

NORTHWEST FARM CREDIT SERVICES

BUSINESS TOOLS

Risk Management Planning Guide

Tip: Risk management is a comprehensive process and includes multiple tools and strategies. The goal is not to eliminate risk, but to manage it effectively through a holistic process.

In today's global agricultural economy, risks to producers, processors, and marketers are expanding and surfacing in many ways—exposing all to more unfavorable circumstances and increasing uncertainty. Finding ways to minimize risk and exposure given increasing uncertainties is critical for long-term business success. Developing a risk management plan helps business owners anticipate and mitigate risks, thus reducing their negative impact.

The following guidelines provide basic steps for developing a risk management plan. Ultimately, the details and execution of the plan will depend upon your industry and your operation's unique circumstances. Regardless of the situation, developing a risk management plan should begin by better understanding your operation and goals, and the available risk management tools and resources.



Risk Categories and Tools

Risk management can be a broad term, but generally risk areas include: production, marketing, financial, legal, and human resources. Each category can have a major impact on your operation's bottom line, long-term growth and net worth. Identifying and planning for these risks is key in the risk management process.

Tip: Consider creating an advisory board of respected peers and outside professionals to evaluate your operation's risk.

| Risk Category | Risk Areas to Consider | Risk Management Tools and Options |
|------------------------|--|---|
| Production | Weather, diseases, pests, technology, management, labor, water, shifts in public policy | Crop or enterprise choices, technology improvements, yield insurance, contract production, farm management |
| Marketing | Variability in input and output prices, market access, consumer demand, access to markets, foreign trade restrictions, natural disaster events or political unrest (interrupting shipping, demand, etc), disease/health scare (BSE or e-coli, etc.), counterparty risk | Marketing plans, future contracts, revenue insurance, contract production, export letters of credit, understanding and diversifying buyers, hedging sales price and input costs to manage margins |
| Financial | Access to capital, interest rate risk, credit obligations, capitalizing growth, monetary risk exchange, accounting, control of assets (lease, own, etc.) | Record keeping and analysis, enterprise accounting, interest rate management, life insurance, family living costs, transition and estate planning |
| Legal | Production, marketing and leasing contracts, business and personal liability, business and environmental regulations, counterparty risk | Contracting (terms and exposure limits, etc.) management, property and casualty insurance |
| Human Resources | Labor supply, death, disease and disability, divorce, business continuity, knowledge transfer to the next generation, management structure and expertise, attracting and retaining employees, compensation | Business planning, transition and estate planning, management, life insurance, disability insurance |

Risk Management Planning Steps

Managing risk should be a priority for every business. The importance of a risk management plan increases with the level of indebtedness compared to equity or sales of the operation and with the level of market volatility within the commodities being produced. Business owners with higher debt levels have less room for error. Producers of commodities with volatile price swings can experience crippling losses in a short period of time.

The following steps are provided to help you develop a risk management plan:

1 Honestly evaluate your operation's strengths, weaknesses, opportunities, and threats

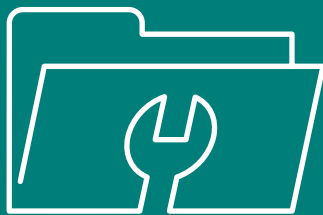
Most business owners have an inherent "gut feel" for the strengths and weaknesses of their operation. But, gathering input from others and formalizing these findings is a key component of understanding your risk exposure. An effective way to do this is by conducting a SWOT analysis – strengths, weaknesses, opportunities, and threats.

