

BARNYARDS & BACKYARDS

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Wyo ranch example uses Risk Scenario Planning tool

In a previous installment, example central Wyoming cattle producers Jim and Sally Butler are trying to decide whether or not to keep and feed their steer calves rather than selling them at 500 pounds.

In this example we created, they are also considering whether LRP insurance would provide enough positive risk protection to be included in the strategy.

Using the RSP tool (available at RightRisk.org by clicking "Risk Management Tools" under the "Resources" tab), the Butlers have developed partial budget data for their price expectations, listed in Figure 1.

Note that this base scenario assumes a net benefit of \$80,030.38, with no indemnity payments received.

After clicking the "Run" button, a probability distribution is generated based on the two uncertain values defined in the tool: the LRP Price index and the Calf sales price. Figure 2 shows the probability curve.

The RSP tool calculates there is a 50/50 chance that the LRP contract net benefit will be \$79,268, with outcomes ranging between \$66,632 and \$88,514. Stated another way, the Butlers have roughly a 50-percent chance purchasing an LRP policy will generate a higher net benefit than the \$80,030 they estimated in their original budget.

Note the LRP policy would protect the Butlers against future price risk. If prices dropped to the lowest level in their projection (\$100/cwt), the net benefit would total \$88,514 with LRP in place.

Using LRP Results in Overall Decision

Recall that the Butlers wanted to evaluate whether they should wait and sell their steer calves at 775 pounds. They could sell them right now at \$125/cwt weighing 550 pounds. They have determined their cost-of-gain would be approximately \$0.65/pound of gain.

The RSP tool can again be used to look at this decision.

The Butlers would enter \$80,030 as added returns for the estimated value of the 775-pound steers determined from the previous analysis. The cost-of-gain at \$0.65/pound would be entered under added costs for the 21,375 pounds of total gain across 95 head. There would be no reduced costs. Reduced returns would include the current sale price of \$125/cwt for 95 head weighing 550 pounds for a total of \$65,313.

Assuming that the cost-of-gain is the primary uncertainty under this scenario, the Butlers enter \$0.85/pound as the maximum and \$0.55/pound as the minimum cost-of-gain values. Running the analysis provides a probability curve as shown in Figure 3.

Results show a 66-percent chance the net benefit will be above \$0 for the strategy. Outcomes range between a loss of \$2,701 and a gain of \$2,823, with a 50/50 chance of a net benefit of \$486 overall.

With these results, the Butlers can more easily evaluate whether the benefits of holding and feeding their steers to a heavier weight are greater than the costs.

Figure 1. Butler Ranch RSP Tool Data

| Partial Budget For: | | | | LRP Insurance Decision | | | |
|---|----------|---------------------|--------------|---|----------|--------------------|-------------|
| Positive Effects | | | | Negative Effects | | | |
| Added Returns | Quantity | Value | Total | Added Returns | Quantity | Value | Total |
| LRP Price Index | | \$ 112.00 | \$ - | LRP Premium | 736.25 | \$ 6.30 | \$ 4,638.38 |
| LRP Coverage Price | | \$ 112.00 | \$ - | | | | |
| Calf Sales (cwt.) | 736.25 | \$ 115.00 | \$ 84,668.75 | | | | |
| LRP Indemnity | 736.25 | \$ - | \$ - | | | | |
| Total Added Returns | | \$ 84,668.75 | | Total Added Costs | | \$ 4,638.38 | |
| Total Positive Effects (Added Returns + Reduced Costs) | | | | Total Negative Effects (Added Costs + Reduced Returns) | | | |
| \$ 84,668.75 | | | | \$ 4,638.38 | | | |

