



## How Does Your Cash Flow?

Robin Reid  
Extension Farm Economist

LaVell Winsor  
Farm Analyst

## Why keep records?

- Income tax filing
- Working with lender
- Management of operation



The road to good record keeping is paved with good intentions.....  
But good intentions aren't much help in creating the financial information needed for decision making

## Common Financial Statements:

- Balance Sheet- List of Assets/Liabilities, Net Worth
- Income Statement- Income/Expenses, Profitability
- Cash Flow- Cash Inflows/Outflows, Feasibility

## Cash Flow

### Definition and Purpose

- Recording of the actual dollars coming in and going out of the business
- Features:
  - Shows where the money comes from (inflows) and where it goes (outflows)
  - Indicates IF and WHEN money will need to be borrowed to pay operating expenses or family living

# Cash Flow

## Key Measures

### Cash Inflow Items

- Sales of Production (crops/livestock/ vegetables/etc.)
- Agricultural Program Payments/Crop Insurance
- Capital Assets Sales
- Off-Farm Income?

### Cash Outflow Items

- Seed, Fertilizer, Chemicals, Feed, Veterinary, etc.
- Capital Assets Purchases
- Family Living
- Taxes

Difference = Net Cash Flow



# Cash Flow Example-Inflows

CASH FLOW PROJECTION FOR OPERATION LOAN DETERMINATION for Joe and Jean Farmer 2018														
CASH INFLOW ITEMS	Annual Estimate	Jan	Feb	Mar	April	May	June	July	Aug	Sep	Oct	Nov	Dec	
<b>Livestock:</b>														
Beef	1	\$188,500	\$38,500.00								\$132,000.00	\$18,000.00		
Other	2	\$0												
Other	3	\$0												
<b>Crops:</b>														
Wheat	4	\$36,000						\$36,000.00						
Corn	5	\$95,256	\$31,500.00								\$63,756.00			
Sorghum	6	\$73,718									\$73,718.00			
Soybeans	7	\$222,246									\$111,123.20		\$111,123.20	
Hay and Forage	8													
Other	9	\$0												
Agricultural Program Payments	10	\$46,336									\$46,336.00			
Crop Insurance Proceeds	11	\$0												
Miscellaneous Income	12	\$990											\$990.00	
Capital Asset Sales	13	\$5,500											\$5,500.00	
Term Loan Proceeds	14	\$80,000							\$80,000.00					
Off-Farm Income	15	\$28,089	\$2,340.75	\$2,340.75	\$2,340.75	\$2,340.75	\$2,340.75	\$2,340.75	\$2,340.75	\$2,340.75	\$2,340.75	\$2,340.75	\$2,340.75	
<b>TOTAL CASH INFLOW</b>	<b>16</b>	<b>\$776,635</b>	<b>\$72,341</b>	<b>\$2,341</b>	<b>\$2,341</b>	<b>\$2,341</b>	<b>\$2,341</b>	<b>\$2,341</b>	<b>\$118,341</b>	<b>\$2,341</b>	<b>\$2,341</b>	<b>\$429,274</b>	<b>\$20,341</b>	<b>\$119,954</b>