Strengths and weaknesses are internal to your operation, meaning these are areas you can influence or control. These areas may include business planning, succession planning, financial management, or human resource practices. Opportunities and threats on the other hand, are external to your operation and frequently uncontrollable. Examples

may include adverse weather, government regulation or marketplace volatility. Monitoring opportunities and threats regularly assures that contingency plans can be implemented quickly when the landscape changes. Think about the best management practices used in your industry as you evaluate your operation's strengths and weaknesses.

| Strengths | Weaknesses |
|--|---|
| Business Planning and Transition <ul style="list-style-type: none"> • Will and buy/sell agreement in place • Insurance for debt coverage is adequate • Ready to start transferring assets to children Production <ul style="list-style-type: none"> • Effective use of technology • Newer equipment line • Diversification • Product quality Financial <ul style="list-style-type: none"> • Good CPA • Good in-house accrual accounting • Strong liquidity, low leverage, good cash flow • Non-farm income and related benefits Marketing <ul style="list-style-type: none"> • Good relationships and alliances in place • Commodity sale contracts in place • Solid reputation • Integrity and follow-through Management <ul style="list-style-type: none"> • Strong work ethic and strong reputation • Use of outside professionals • Overall negotiation skills • Effective decision making/conflict resolution Communications <ul style="list-style-type: none"> • Good day-to-day communications • Weekly managers meeting | Business Planning and Transition <ul style="list-style-type: none"> • No written business plan • No plan for transfer of assets/management • Lack of communications between parents and children/beneficiaries about transfer • Questions regarding next generation's return Production <ul style="list-style-type: none"> • Aging irrigation equipment • More difficult to get adequate labor at harvest Financial <ul style="list-style-type: none"> • Little reference to operating budget • Financial reports not used as a management tool by all key players Marketing <ul style="list-style-type: none"> • Only Dad is known by buyers, no backup for marketing responsibilities • Few buyers Management <ul style="list-style-type: none"> • Labor retention • Time constraints imposed by diversification • No formal employee performance job descriptions or written expectations Communications <ul style="list-style-type: none"> • Lack of long-term, strategic communications • Lack of defined roles • Unresolved differences in expectations between generations |
| Opportunities | Threats |
| <ul style="list-style-type: none"> • Expiration of CRP contracts, potential new leases and increased seed sales • Adoption of new, production enhancing genetics • Agricultural industry promotion, increased sales • Purchase of high-quality, used equipment resulting from area farmers' retirement • Specialized promotions for niche products (e.g. branded beef, natural beef, etc.) | <ul style="list-style-type: none"> • Adverse weather and associated yield reductions • Increasing costs of production associated with continued increases in energy • Cessation or reduction in government subsidies • Increasing labor costs/decreased availability • Loss of off-farm income • Animal disease • Inadequate water for irrigation |

Tip: Northwest FCS Knowledge Teams develop industry-specific Peer Financial Benchmarks, which can help you measure your operation's financial performance, efficiency and profitability compared to similar operations.



Tip: To help identify potential opportunities and threats in the market, the Northwest FCS Knowledge Center offers Market Snapshots, Industry Perspectives and Industry Symposiums.

2 Complete a Risk Assessment

Consider what you have learned about your operation through the SWOT analysis. Now, complete the following Risk Assessment Worksheet. Your risk assessment should compliment your SWOT analysis, identifying your operation's strengths, weaknesses, opportunities, and threats. Completing the assessment helps to assure that risks facing your operation are understood and goals to mitigate or reduce the negative impact of those risks are in place.

Risk Assessment Worksheet¹:

Use this Risk Assessment Worksheet to identify and address the various risks facing your operation (see instructions below). Inventory your risks by category (e.g. production, marketing, financial, legal, and human resources). Or, inventory all risks together. Scoring for the Risk Assessment Worksheet is based on:

- 1) The likelihood (probability) that some risk event will occur, and,
- 2) The operational impact if it does occur.

| A | B | C | D | E |
|------------|-------------|--------|---------------|--------------------------|
| Risk Event | Probability | Impact | Risk Position | Risk Management Strategy |
| | | | | |
| | | | | |

Column A – Identify risks: Identify the different risk events facing your operation.

