

## **Case Study #3: The Wheat (Sr.) Farm, Bill and Edna Wheat**

*Following is the third in a series of fictional Case Studies prepared to illustrate the process involved, and benefits of completing a financial review to analyze options that might be available for a farm operation. Everything about this Case Study is made up, although the situation presented is common in the industry across the province. This Case Study illustrates how a review such as this could be conducted, the type of analysis that would result, and how the work done can assist participating farmers in making decisions about their business. The purpose of this Case Study is not to recommend a particular course of action. Individual results may vary.*

### **The Wheat Farm (Retiring Farmers)**

Bill and Edna Wheat Sr. run a cash crop farm in central Alberta near the town of Prosperity. The operation focuses on the production of wheat, canola and barley grown in rotation on a continuous cropping basis. They own 10 quarters of land and cash rent another two. Bill works full time on the farm and Edna is a homemaker. They have pension income of about \$15,000 per year which will increase to about \$25,000 in 2017.

The farm was originally homesteaded by Bill's grandfather in 1910, and was transferred in the 1940's to his father. In 1981 Bill and Edna took over the farm and since then the farm expanded to its present size. They now operate with their son Tyler and his wife Chrystal who own one quarter section and rent another. Bill and Edna also have two other adult children who have careers away from the farm.

The two Wheat families run the 14 quarters involved as one unit, however each has their own assets and debts, as well as income and expenses. Bill and Edna own most of the farm equipment (Tyler and Chrystal own one tractor) and operate out of their yard where all the buildings are located. Tyler and Chrystal live in nearby Prosperity where Tyler works full time as a Sales Representative for a crop protection company and Chrystal works part time in a bank. They are both 32 years old.

Bill and Edna are in their mid 60's and are thinking seriously of transitioning into retirement. They have been finding they need to slow down a bit and Tyler and Chrystal have been taking up the slack. Tyler and Chrystal would like to take over the farm, and have developed a plan. Bill and Edna would like to see that happen as well, and are willing to help. Both families feel that the time is right for them to make serious plans.

Thinking about options for this change, Bill, Edna, Tyler and Chrystal met with their accountant to discuss some tax aspects. Their accountant told them about the Program available through Growing Forward 2 that might assist in the cost of a Consultant to help in the preparation of a Succession Plan. On this advice, the families decided to apply to the program and arranged meetings with a Consultant.

***Note: In Case Study #2 Tyler and Chrystal's side of the transition was considered. Bill and Edna's part will be the subject of this Case Study.***

### **Goals**

Prior to the first meeting Bill and Edna's consultant, Joe Analyst asked them to provide information about their operation, their goals and other basic financial information

including their assets and debts. At the first meeting on the farm, Joe collected additional information necessary to complete the financial review. A significant amount of time was spent discussing what they want to achieve for themselves personally and for their farm business. Following is a list of goals they identified.

### **Personal Goals**

Bill and Edna have now reached a point where they have financial stability and sufficient assets to fund their retirement. The heritage of the farm and future of their children is important to them and they are willing to provide assistance to family who wish to carry on with the farm operation.

Specific personal goals are as follows:

- While still healthy and able to work, Bill realizes he needs to slow down. He would like to stay involved in the farm, but with more time off and less responsibility.
- They want to continue to live on the farm and would like to have a new house with less space and easier upkeep.
- Both Bill and Edna would like to have more time and money available to use for travel and pursuit of other personal interests.
- They need to be financially secure. Ideally, they would like their various sources of income to cover their personal expenses and debt payments, retaining the value of their assets for their estate and distribution to their heirs. They want to be sure to have sufficient funds to cover additional care in their senior years.
- In this planned business change, they want to be sure they treat all their children fairly, including those who have decided not to pursue farming careers.

### **Goals for their business**

As retiring farmers personal goals are much more important than business goals.

Their business goals are very simple:

- Within the next year – to finalize arrangements to transfer over farm operations to their son and his wife, build their new home and re-establish residence in their new location.
- Within the next 3 years – to complete the transition in all respects into the new reduced farming operation and do comprehensive Succession and Estate plans.
- Within 5 years – to reduce investment in equipment and other operating assets and begin phasing into full retirement.