# Cash Flow Example-Outflows

CASH OUTFLOW ITEMS	Annual Estimate	Jan	Feb	Mar	April	May	June	July	Aug	Sep	Oct	Nov	Dec	
Feed	17	\$22,200	\$3,200.00	\$3,200.00	\$3,200.00	\$3,200.00	\$500.00	\$500.00	\$500.00	\$500.00	\$500.00	\$3,200.00	\$3,200.00	
Hired Labor	18	\$42,000	\$3,500.00	\$3,500.00	\$3,500.00	\$3,500.00	\$3,500.00	\$3,500.00	\$3,500.00	\$3,500.00	\$3,500.00	\$3,500.00	\$3,500.00	
Repairs	19	\$58,000	\$11,600.00	\$1,450.00	\$11,600.00	\$1,450.00	\$1,450.00	\$1,450.00	\$1,450.00	\$1,450.00	\$11,600.00	\$11,600.00	\$1,450.00	
Seed	20	\$68,000		\$15,000.00						\$13,000.00			\$40,000.00	
Fertilizer	21	\$91,000	\$6,000.00		\$40,000.00		\$15,000.00		\$10,000.00				\$20,000.00	
Herbicide and Insecticide	22	\$70,000	\$2,000.00	\$15,000.00	\$25,000.00		\$20,000.00						\$8,000.00	
Veterinarian Expense	23	\$6,700	\$100.00	\$100.00	\$2,500.00	\$100.00	\$100.00	\$100.00	\$100.00	\$100.00	\$3,200.00	\$100.00	\$100.00	
Storage & Marketing	24	\$2,450	\$300.00					\$400.00			\$350.00	\$700.00	\$700.00	
Machinery Hire and Lease	25	\$14,500		\$2,000.00	\$3,000.00	\$4,000.00		\$3,000.00		\$2,500.00				
Fuel and Oil	26	\$24,000		\$12,000.00					\$12,000.00					
Utilities	27	\$3,600	\$300.00	\$300.00	\$300.00	\$300.00	\$300.00	\$300.00	\$300.00	\$300.00	\$300.00	\$300.00	\$300.00	
Property Tax	28	\$1,420									\$1,420.00			
Real Estate Tax	29	\$5,000				\$2,500.00							\$2,500.00	
General Farm Insurance	30	\$5,500						\$5,500.00						
Crop Insurance Premiums	31	\$14,184					\$1,400.00		\$12,784.00					
Cash Rent	32	\$46,240		\$23,120.00									\$23,120.00	
Miscellaneous Expense	33	\$11,400	\$950.00	\$950.00	\$950.00	\$950.00	\$950.00	\$950.00	\$950.00	\$950.00	\$950.00	\$950.00	\$950.00	
Interest	34	\$44,500		\$4,200.00	\$4,500.00						\$1,800.00	\$34,000.00		
Term Loan Payments	35	\$64,000					\$16,000.00						\$48,000.00	
Livestock Purchases	36	\$5,000		\$5,000.00										
Capital Asset Purchases	37	\$112,500						\$100,000.00					\$12,500.00	
Other	38	\$0												
Family Living Withdrawals	39	\$60,000	\$5,000.00	\$5,000.00	\$5,000.00	\$5,000.00	\$5,000.00	\$5,000.00	\$5,000.00	\$5,000.00	\$5,000.00	\$5,000.00	\$5,000.00	
Estimated Taxes	40	\$12,900		\$12,900.00										
<b>TOTAL CASH OUTFLOWS</b>	<b>41</b>	<b>\$785,094</b>	<b>\$24,950</b>	<b>\$37,400</b>	<b>\$104,370</b>	<b>\$88,000</b>	<b>\$14,300</b>	<b>\$67,200</b>	<b>\$117,700</b>	<b>\$11,800</b>	<b>\$62,084</b>	<b>\$26,820</b>	<b>\$75,150</b>	<b>\$155,320</b>

# Cash Flow Example

CASH FLOW PROJECTION FOR OPERATION LOAN DETERMINATION for Joe and Jean Farmer 2018														
	Annual Estimate	Jan	Feb	Mar	April	May	June	July	Aug	Sep	Oct	Nov	Dec	
<b>TOTAL CASH INFLOW</b>	<b>16</b>	<b>\$776,635</b>	<b>\$72,341</b>	<b>\$2,341</b>	<b>\$2,341</b>	<b>\$2,341</b>	<b>\$2,341</b>	<b>\$2,341</b>	<b>\$118,341</b>	<b>\$2,341</b>	<b>\$2,341</b>	<b>\$429,274</b>	<b>\$20,341</b>	<b>\$119,954</b>
<b>CASH OUTFLOW ITEMS</b>	<b>41</b>	<b>\$785,094</b>	<b>\$24,950</b>	<b>\$37,400</b>	<b>\$104,370</b>	<b>\$88,000</b>	<b>\$14,300</b>	<b>\$67,200</b>	<b>\$117,700</b>	<b>\$11,800</b>	<b>\$62,084</b>	<b>\$26,820</b>	<b>\$75,150</b>	<b>\$155,320</b>
<b>NET CASH FLOW</b>	<b>42</b>	<b>(\$8,459)</b>	<b>\$47,391</b>	<b>(\$5,059)</b>	<b>(\$102,029)</b>	<b>(\$85,659)</b>	<b>(\$11,959)</b>	<b>(\$64,859)</b>	<b>\$641</b>	<b>(\$9,459)</b>	<b>(\$59,743)</b>	<b>\$402,454</b>	<b>(\$54,809)</b>	<b>(\$35,366)</b>
<b>CASH BALANCE</b>	<b>43</b>	<b>\$12,532</b>	<b>\$59,923</b>	<b>\$24,864</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$94,249</b>	<b>\$39,439</b>	<b>\$4,073</b>
<b>OPERATING LOAN BALANCE</b>	<b>44</b>	<b>\$0.00</b>	<b>\$0</b>	<b>\$0</b>	<b>\$77,166</b>	<b>\$162,825</b>	<b>\$174,784</b>	<b>\$239,644</b>	<b>\$239,003</b>	<b>\$248,462</b>	<b>\$308,205</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>



## Completing a Cash Flow

Historical vs. Projected Cash Flow

- Historical = What actually happened in that time period?
- Projected = When will cash come in and flow out? What will my operating loan requirements be?

