



# BRIEFING

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## Forage and Rangeland Production Risk Management in Montana: Noninsured Crop Disaster Assistance Program

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### Objective

### Analysis

### for Informed

### Decision Making

#### Introduction:

Montana farm and ranch managers are increasingly seeking production risk management tools for forage production and rangeland. Forage and rangeland production risks can be ameliorated to some degree by using multiple peril crop insurance products subsidized by the Federal Crop Insurance Corporation (FCIC) with oversight provided by USDA's Risk Management Agency (RMA). [See AMPC Briefing No. 80 for applicable RMA forage production insurance products]. In some cases, specific RMA products may not be available in all Montana counties. However, if RMA has an actuarial offering in at least one Montana county, producers may file a *Request for Actuarial Change* through their crop insurance agent. The *Request* may result in a *Written Agreement* that is, essentially, an individualized crop insurance product for a specific year. Currently, RMA GRP Rangeland Insurance is offered in some Montana counties as a pilot program [See AMPC Policy Paper 7, Revised]. Therefore, a *Request for Actuarial Change* based on that pilot program is not allowed.

Another opportunity for producers to manage forage and rangeland production risks is the Farm Service Agency's (FSA) Noninsured Crop Disaster Assistance Program (NAP). NAP coverage is generally only available to producers in counties where an RMA crop insurance

actuarial table for the subject crop does not exist.

NAP provides financial assistance to farm and ranch managers who have adversely affected 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 Forage Production:

NAP coverage is available for grains to be harvested as hay (and not insured to be harvested as grain). NAP is also available for irrigated and non-irrigated grass hay, and mixed forage hay.

Under NAP coverage, forage crops intended for harvest can be grazed. Grazing must cease on forage intended for mechanical harvest by specified pull-off dates. Acreage grazed after the pull-off date will not be eligible for NAP coverage as forage production. However, forage intended for mechanical harvest that is grazed after the pull-off date can be covered under NAP grazed forage provisions, and losses are determined on an animal unit day basis regardless if forage is mechanically harvested at a later date.

NAP coverage is available at the basic unit level using RMA's definition of basic unit. The fee structure for NAP coverage is \$100 per crop in a county 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. Expected production is product of a producer's approved yield and reported acreage. The per unit payment rate is 55 percent of the average market price for a specific forage as specified by the state FSA committee. NAP payments to producers may be reduced if a crop was damaged so severely that it could not be economically harvested. The reduction in payment would generally reflect the reduced costs of not harvesting the forage.

As an example, consider a producer who planted oats for hay on irrigated cropland in Roosevelt County. Suppose production was lower than expected because of a shortage of irrigation water. Only 0.5 tons of oats per acre were harvested from a basic unit where the approved irrigated yield for oat hay was 2.35 tons per acre. For the 2006 crop year, the Montana FSA state committee has specified a market price for grass hay, mixed forage hay, and grains harvested for hay as \$74.67 per ton. The resulting NAP payment to this producer for this production loss is calculated as:  

$$[(1.85 \text{ ton/acre loss}) - (2.35 \text{ tons/acre} \times 0.5)] = [(0.675 \text{ tons/acre}) \times (\$74.67/\text{ton} \times 0.55)] = [(0.675 \text{ tons/acre}) \times (\$41.07/\text{ton})] = \$27.72/\text{acre}.$$

Some producers may not have sufficient, verifiable production histories to develop approved yields for forage crops. The Montana FSA committee provides yields for hay crops pertinent to each county including those for grass hay, hay from mixed forages, and small grains harvested for hay. Table 1 presents the FSA recommended yields for grains harvested for hay in Roosevelt County. County FSA offices can provide Montana FSA recommended yields for all Montana counties.

**Table 1: FSA Recommended Yields for Small Grains Harvested for Hay, Roosevelt County, 2006**

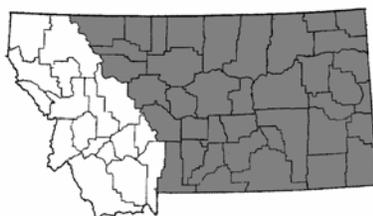
Crop	Non-irrigated (tons/acre)	Irrigated (tons/acre)
Barley	1.33	2.25
Millet	1.53	2.35
Oats	1.53	2.35
Rye	1.53	NA
Speltz	1.53	NA
Triticale	1.53	NA
Wheat	NA	NA

NA= Not applicable

**NAP for Rangeland and Other Grazing:**

NAP coverage is available for forage that is to be grazed in Montana counties for which RMA GRP Rangeland Insurance is not offered (Figure 1). Thus, NAP is only applicable to rangeland and other forages to be grazed in western Montana beginning with the 2006 production year.

