Harvested Roughage and Rangeland Production Risk Management in Montana–Noninsured Crop Disaster Assistance Program

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Introduction:

With continuing drought in certain areas of Montana farm and ranch managers are concerned about managing production risks associated with harvested roughage and rangeland.

Production risks for harvested roughage and rangeland production can be ameliorated to some degree by using multiple peril crop insurance products underwritten in part by the Federal Crop Insurance Corporation and managed by the USDA’s Risk Management Agency (RMA). [See Briefing No. 36 for applicable crop insurance products]. When such products are unavailable in a county, and RMA has a regular actuarial offering in other counties, producers may file a Request for Actuarial Change through their insurance agent that may result in a Written Agreement, an individualized crop insurance product for roughage for that year. Currently the RMA rangeland insurance product (discussed in Briefing No. 36) is a pilot program for which a Request for Actuarial Change is not allowed.

Another opportunity for producers to manage production risks for harvested roughage or rangeland production is to use the Noninsured Crop Disaster Assistance Program, commonly known as NAP. NAP coverage is generally only available to producers in counties where a crop insurance actuarial table for the subject crop does not exist. NAP is administered by the Farm Service Agency (FSA) to provide financial assistance to farm and ranch managers who have crop production that has been impacted by a natural disaster [See Briefing No. 14-Revised for an explanation of the operation and reporting requirements of this financial assistance program].

NAP for Harvested Roughage:

NAP coverage is available for grains planted for the purpose of harvesting as hay (and not insured to be harvested as grain).

NAP is also available for older stands of irrigated alfalfa and alfalfa-grass mixtures intended for forages.

NAP is available for irrigated and non-irrigated grass hay.

NAP is not available for older stands of non-irrigated alfalfa and alfalfa-grass mixtures.

New perennial forage seedings, either irrigated or non-irrigated, are not eligible for NAP coverage during the year of stand establishment.

Under NAP coverage, forage crops intended for harvest can be grazed. There are pull-off dates specified on which all grazing should cease in the...
spring on forage intended for mechanical harvest. Acreage grazed after the pull-off date will be eligible for NAP coverage. However, forage intended for mechanical harvest that is grazed after the pull-off date will be covered under the grazed forage provisions and loss will be determined on an animal unit day basis regardless if it is later mechanically harvested.

By crop NAP coverage is available at the basic unit level using the RMA definition of basic unit [See Briefing No. 6].

The fee structure for NAP coverage is $100 per crop in a county payable to FSA not to exceed $300 per producer.

In the case of loss due to a natural disaster, NAP covers the amount of loss in excess of 50 percent of the producer’s expected production, based on the producer’s approved yield and reported acres for the subject harvested roughage. The per unit of production payment rate is 55 percent of the average market price for the specific harvested roughage, as specified by the state FSA committee. The calculated NAP payment may be reduced by a payment factor reflecting the decrease in production costs if the loss caused the crop to be left unharvested.

Consider oats planted for hay on irrigated cropland in Roosevelt County where the production was reduced due to a shortage of irrigation water. Only 0.5 tons of oats per acre were harvested from a basic unit where the approved yield for NAP purposes was 2 tons per acre. For the 2003 crop year, the Montana FSA state committee has specified an oat hay average market price of nearly $70 per ton. The financial payment per acre for this loss would be calculated as: 

\[(1.5 \text{ ton/acre loss}) - (2 \text{ ton/acre} \times 0.5) = (0.5 \text{ ton/acre}) \times ($70/\text{ton} \times 0.55) = (0.5 \text{ ton/acre}) \times ($38.50/\text{ton}) = $19.25/\text{acre}.\]

NAP for Rangeland and other Grazing:

NAP coverage is available statewide for forage that is to be grazed including the 12 Montana counties where a group risk plan is being offered by RMA as a pilot insurance program (Figure 1)*. This is possible because this is group rather than individual crop insurance coverage.

For purposes of NAP coverage forage for grazing is categorized as grass and grass mixtures, perennials, and annually-planted forages. These three main categories are further stratified:

1. Grass and Grass Mixtures: 
   - tame, seeded less than 20 years ago; and 
   - native, never seeded or seeded over 20 years ago.

