4,125)</b>	<b>(\$11,150)</b>	<b>(\$11,845)</b>	<b>(\$15,415)</b>	<b>(\$4,125)</b>

*The Blakes would require a minimim operating loan of \$15,415.*

*They would require this amount in the third quarter.*