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### Free Risk Scenario Planning tool lets you assess changes in the face of uncertainty

The Risk Scenario Planning (RSP) tool from RightRisk.org is included in the RightRisk Analytics toolbox. This toolbox is loaded with budgeting tools and risk analytics designed to assist you in accounting for and managing risk, including important areas such as machinery risk, forage leases, and comparing management alternatives. Point your browser to RightRisk.org to get started.

### **Using the Tool to Analyze Livestock Risk Protection**

In a previous example, we described a ranch and the decision whether to purchase Livestock Risk Protection (LRP) as part of a risk management strategy. We assumed the ranch is selling 100 head of 500-pound steer calves, with an LRP premium cost of \$3.68/cwt. Note that there are other aspects to establishing LRP coverage, but for purposes of our example we keep things simple.

Previously, we assumed a \$10/cwt basis (the difference between the cash price and LRP index price) with a corresponding LRP coverage price of \$160.47/cwt, an index price of \$157/cwt and an ending cash price of \$147/cwt (Figure 1).

### **RSP Tool Output and Probability Analysis**

The resulting distribution shows the probability of an outcome falling at or below a particular value on the graph. The RSP tool generates results based on repeated random draws (1,000 total draws) from the distributions of the uncertain values entered.

For our present example, selecting the index price and the basis value as the uncertain variables generates the results depicted in Figure 2. The resulting graph shows a 50/50 probability that the total net benefit of the strategy is \$73,289, with a range of \$69,574 (low) and \$78,051 (high).

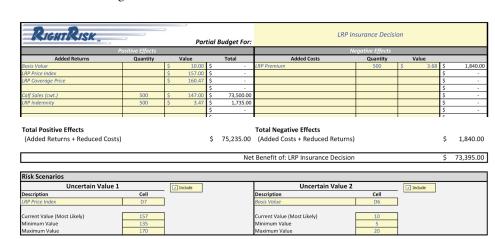


Figure 1. Risk Scenario Planning Tool entries to evaluate LRP insurance decisions



Figure 3. Risk Scenario Planning Tool output for LRP insurance, basis variation only

One of the most useful features of the RSP tool is the ability to change the details for a select variable and see the effect on the probability projections. For instance, selecting to include only the basis value in the analysis generates a probability curve with a lower bound (\$69,253) and a higher bound (\$75,678), suggesting the net return will fall somewhere in between (Figure 3). Taking the index values out of the risk equation shifts the range of potential net benefits lower.

We could also change the range of expectations for the uncertain values in our example. Suppose the ranch manager was less certain of both the basis and the expected LRP index value at the end of the contract. We adjust the basis values to \$15/cwt for the most likely, \$30/cwt for the max and \$2/cwt for the minimum. We also revise the index values to \$150/cwt for most likely, \$125/cwt for the minimum and \$190/cwt for the maximum.

Entering these values into the RSP tool and rerunning the analysis provides the output as shown in Figure 4. The broader range of possible outcomes for each variable and associated increased uncertainty pushes the overall range of outcomes downward, with the 50/50 value for net benefit falling at \$71,303. Even though the most likely outcome would result in a much higher indemnity payment, the overall net benefit is lower, given the wider basis and expected lower price for the cattle.

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Figure 2. Risk Scenario Planning Tool output evaluating LRP insurance

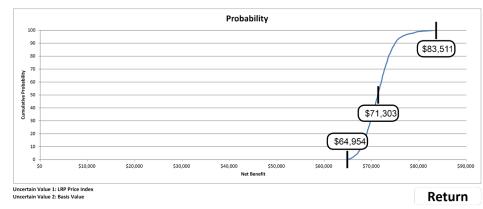


Figure 4. Risk Scenario Planning Tool output evaluating LRP insurance, alternative scenario

# Risk Scenario Planning Version 1.11 Click Here to Begin By: John P. Hewlett, University of Wyoming Dr. Jay Parsons, University of Nebraska-Lincoln EVENNUM BY TEXTENSION RIVERSITY EXTENSION RIVERSION RI

### About the Risk Scenario Planning Tool

The Risk Scenario Planning Tool (RSP) from RightRisk.org, is a spreadsheet tool designed to help producers take in a wide range of values when considering a change or decision. The RSP tool can help a producer quantify the risk values associated with a particular decision or change and gives results showing a probability distribution for the variables entered.

The tool contains a user guide to help start the process, as well as several crop and livestock examples to show how the tools work.

To begin using the tool or view the user guide:

· Log on to RightRisk.org

 Under the Resources Tab, select Risk Management Tools.

## When that time comes: some thoughts on successful pasture reseeding

Has your dryland pasture reached that point? You know, when the plant species originally established no longer exist, maybe invasive or unwanted plants outnumber the desired species, or you just feel it is a time for change? No matter the reason, there are some important considerations to work through before you start planting a new field or pasture.

### **Understanding your soil**

The physical and chemical properties of your pasture play a major role on the types of plants that will succeed or fail. Completing a soil test prior to planting is an important step. Most routine or basic soil tests provide information related to soil texture, pH, nutrient levels, organic matter and salt concentrations. Completing a soil test prior to planting can steer your species selection to accommodate your soil's physical and chemical properties. Follow-up testing is also a great way to see if you are building or loosing organic matter after a new field is established.

### **Selecting Species**

Matching the plant species to the climate of your pasture helps

promote better germination and establishment. Annual precipitation, number of growing days, average high and low temperatures and timing of precipitation affect the ability of plants to grow and produce desired forage. Newly seeded plants growing at the wrong time of year or in a climate that does not align with the plant's physiological needs can mean almost certain failure.

Many great resources for selecting species for reseeding are available. University of Wyoming Extension Bulletin 1206 (bit.ly/plantspecies) gives a great outline of grasses and forbs for reseeding based on annual precipitation, elevation and soil. "Dryland Pastures in Montana and Wyoming," available at bit.ly/drylandpasture, is another great resource on species and seeding techniques.

### Planting

When choosing seeds, it is important to pay attention to labels. Look for seeds that are not too old, contain very little or no weed contaminants and have been harvested from plants in a similar climate. Other important

information to look for before seeding is percent germination value and number of pure live seed (PLS).

Planting can be as simple as going out into the field or pasture and throwing some seeds on the ground or as involved as completely reworking the field and planting with machinery. Seeds can be planted in the fall or spring, depending on the species.

UW Extension Bulletin 1248 provides a great overview of planting a new stand of plants. Find it at bit.ly/successfulforage.

For more on plant species selection, pasture renovation and lots of other topics, go to University of Wyoming Extension publications at bit.ly/UWEpubs and the Barnyard and Backyards website at bit.ly/barnbackyard.

For more help, contact your local extension office or one of the four agricultural experiment stations in the state.

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Drill seeders that can be pulled with small machinery are

great for small pasture renovations



Disking might be needed to removing existing unwanted plants from a pasture as shown above