Because Bill and Edna's financial situation overall is strong and they have made the decision to move toward retirement, they personally have few concerns about their own ability to make the transition. They are more concerned about the impact of their decisions on their children.

### **The Status Quo assessment (statement and projections assuming no changes)**

Working from the information the Wheats provided, Joe Analyst completed a Status Quo assessment of their operation. The purpose of this part of the review is to gain information about their current operation and financial situation, and what they can expect financially if no changes are made. The results are summarized below.

**Before Change Statement of Assets and Debts**

**Wheat (Sr.) Farm Asset/ Debt Summary**

<b><u>Assets (Jan 1, 2016)</u></b>		<b><u>Liabilities (Jan 1, 2016)</u></b>	
<b>Current Assets</b>		<b>Current Liabilities</b>	
Cash in bank	46,000	Operating loan	0
Cash saved	0	Canola Advance	69,600
Crops for sale	301,000	Acc. interest	24,065
Feed & sup.	10,000	Cur. port. term debt	96,958
Total	357,000	Total	190,623
<b>Intermediate Assets</b>		<b>Intermediate Debt</b>	
Mach & equip	950,000	Combine loan	124,385
RRSPs	80,000	Tractor loan	16,388
Total	1,030,000	Total	140,773
<b>Long Term Assets</b>		<b>Long Term Debt</b>	
Land	3,500,000	Mortgage loan	548,316
Buildings	120,000	House loan	82,584
Total	3,620,000	Total	630,900
<b>Total Assets</b>	<b>5,007,000</b>	<b>Total Debt</b>	<b>962,296</b>
		<b>Net Worth</b>	<b>4,044,704</b>

**Financial Ratios (Jan 1, 2016)**

Current Ratio	1.87
Debt to Equity Ratio	0.24
Equity Ratio	0.81

**Definitions**

\* Current Portion Term Debt - is the portion of the Intermediate and Long Term Debt that is due within the next 12 months. This amount is in addition to the Intermediate and Long Term Debt shown. In this case, it includes 39,061 of the Combine loan, 15,737 of the Tractor loan, 27,605 of the Mortgage loan and 14,555 of the House loan

Current Liabilities - is debt that is normally due within the upcoming 12 months

Intermediate Debt - is the portion of the debt that is due beyond 12 months and within 10 years

Long Term Debt - is the portion of the debt that is due beyond 10 years

Joe explained that the ratios and financial indicators for the present Asset/Debt Summary all appear to be strong. The Current Ratio of 1.87 suggests that there should be sufficient resources to meet financial obligations within the next 12 months. Their overall financial situation is very good as well, as evidenced by their Debt to Equity and Equity ratios. With their significant Net Worth, they should have adequate resources to fund their retirement and provide some assistance to their children who wish to take over the operation.

**Before Change Income and Expense Summary**

<b><u>Wheat (Sr.) Farm Income/Expense Summary</u></b>			
<b><u>Income (Jan 1 - Dec 31, 2016)</u></b>			<b><u>Expenses (Jan 1 - Dec 31, 2016)</u></b>
<b>Income</b>			<b>Expense</b>
Crop sales			Cropping expense 433,580
wheat	40,000	x 5.50 220,000	Overhead expense 30,500
canola	25,000	x 10.00 250,000	Operating interest 2,548
barley	50,000	x 4.10 205,000	Term interest 36,085
Total		675,000	<b>Total Cash Expense 502,714</b>
Other income			<b>Non Cash Expense</b>
Gov't programs		5,000	Depreciation 83,500
Custom work		6,000	Exp. side acc. adj. -1,773
Other		4,000	<b>Total Non Cash Expense 81,727</b>
Total		15,000	<b>Total Accrued Expense 584,440</b>
<b>Total Cash Income</b>		690,000	<b>Net Accrued Farm Inc. 100,655</b>
<b>Inc. side accrual adjustments</b>		-4,905	Pension income 15,000
<b>Total Accrued Income</b>		685,095	Living costs 50,000
			Income tax 10,000
			<b>Debt Service Capacity 175,240</b>
			(Net acc. farm inc. + depreciation + term interest + non farm income - living costs - income tax)