Column B – Approximate probabilities: What is the probability that the risk events will happen within the next three years? Score the events based on the following table.

| Probability That the Undesirable Event will Happen | Score on the Risk Assessment Worksheet |
|--|--|
| 0 - 10 percent | 0 |
| 11 - 20 percent | 1 |
| 21 - 50 percent | 2 |
| > 50 percent | 3 |

Column C – Approximate impacts: What is the impact on your operation's profitability and goals if the undesirable outcomes occur? Evaluate and score the impacts based on the following table.

| Description of Expected Impact if Undesirable Outcome Happens | Score on the Risk Assessment Worksheet |
|---|--|
| Virtually no impact. Short-term nuisance at worst. | 0 |
| Short-term impact with moderate disruption/loss. It will hurt, but will be short term. | 3 |
| Significant short-and/or long-term impact that, while survivable, results in serious disruption/loss. | 6 |
| Severe catastrophic hardship and/or loss. Continued operation will be difficult. | 9 |

Column D – Determine risk position: Determine your operation's risk position around the risks you've identified. Add the scores in Column B and Column C, interpreting your risk position based on the table below. Note that the descriptions are subjective and should be used as an indicator only.

| Risk Position | Total Score on the Risk Assessment Worksheet |
|---|--|
| No action required. | 0 to 2 |
| Not critical, but may want to begin examining how to reduce or avoid the risk, especially low cost alternatives. | 3 to 4 |
| Need to be more serious about addressing the risk. Threat is becoming more urgent. Seek cost effective means to address the risk. | 5 to 6 |
| Action is required. There is an urgency for action. | 7 to 8 |
| Do not delay. Immediate action is required. | 9 to 12 |

Tip: Northwest FCS offers several tools to help evaluate your operation.

For example, our Best Management Practices Assessment allows you to compare your practices to those of several key management areas.

Column E – Develop risk management strategy: What are some ways you will address the risk events you've identified?

3 Practice sound financial management

Determining the outlook for your business is difficult, if not impossible, without a firm hold on your current financial position. Good financial records are absolutely necessary to make effective business decisions. Remember the "garbage in, garbage out" philosophy: if records used to make decisions are poor, chances are the decisions will be poor as well.

Below are questions taken from Northwest FCS' Best Management Practices Assessment. Your answers to these questions may help indicate your operation's strengths or weakness in financial reporting, budgeting, tracking cost of production, and performance measurements.

Financial Reporting

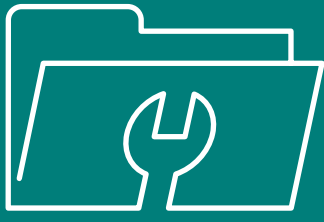
- Which of the following best describes the development of financial statements in your operation?

Financial management and reporting is the sole responsibility of the operation's accountant(s) for preparation of tax returns. Financial statements are not prepared in-house.

Costs are tracked via management's financial record keeping. Financial statements are not prepared in house. Overall financial management and reporting rests largely with accountant(s).

Management reviews internally prepared financial statements throughout the year. Full financial analysis is a function of tax or lending requirements and is performed by the operation's accountant(s).

Management conducts full financial analysis, comparing actual financial results against projected performance via financial statements prepared internally. Lender and tax reviews are one more step, rather than the sole reason, for financial analysis.



Tip: Business Management Center workshops help producers learn how financial statements and analysis can be used to make better risk management decisions.

- If prepared in-house, how would your accountant(s) describe your financial statements in terms of errors, omissions or inaccuracies?
- What is the highest level of internal accounting expertise found among you, your partners, your managers and employees?
- Are your operation's financial statements prepared on a cash or accrual basis?
- How often does management review financial statements (income statement, balance sheet, budget) in your operation?

Performance Measurements

- How interested are you in your operation's financial performance measurements (e.g. return on assets, working capital, debt to asset ratio, earned net worth change, etc.)?
- Does your operation set specific financial performance goals?
- Are your operation's performance measurement goals set outside of external parties' requirements (e.g. loan covenants)?
- How often are financial performance measurement goals referenced in your operation?
- If financial performance measurement goals are set and referenced, are steps taken when actual performance does not meet performance measurement goals?
- Are incentive programs (e.g. compensation) tied to performance measurement goals?