2. Perennials: includes legume and legume mixtures such as alfalfa, alfalfa mixtures, clover, etc.–other than grasses.

3. Annually-planted forages: includes but not limited to small grains.

Each pertinent type of forage for grazing in each county is assigned a normal carrying capacity. Normal carrying capacity is expressed in animal unit days per acre. An animal unit is specified to have a daily net energy for maintenance requirement of 13.6 Mcal. (This is equivalent to the daily net energy required of an 1,100 beef cow in her sixth month of pregnancy. Or alternatively, an animal that would require 16 pounds of TDN per day.)

Consider as an example Carter County FSA specified a 215 day grazing period, starting May 1 and ending December 1. Carrying capacities for pertinent forage types are specified (Table 1).

Again, the payment is $100 per crop not to exceed $300 per producer in a county. The fee structure for grazing is determined by three fee groupings–two of which are pertinent to Montana:

1. Alfalfa, alfalfa mix, and all other grasses and legumes;
2. Seeded small grain forages; and
3. Sorghum forages

* In these 12 counties producers may sign up for both insurance and NAP Coverage. But producers can only receive benefits from one of these USDA programs. But there would be no refunds of the NAP fees or insurance premiums.
Table 1: Carrying Capacity, expressed as Acres/Animal Unit, by Type of Forage for Carter County

<table>
<thead>
<tr>
<th>Forage Type</th>
<th>Acres/Animal Unit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Grass, non-irr. native</td>
<td>20.30</td>
</tr>
<tr>
<td>Grass, irr. native</td>
<td>n/a</td>
</tr>
<tr>
<td>Tame, non-irr.</td>
<td>10.50</td>
</tr>
<tr>
<td>Perennial, non-irr. forage</td>
<td>6.30</td>
</tr>
<tr>
<td>Perennial, irr. forage</td>
<td>2.45</td>
</tr>
<tr>
<td>Annual, non-irr. forage</td>
<td>5.25</td>
</tr>
<tr>
<td>Annual, irr. forage</td>
<td>3.50</td>
</tr>
</tbody>
</table>

For your county, contact the FSA office for carrying capacity information.

Alfalfa, alfalfa mixtures, grasses and legumes collectively carry a $100 fee.

For small grains planted for grazing the NAP fees depend upon the grains planted. Wheat, barley, oats, triticale, and rye each carry a $100 fee up to a maximum of $300 for the producer in the county.

Sorghum forage carries a $100 fee.

Consider an example ranch operation. The producer plants 200 acres of oats for grazing, wants to obtain NAP coverage on 640 acres of native grass, and has 160 acres in a mixture of clover and alfalfa that will be grazed. The producer would pay $200 to cover all of this grazing under NAP.

In the case of a loss in grazing carrying capacity due to a natural disaster, the county FSA committee will require an independent assessment of the average loss in grazing. Often this assessment will be conducted by a contract range scientist independent of the producer and the FSA committee.

As with all other crops covered under NAP, only losses in excess of 50 percent of the normal carrying capacity will be financially compensated at 55 percent of the established payment rate. For the 2003 grazing year, the nationally-established payment rate is $0.5772 per animal unit day.

Consider the NAP compensation for the example ranch operation where the producer suffered more than a 50 percent loss in normal carrying capacity on only the native grass. This Carter County operation has 640 acres of non-irrigated grass.

Calculations for compensation are as follows:

Normal Production:
\[
(640 \text{ acres} / 20.3 \text{ acres per animal unit}) \times 215 \text{ days} = 6,788 \text{ animal unit days}
\]

Assessed Production Loss:
\[
70\% \text{, or } (6,788 \text{ animal unit days} \times 0.50) = 1,356 \text{ animal unit days}
\]

Compensation:
\[
[(1,356 \text{ animal unit days}) \times ($0.5772 \text{ per animal unit days} \times 0.55)] = $430 /640 \text{ acres} = $0.673/\text{acre}
\]

2003 NAP Important Dates:

The usual application closing date for perennial forage crops for the 2003 crop year was December 1, 2002. The Montana FSA state committee has extended that closing date to March 17, 2003.

Producers interested in purchasing NAP coverage for grass, pastures, and mixed forage crops for which multiple peril crop insurance is not available in their county need to contact their FSA county office to complete the NAP coverage application and pay appropriate fees by March 17, 2003.
The programs of the MSU Extension Service are available to all people regardless of race, creed, sex, disability or national origin. Issued in furtherance of cooperative extension work in agriculture and home economics, acts of May 8 and June 30, 1914., in cooperative with the U.S. Department of Agriculture, Dr. LeRoy Luft, Interim Vice Provost and Director, Extension Service, Montana State University, Bozeman, MT 59717.