<b>Profitability Ratios:</b>	
Debt Service Ratio:	1.32
Return on Assets: (see Note)	1.69%
Return on Equity: (see Note)	1.20%
Max. operating loan required:	156,071

<b>Payments:</b>	
Principal	96,958
Interest	36,085
<b>Total</b>	<b>133,043</b>

<b>Closing Financial Ratios:</b>	
Current Ratio	2.18
Debt to Equity Ratio	0.20
Equity Ratio	0.83

**Note:** Return on Assets and Equity as shown assume returns after Living Costs and Income Tax.

**The Income Expense Summary provided further insight about what Bill and Edna could expect financially if they were to continue on as at present:**

1. Farm operations should continue to be profitable.
2. They should be able to continue to service their debt, and meet their present financial requirements.
3. Over time, they should continue to build equity as debt is reduced and their surplus is reinvested into the farming operation.

**The Action Plan:**

Both families would like to see the transition to Tyler and Chrystal take place. Joe Analyst explored alternatives with them to determine the best way in which this could be done. In addition to Bill and Edna's goals, Tyler and Chrystal needed to make sure they have enough to meet their financial needs, and the plan would be fair to their other two adult children.

The plan they decided on involves Tyler and Chrystal taking over the operation, but for Bill and Edna to continue to be involved for the next few years providing additional labour during busy seasons, and management advice as required. Some of the features of the plan are as follows:

- Tyler and Chrystal will purchase the home quarter for \$600,000, using bank financing. Bill and Edna will use most of the money to build a new home on an adjoining quarter they will keep.
- Tyler and Chrystal will rent the remaining nine quarters of land owned by Bill and Edna, however, three of the quarters (the land they will inherit eventually) will be rent-free. The rent on the remaining six quarters will be slightly reduced.
- Tyler and Chrystal will rent Bill and Edna's equipment line for \$60,000 per year. As items need to be replaced, Tyler and Chrystal will purchase the new items, and the trade-in or sale amount will return to Bill and Edna. The amount of rent will decrease annually as items are replaced.
- Bill and Edna will continue to farm the half section they rent. They will pay Tyler and Chrystal \$20,000 per year back for equipment usage as long as they continue to do so.
- Bill and Edna will assist Tyler and Chrystal in farm operations as they are able, but will now spend more time and money traveling and pursuing other personal interests. They expect that with this change their living costs will increase from past levels.
- Bill and Edna's new home will be built on land that the 2 non farming children will eventually inherit. When Bill and Edna are no longer able to live on their own, rental income from the home will provide them with an additional source of income. When their estate is finally settled, the extra property value will provide additional benefit to these 2 children to offset the benefit Tyler and Chrystal will be receiving now relative to the rental benefit, unpaid help and access to equipment