Figure 2. Net Benefit Cumulative Probability Distribution

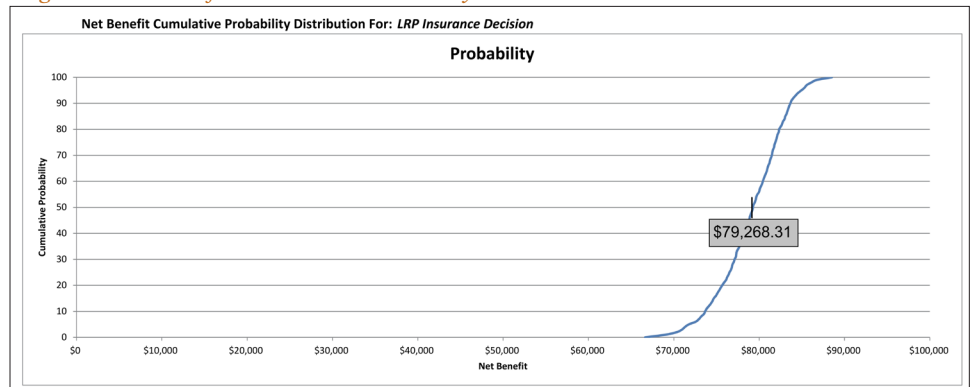
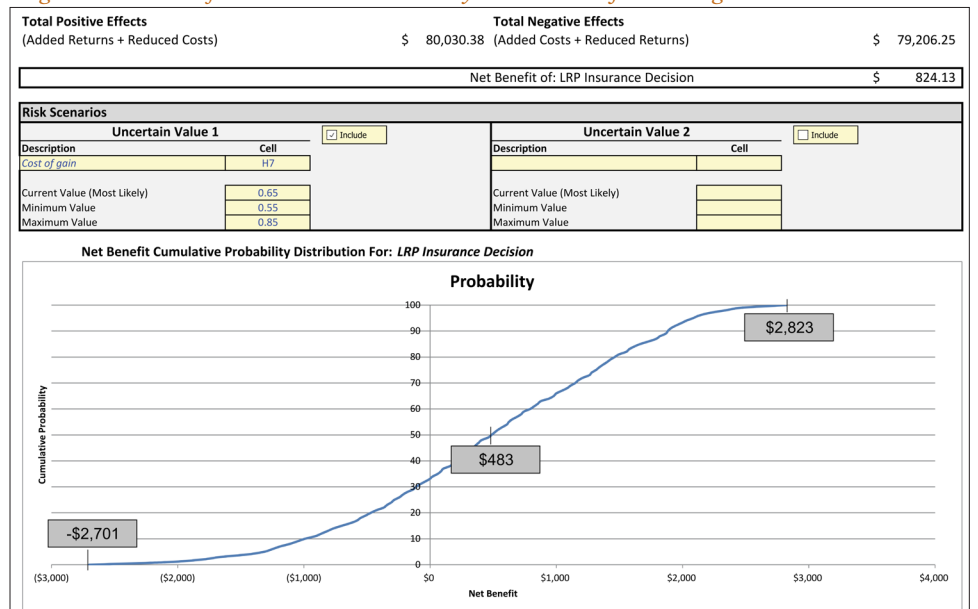


Figure 3. Net Benefit Cumulative Probability Distribution for Feeding Steer Calves



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Livestock Risk Protection (LRP) is an insurance policy designed for livestock producers to help manage price risk. LRP is available in Wyoming for feeder and fed cattle, sheep, and swine producers. LRP prices and coverage levels are determined by Chicago Mercantile Exchange (CME) prices based on the length of the contract.

For more information
Visit RightRisk.org for in-depth information on numerous agricultural risk management topics and crop insurance programs. Online tools such as the Risk Scenario Planning tool are available and are designed to help users make decisions no matter where they might be with their risk management planning.

For more information on LRP and other insurance products designed for livestock producers, visit RightRisk.org.

The Worker Protection Standard – employer responsibilities

What do I need to do according to WPS, as an ag employer, to keep my workers and handlers safe?

Last month, I looked at exceptions to the Worker Protection Standard. This month, I'll discuss employer responsibilities for safety.

To ensure employees will be protected from exposures to pesticides, the WPS requires employers to:

- Exclude workers and others from areas being treated with pesticides.
- Exclude workers and others from the application exclusion zone (AEZ) within the boundaries of the agricultural establishment during pesticide applications. (Details concerning the AEZ will be provided in a later article)
- Exclude workers from areas that remain under a restricted-entry interval (REI), with narrow exceptions.
- Ensure a pesticide handler or an early-entry worker (one that enters a treated site prior to the expiration of the REI) be a minimum of 18 years old.

- Prohibit handlers from applying a pesticide in a way that will expose workers or other persons.
- Protect handlers during handling tasks including monitoring while handling highly toxic pesticides.
- Provide, maintain, and ensure the correct use of personal protective equipment (PPE), including enhanced protections for the use of respirators.
- Protect early-entry workers who are doing permitted tasks in treated areas during an REI, including special instructions and duties related to correct use of personal protective equipment (PPE).

Mitigate

To address pesticide exposures employees may experience, the WPS requires employers to provide:

- Decontamination supplies — specific amounts of water for workers and handlers along with soap and towels for routine washing and emergency decontamination. (One gallon per worker and three gallons per handler, measured at the beginning of each work day).

- Eyewash water — for handlers using pesticides requiring protective eyewear. (There are specifics in the "How to Comply Manual" for eye wash water amount, and flow rate).
- Emergency assistance — making transportation available to a medical care facility if an agricultural worker or handler may have been poisoned or injured by a pesticide, and providing information about the pesticide(s) to which the person may have been exposed.

Next time we will further explore details in the "How to Comply Manual" if you would like to read ahead, here is a link bit.ly/howtocomply.

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