Costs of Production

- What is the level of detail to which costs are tracked in your operation?

Whole-operation (e.g. costs by whole farm)

Enterprise (e.g. costs by crop, processing costs, transportation costs, etc.)

Unit (e.g. costs by field, processing line, truck, etc.)

- How are variable, fixed and total costs tracked and reviewed in your operation?
- How do you use cost data in managing your operation?

Budgeting

- Does your operation prepare an annual, written operating budget?
- How often is your budget updated and reconciled?
- How is your budget used in managing your operation?

Using Trusted Advisors

- Consider your role in financial recordkeeping and the work provided by your accountant. Is your accounting system effective?
- Does your accountant provide the services and expertise you need to make decisions?
- Do you have a team of trusted advisors to help you manage your risk – accountant, attorney, financial planner, lender?

Tip: One of the keys to developing an effective cash flow budget is to identify variable and fixed costs.

Northwest FCS offers a number of financial management resources to help. Through our Business Management Center workshops producers learn how financial statements and analysis can be used to make better risk management decisions. Our Business Tool publications for financial planning include: Preparing Agricultural Financial Statements and Understanding Key Financial Ratios and Benchmarks. We can also help you find knowledgeable financial advisors because we work with accountants, attorneys and financial planners every day. In some cases, the best resources may not be found in your local communities. Contact your Northwest FCS representative to learn more.

4 Develop a cash flow budget

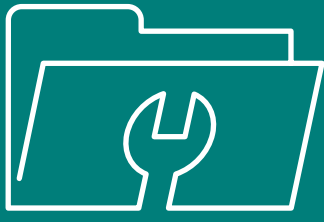
Your operation may have strong working capital (e.g. current assets less current liabilities), but be cash poor. A cash flow budget is a tool to understand and measure your cash flow, detailing how cash is sourced and used for three types of activities:

- **Operating:** Production, sales, delivery of products, and collection of customers' payments.
- **Investing:** Transactions involved in the purchase or sale of equipment, facilities, real estate, securities, and other capital assets not held for immediate resale.
- **Financing:** Transactions between the business and its lender(s) and/or owner(s) used to finance the business.

The cash flow budget answers questions, including: 1) How did actual expenses and revenues compare to projections; 2) If variances did occur, were they controllable or uncontrollable; and 3) what are the operating financing requirements of your business?

One of the keys to developing an effective cash flow budget is to identify variable and fixed costs. Variable costs are often those you can negotiate, usually during the course of a 12-month period, e.g. direct labor, fertilizer, seed, and fuel costs. Fixed costs, on the other hand, are locked-in business decisions extending beyond a year-long cycle which are not dependent on the level of production of your operation. These may include administrative labor costs, overhead costs (taxes, professional fees, etc.) long-term lease contracts, and long-term debt payments extending beyond a year.

There is only so much room for producers to differentiate themselves from a competitor's sales price when it comes to variable costs. Strategic business decisions regarding fixed costs and capital expenditures may ultimately be a key differentiating factor when it comes to determining a minimum sales price or throughput for breakeven point calculations. Business decisions impacting the level of fixed costs is a critical factor for producers considering a growth strategy. Managing gross profit margins and fixed costs are the primary financial differentiators often driving the level of success in production agriculture.