*Obviously you need to start somewhere, but the best way to make a projected cash flow is with an historical cash flow!*

## Completing a Cash Flow

Total Business or Partial Business Cash Flow?

- Do you include family living and off-farm income?
    - If it will affect your *farm's* cash flow = YES
  - You can just do a cash flow for one enterprise or part of the farm
  - You do a partial cash flow for an expansion or change in the business
- 
- Monthly intervals? Full year?

## Projecting a Cash Flow

Information for preparing a cash flow projection can come from many sources including:

1. Records of actual cash flow or other farm records from past years
  - If you keep detailed and timely records, you can build a cash flow in monthly intervals to see Net Cash Flow for the year
2. Tax returns (Schedule F)
  - If you have only done enough in the past to file income taxes, you can still use this as a basis to start an annual cash flow and allocate yearly income/expenses out to the months they may occur

## Cash Flow Interpretation and Use

- 1.) Gives you a picture of your yearly budgeted expenses and income
- 2.) Evaluates feasibility-**Will my operation cash flow?**
  - (generate sufficient inflows to cover outflows in this time period)*
- 3.) Indicates if/when/how much will need to be borrowed and when
- 4.) Can compare the actual cash flow to cash flow projections and monitor discrepancies
- 5.) Allows for planning of new projects or investments for the business

## Cash Flow Interpretation and Use

*Does Cash Flow indicate Profitability?*



This Photo by Unknown Author is licensed under CC BY-NC-ND

- *Overhead Expenses/Depreciation*
- *Unpaid Labor*
- *Accrual Adjustments*

## Cash Flow An Important Tool in Agricultural Financial Management

- Complete a historical and projected cash flow annually
- Monitor the projected cash flow against actual cash flow throughout the time period
  - The process of completing a projected cash flow statement will prepare a farm manager to respond and adapt as changes occur during the year
- Use the cash flow as an evaluation tool
  - Feasibility!

## Questions?

## Activity time!

- Joe and Jean Farmer own and operate a crop and beef cattle operation. They are estimating their cash flow needs for 2019, including both their farm income and expenses as well as Jean's off-farm income and their family living needs.
- The farm's main income sources include cash grain sales, bred beef heifers and beef calves. Yearly expenses are fairly consistent other than in 2019 the Farmer's plan to build a new machine shed in July, which is a capital asset purchase for \$100,000. They plan to finance \$80,000 of the building cost (term loan proceeds).

## How to Manage the Cash Shortfall

- First step is planning for the shortfall
  - Anticipate the shortfall
  - How much of shortage is expected?
- Increase Income/Reduce Expenses
  - Family Living?
  - Increase off-farm income
- Where to get funding?
  - Savings
  - Refinance debt
  - Reevaluate enterprise mix
  - Sell unused or underutilized assets

## Wrap-up

- Keep accurate and timely records
- Complete a cash flow annually and monitor it throughout the year
- Use your records and cash flow as a tool to manage your business
- Make a family living budget and stick to it

## Family Living Expenses

2017 Data - Kansas Family Living Summary	Kansas Farm Management Association Annual ProfitLink Summary					Average
	Age of Oldest Child				Couples	
	<= 5	6 - 13	14 - 17	> 17		
Number of Families	18	35	31	56	200	372
Average Family Size	3.8	4.4	4.7	4.5	2.0	2.8
<b>Family Living Expenses</b>						
Food Purchased	8,453	10,531	12,823	10,805	7,356	8,480
Household Operation	9,601	12,455	13,182	10,976	7,011	8,651
House Upkeep & Repairs	5,103	4,477	2,880	3,815	3,973	3,913
Furniture - Equipment	689	717	2,013	864	953	990
Personal - Recreation	7,479	7,734	14,285	14,938	9,046	9,975
Education	278	2,107	3,748	2,499	539	1,237
Child Care	1,846	1,465	135	281	223	483
Clothing	1,869	2,174	3,700	2,667	1,234	1,740
Gifts	951	1,390	1,758	3,573	4,683	3,504
Contributions	3,789	2,890	3,331	5,953	4,715	4,492
Doctor - Other Medical	4,354	3,756	7,026	5,380	4,647	4,718
Health Insurance	7,323	8,727	9,986	9,468	10,332	9,493
Life Insurance	1,269	2,131	5,647	3,986	3,594	3,461
Auto Expense	2,935	3,645	1,972	5,099	2,307	2,767
Utilities - Telephone	2,381	3,226	2,699	3,386	2,724	2,794
Bank Interest	1,012	1,651	1,664	1,167	420	755
Miscellaneous Expense	185	178	902	580	659	621
<b>Total Family Living</b>	<b>\$59,515</b>	<b>\$69,244</b>	<b>\$87,742</b>	<b>\$85,438</b>	<b>\$64,415</b>	<b>\$68,095</b>
<b>Taxes</b>						
Income/Self-Emp/Property Tax	16,571	9,011	20,441	16,892	16,785	16,341
<b>Total Family Living &amp; Taxes</b>	<b>\$76,086</b>	<b>\$78,255</b>	<b>\$108,183</b>	<b>\$102,329</b>	<b>\$81,200</b>	<b>\$84,436</b>