## Operations were projected for 2 years based on this change. The results follow:

<u>After Change Projection (Year 1)</u>				<u>After Change Projection (Year 2)</u>			
<u>Income (Jan 1 - Dec 31, 2016)</u>		<u>Expenses (Jan 1 - Dec 31, 2016)</u>		<u>Income (Jan 1 - Dec 31, 2017)</u>		<u>Expenses (Jan 1 - Dec 31, 2017)</u>	
<b>Income</b>		<b>Expense</b>		<b>Income</b>		<b>Expense</b>	
Crop sales		Cropping expense	106,600	Crop sales		Cropping expense	106,600
wheat	22,000 x 5.50	Overhead expense	13,500	wheat	7,000 x 5.50	Overhead expense	13,500
canola	16,500 x 10.00	Operating interest	2,470	canola	4,500 x 10.00	Operating interest	346
barley	12,000 x 4.10	Term interest	32,181	barley	8,500 x 4.10	Term interest	24,952
Total	335,200	<b>Total Cash Expense</b>	154,751	Total	118,350	<b>Total Cash Expense</b>	145,397
<b>Other income</b>		<b>Non Cash Expense</b>		<b>Other income</b>		<b>Non Cash Expense</b>	
Land rent (840 ac x \$75/ac)	63,000	Depreciation	83,500	Land rent (840 ac x \$75/ac)	63,000	Depreciation	77,308
Equipment rent	60,000	Exp. side acc. adj.	-5,197	Equipment rent	60,000	Exp. side acc. adj.	-993
Other	2,500	<b>Total Non Cash Expense</b>	78,303	Other	2,500	<b>Total Non Cash Expense</b>	76,314
Total	125,500	<b>Total Accrued Expense</b>	233,054	Total	125,500	<b>Total Accrued Expense</b>	221,712
<b>Total Cash Income</b>	460,700	<b>Net Accrued Farm Inc.</b>	10,796	<b>Total Cash Income</b>	243,850	<b>Net Accrued Farm Inc.</b>	22,138
<b>Inc. side accrual adjustments</b>	-216,850	Pension income	15,000	<b>Inc. side accrual adjustments</b>	0	Pension income	25,000
<b>Total Accrued Income</b>	243,850	Living costs	60,000	<b>Total Accrued Income</b>	243,850	Living costs	70,000
		Income tax	0			Income tax	3,000
		<b>Debt Service Capacity</b>	81,478			<b>Debt Service Capacity</b>	76,398
		(Net acc. farm inc. + depreciation				(Net acc. farm inc. + depreciation	
		+ term interest + non farm income				+ term interest + non farm income	
		- living costs - income tax)				- living costs - income tax)	

  

<b>Profitability Ratios:</b> Debt Service Ratio: 1.36 Return on Assets: (see Note) -0.42% Return on Equity: (see Note) -1.19% Max. operating loan required: 0	<b>Payments:</b> Principal 27,605 Interest 32,181 Total 59,786	<b>Profitability Ratios:</b> Debt Service Ratio: 1.42 Return on Assets: (see Note) -0.51% Return on Equity: (see Note) -1.16% Max. operating loan required: 0	<b>Payments:</b> Principal 28,861 Interest 24,952 Total 53,813
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<b>Closing Financial Ratios:</b> Current Ratio 1.94 Debt to Equity Ratio 0.14 Equity Ratio 0.88	<b>Note:</b> Return on Assets and Equity as shown assume returns after Living Costs and Income Tax. Before those items, returns would be higher.
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Some comments about these results are as follows:

1. Year 1 is the transition year, so expenses and payments are higher than they will be in the long term, as assets are being sold and debt reduced over time. Year 2 shows a typical year after transition and shows all expected revenues and expenses for a full year.
2. Bill and Edna's financial position is projected to remain strong going forward, even with the financial concession being made to Tyler and Chrystal.
3. As equipment is sold, funds will become available to retire the remaining debt Bill and Edna have outstanding. It is anticipated that by the time they fully retire from farming activities, in possibly another 10 years, most of the remaining equipment will be sold, and all debt will be retired.
4. Adequate funds should be available going forward for Bill and Edna to increase personal expenditures as planned. In Year 2 they will both collect their CPP and OAS pensions which will help fund their personal costs.

### Summary

As illustrated in Case Study #2, and in this Case Study, the projections done show that the transition plans are feasible, both for Tyler and Chrystal to expand into the farm operation, and for Bill and Edna to phase down. On the basis of the reviews done, Bill and Edna, as well as Tyler and Chrystal decided to proceed with the plan. Some additional things Bill and Edna will work into their plan include:

- ✓ Work with tax and legal experts to develop the details in those areas about exactly how this transition of the farm might best be structured
- ✓ Within the next 2 years, develop a full estate plan to deal with all matters pertaining to their estate and eventual transfer of their remaining assets to their children. As part of this, they will update their wills, and obtain appropriate tax and legal advice on those issues as well

Working through this financial review provided both Bill and Edna, and Tyler and Chrystal with the numbers they need to decide if they will be able to proceed with a plan to transfer the farm operation, and things they need more information about. After completion of this review, they were then able to move to development of a detailed Succession Plan, the next step in the process.