Tip: Compare actual to budgeted expenses and identify variances that can and cannot be controlled.

| Simple Cash Flow Budget Sample | | | | | For Period _____ to _____ | | | | | |
|------------------------------------|-------|--|--|--|---------------------------|--|--|--|--|--------|
| | Month | | | | | | | | | Totals |
| | | | | | | | | | | |
| Beginning Cash Balance | | | | | | | | | | |
| Operating Receipts | | | | | | | | | | |
| Crops | | | | | | | | | | |
| Livestock | | | | | | | | | | |
| Custom Work | | | | | | | | | | |
| Government Payments | | | | | | | | | | |
| Capital Receipts | | | | | | | | | | |
| Production Livestock | | | | | | | | | | |
| Machinery, Equipment, R.E. | | | | | | | | | | |
| Non Farm Income | | | | | | | | | | |
| Total Cash Flows | | | | | | | | | | |
| Operating Expenses | | | | | | | | | | |
| Feed Purchased | | | | | | | | | | |
| Fertilizer | | | | | | | | | | |
| Freight and Trucking | | | | | | | | | | |
| Gas, Fuel and Oil | | | | | | | | | | |
| Hired Labor | | | | | | | | | | |
| Insurance | | | | | | | | | | |
| Utilities | | | | | | | | | | |
| Taxes (R.E. and Personal Property) | | | | | | | | | | |
| Interest - Mortgage | | | | | | | | | | |
| Interest - Operating | | | | | | | | | | |
| Total Cash Operating Expenses | | | | | | | | | | |
| Livestock Purchases | | | | | | | | | | |
| For Resale | | | | | | | | | | |
| Production Livestock | | | | | | | | | | |
| Capital Expenditures: | | | | | | | | | | |
| Machinery and Equipment | | | | | | | | | | |
| Buildings and Improvements | | | | | | | | | | |
| Other Expenditures: | | | | | | | | | | |
| Family Living | | | | | | | | | | |
| Income and Social Security Tax | | | | | | | | | | |
| Term Loan Principal Payments | | | | | | | | | | |
| Total Cash Required | | | | | | | | | | |
| Cash Available - Cash Required | | | | | | | | | | |
| Money Borrowed | | | | | | | | | | |
| Operating Loan | | | | | | | | | | |
| Term Loan | | | | | | | | | | |
| Operating Loan Principal Payments | | | | | | | | | | |
| Ending Cash Balance | | | | | | | | | | |
| | | | | | | | | | | |
| | | | | | | | | | | |

On the preceding page (8) is a simplified version of a cash flow budget. Contact your Northwest FCS representative for help in developing a cash flow budget or statement of cash flows for your operation, including detailed excel spreadsheet templates.

lost \$3.92 per cwt. Accrual-based accounting provides additional accuracy when calculating breakeven prices.

This breakeven calculation can be modified for various commodities. Simply change the standard unit of measurement, i.e. 100# of potatoes, a bushel of wheat, bin of apples, etc.

Tip: Include breakeven points in your marketing plan to establish a target sales price.

5 Understand costs of production and breakeven points.

How much does it cost your operation to produce a hundredweight of milk, 100 pounds of potatoes, or a bushel of wheat? Without this information, risk management tools – especially market risk management tools – can be ineffective.

Once costs are understood, your operation's breakeven point can be calculated in several ways. The most effective is a breakeven calculation that recognizes the average price received for each commodity, as well as, other income. Methods for calculating breakeven points include: 1) breakeven price; 2) breakeven costs; 3) breakeven by units; and 4) cash flow breakeven. With all breakeven methods, both fixed and variable costs need to be identified. Below is a simple example of a breakeven price calculation for a dairy operation.

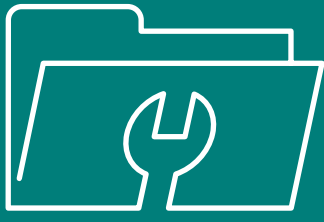
Breakeven Calculation: Milk Price Example