## How to start tracking/managing family living

- Create a family living budget with your family
- Talk as a family about the importance of a family living budget
- Track family living expenses
  - Manual paper log
  - Use an app for money tracking
  - Financial software IE Quickbooks
  - Electronic download into financial software

- **Food & Meals** – Groceries, eating out, eating at school activities, school lunches, fees on livestock processed
- **Medical Care** – Co-pay, prescriptions, over-the-counter medicine, health supplements
- **Health Insurance** – Health, dental, and vision insurance premiums, cancer policies, Health Savings Accounts
- **Cash Donations** – Church, donations to community or school, children's fundraisers, Boy Scout/Girl Scout, 4-H
- **Household Supplies** – All other miscellaneous items to run a household, pet food and care, the Wal-mart shopping trips, non-farm technology changes IE kids phone upgrades, school and family pictures, yard/garden supplies, magazine subscriptions, memberships
- **Clothing** – Clothes, shoes, school t-shirts
- **Personal Care** – haircuts, nails, massages, make-up, gym membership
- **Child/Dependent Care** – daycare expenses, babysitter
- **Alimony & Child Support**
- **Gifts** – Christmas, birthdays, anniversaries, other holidays, expense for Christmas cards. One formula for gifts - consider what is spent at Christmas and double to include other holidays.
- **Education** – college costs, tuition, books, fees at the beginning of the school year, field trip fees, organization dues
- **Recreation** – movies, bowling, college or professional game tickets, vacation, hotels, hobbies, subscriptions, expenses for going out, kids activity expenses (fees for activities, equipment purchased, uniforms, admission fees, extra eating out expenses, 4-H project expenses), magazine subscriptions, family/school pictures
- **Utilities (Household Share)** – propane, electricity, telephone, TV (cable, Netflix, Dish), water, internet
- **Personal Vehicle Operating Expenses** – fuel, oil changes, tires, maintenance, insurance, registration and tags, personal auto repairs
- **Dwelling Rent** – If renting, renters insurance
- **Household Repairs** – Usually recommend \$1,000-2,000 per year – appliance replacement, furniture, carpet, paint, house maintenance, yard upkeep, landscaping/plants, HVAC, handyman repairs, pest control
- **Disability/Long-term Care Insurance** – If the client is 60+, if they don't have LTC insurance, this is a good place to ask what their future plans are for LTC
- **Life Insurance Payments** – Term policies and whole life or universal, if none, this is a good conversation for the importance of life insurance.
- **Personal Property Insurance** – House share of property insurance
- **Miscellaneous**
- **Partnership Withdrawals**
- **Corporate Dividends**
- **Retirement Savings** – 401K, IRA, other investments

**KANSAS STATE**  
UNIVERSITY



Links to cash flow worksheets online:

***KSU-Integrated Financial Statements***

(Balance Sheet, Income Statement, Cash Flow, simple spreadsheet versions and hand-fill in sheets)

<http://www.agmanager.info/ksu-integrated-financial-statements>

***Monthly Cash Flow for Operating Loan Determination***

(Cash Flow only, both simple and complex versions)

<http://www.agmanager.info/monthly-cash-flow-operating-loan-determination>

**KANSAS STATE**  
UNIVERSITY



# Questions?

Robin Reid  
[robinreid@ksu.edu](mailto:robinreid@ksu.edu)  
785-532-0964

LaVell Winsor  
[lwinsor@ksu.edu](mailto:lwinsor@ksu.edu)  
785-220-5451

Extension Agricultural Economics

[www.AgManager.info](http://www.AgManager.info)

**KANSAS STATE**  
UNIVERSITY