The following example depicts the calculation of the breakeven milk price for a dairy's performance. The breakeven milk price in this example is \$15.75 per cwt and the dairy

| Revenues | | |
|----------------------|-----------------------------|--------------|
| | Average Milk Price Received | \$11.83/cwt |
| | + Other Income | \$0.46/cwt |
| | TOTAL INCOME | \$12.29/cwt |
| Operating Expenses | | |
| | Total Operating Costs | \$15.54/cwt |
| | + Interest Expense | \$0.67/cwt |
| | TOTAL EXPENSES | \$16.21/cwt |
| Net Income (Loss) | | |
| | Total Income | \$12.29/cwt |
| | - Total Expenses | \$16.21/cwt |
| | TOTAL INCOME (LOSS) | (\$3.92)/cwt |
| Breakeven Milk Price | | |
| | Average Milk Price | \$11.83/cwt |
| | - Net Income | \$(3.92)/cwt |
| | BREAKEVEN MILK PRICE | \$15.75/cwt |

6 Manage margins and exercise discipline.

Market prices and input costs may move together or in opposite directions. To create an effective risk management strategy, both need to be considered simultaneously when making pricing decisions. One way to think about managing margins is to establish a "market playing field" to operate within from a price perspective.



Tip: Set a bottom and top sales price range based on a certain percentage below and above your breakeven point.

The key to managing margins is to first know your breakeven points and how much risk your balance sheet can handle. Balance sheet risk is sometimes evaluated by comparing working capital to Value of Farm Production or total expenses. Comparing working capital to total expenses shows how much of the operation's expenses can be funded with cash in the coming year (approximately).

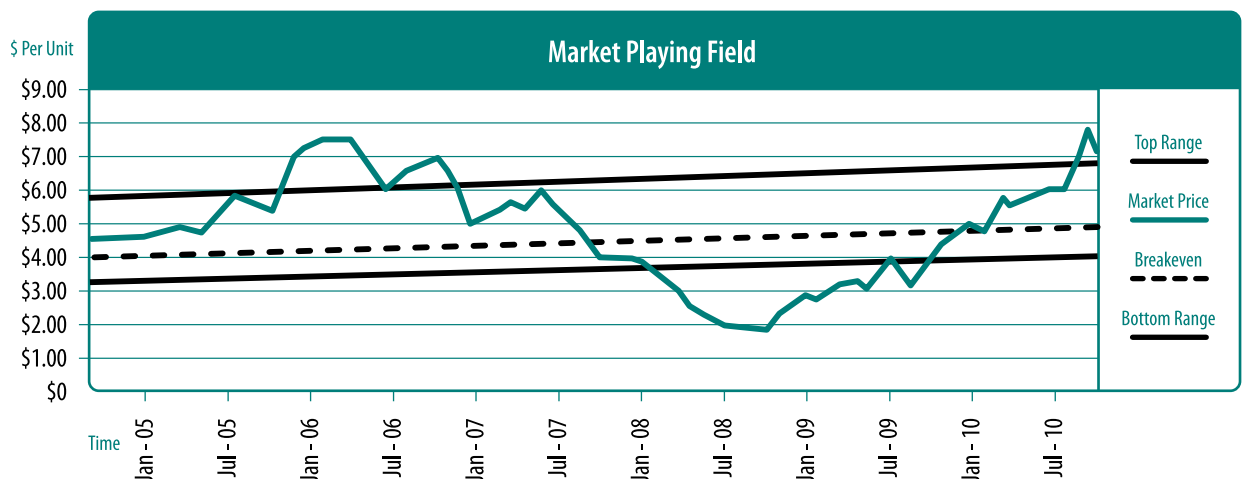
The next step to developing a market playing field is to clearly identify your overall appetite for risk. Then set a bottom and top sales price range based on a certain percentage below and above your breakeven point. With the pricing targets identified, you can evaluate using risk management tools like forward contracts and hedges on both revenue and input costs.

Customers who manage the margins understand that in up markets they may be capping some earning potential. But in times of volatility, they sleep better at night

knowing their balance sheet is protected from extreme market shocks. Having a risk management policy, as part of your marketing plan, also helps to outline a systematic approach to marketing products and purchasing key inputs over the course of the year.

Tools for managing market price and input costs include cash markets, forward contracts, futures contracts, options, and mixed strategies. If you do not fully understand futures and options – get help from someone who does. Using these tools haphazardly is closer to speculation than risk management. Contact your local Northwest FCS representative for a list of risk management resources.

Generally speaking, limiting risk through risk management tools like hedging is sound business. To help manage your risk, you may want to consider a hedge line – a line of credit specifically designated for



Tip: Completing the assessment helps to assure that risks facing your operation are understood and goals to mitigate or reduce the negative impact of those risks are in place.

margin calls. Risk management plans should be followed consistently and not represent speculation (e.g. “long positions” not matched with the underlying commodity). Risk management tools should be executed based on your plan and not emotion. When executing hedging strategies, discipline is the best practice.

7 Develop short- and long-term goals and action plans.

The SWOT analysis, Risk Assessment Worksheet, financial reporting assessment, and cash flow budget are tools used to identify your operation’s risk areas. What strengths allow you to capitalize on opportunities? How significant are the negative impact of weaknesses in your business? What weaknesses expose your business to immediate threats and what is the likelihood and impact of these threats?

Use this analysis to develop short-term goals (less than one year) and long-term goals (more than a year) for managing risks in your operation. Goals that are most effective are SMART goals – meaning goals that are specific, measureable, agreed to, realistic, and time-based.

Sample Goals:

- Develop a marketing alliance with an established apple packer and marketer by January 1, 2012.
- Increase financial strength and the ability to bear risk with a current ratio of (xx) to (xx) by March 2012.

- Provide an owner return of (xx) percent by December 2012 to allow mom and dad a comfortable retirement.
- Have no reliance on government programs by 2015.

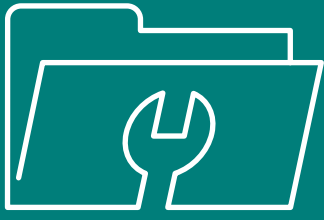
The next step is to create an action plan for each goal that identifies who is ultimately responsible for achieving the goal, steps needed to accomplish the objective, who is responsible for each step, target dates for progress, and ultimately, completion of the goal.

Review these goals and action plans periodically and at regularly scheduled meetings to ensure progress is being made. Keep in mind, some goals may need to be adjusted as opportunities and threats develop in the market place.

Action Plan Sample:

GOAL: Develop a marketing alliance with established apple packer and marketer by January 1, 2012

| Action Steps | Person Responsible | Due Date | Comments |
|--|--------------------|----------|----------|
| Inventory area packers | | | |
| Develop criteria to evaluate packers | | | |
| Talk to well-respected peers about their experiences | | | |
| Choose top 3 packers | | | |
| Interview packers | | | |
| Select packer and develop alliance | | | |



FOR ADDITIONAL INFORMATION:

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8 Proactively manage your balance sheet and develop contingency plans consistent with your risk tolerance

The importance of contingency plans increases with your tolerance for risk. Proactively managing your balance sheet and identifying primary, secondary, and tertiary repayment sources should be common elements in all risk management and contingency plans.

Primary repayment sources include revenues generated from the operation's normal cash cycle (e.g. the process by which production becomes inventory and is converted to accounts receivable and cash). When primary repayment sources are constrained, secondary repayment sources include excess working capital, equity injections from owners, and/or term debt from debt servicing equities. As a last resort, tertiary repayment comes first from the sale of non-strategic assets and then from the sale of strategic assets.

Risk Management as a Discipline

There is no single tool, strategy or silver bullet for managing risk. Rather, risk management is a comprehensive process and represents multiple tools and strategies. The ultimate goal is not to eliminate risk, but to manage it effectively through a holistic process. Market volatility reminds all of us in agriculture that what may seem like a positive on the surface can have dramatic impacts on other aspects

of our business. Increased time and attention toward risk management planning will go a long way in positioning your business for long-term success.