**Figure 1: Montana Counties with RMA GRP Rangeland Insurance (shaded counties), 2006**



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 as:

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.
3. Annually-planted forages: includes, but is 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 defined as the quantity of forage necessary to provide 13.6 Mcal. This is equivalent to the daily net energy required of an 1,100 beef cow in her sixth month of pregnancy. Alternatively, this is also equivalent to the provision of 16 pounds of TDN per day.

Consider as an example Beaverhead County where FSA has specified a 199 day grazing period, starting May 1 and ending November 15. Carrying capacities for pertinent forage types are specified in Table 2.

**Table 2: Carrying Capacity, expressed as Acres/Animal Unit, by Type of Forage for Beaverhead County\***

Forage Type	Acres/Animal Unit**
Grass, non-irrigated native	19.50
Grass, irrigated native	3.90
Tame, non-irrigated	19.50
Perennial, non-irrigated forage	5.85
Perennial, irrigated forage	2.28
Annual, non-irrigated forage	4.88
Annual, irrigated forage	3.25

\*Contact county FSA offices for carrying capacity information.

\*\* Beaverhead County has 199 grazing days.

Alfalfa, alfalfa mixtures, grasses and legumes are collectively considered a single crop. NAP fees are, therefore, \$100 for the entire category. NAP fees for small grains planted for grazing purposes are contingent upon grain type. Wheat, barley, oats, triticale, and rye each require a \$100 fee up to a maximum of \$300 for a producer in any county. Sorghum forage requires a \$100 fee.

To illustrate the fee structure, consider a ranch operation in which a producer plants 200 acres of oats for grazing, has 640 acres of native grass, and 160 acres of a clover/alfalfa mixture. Each crop is planted or maintained for grazing purposes. If the producer wants to use NAP as a production risk management tool on these grazed crops, the producer would pay \$100 to insure the native grass and clover/alfalfa mixture, and another \$100 to insure the oat crop.

In the case of a loss in grazing carrying capacity due to a natural disaster, county FSA committees require an independent assessment of the grazing loss. Such assessments are often conducted by range scientists employed by other government agencies.

As with all crops covered under NAP, only losses in excess of 50 percent of the normal carrying capacity will be financially compensated using 55 percent of the established payment rate. For the 2006 grazing year, the nationally-established payment rate is \$0.5746 per animal unit day. The effective payment rates is 55 percent of the payment rate, or \$0.3160 per animal unit day.

Consider NAP compensation for a Beaverhead County ranch operation in which a producer experienced an assessed 70 percent loss in normal carrying capacity on 640 acres native, non-irrigated grass. NAP payments are calculated as follows:

Normal Production:  
(640 acres/19.50 acres per animal unit)  
x 199 days = 6,531 animal unit days

Assessed Production Loss:  
70 percent, or (6,531 animal unit days x 0.70) = 4,571 animal unit days

Compensated Production Loss:  
[4,571 animal unit days) - (6,531 animal unit days x 0.50)] = 1,305 animal unit days

NAP Compensation:  
[(1,305 animal unit days) x (\$0.5746 per animal unit days x 0.55)] = \$412 /640 acres = \$0.644/acre

### **NAP Eligibility for AUM/AU Grazing Leases:**

Montana has specific rules for applying NAP to AUM/AU grazing leases. AUM or AU leases are defined as those in which an operator only pays for actual grazing production each year. If grazing is reduced, a producer either pays a lower lease amount, receives a refund if the lease had been prepaid, or receives a credit that is applied to the following year.

An AUM/AU lease landowner will be at risk because of a potential loss of income if grazing production declines. In addition, landowners often pay for all or a portion of capital improvements such as water access and fencing.

An AUM/AU lessee will also incur some risk if they are responsible for range improvements such as water access and fencing. Lessees are also at risk if they have incurred maintenance costs on capital improvements.

NAP applications to AUM/AU grazing leases follow two specific policies, one for private leases and one for Federal AUM/AU grazing leases. For private leases in which both owners and lessees are determined to be at risk, NAP eligibility will be determined based on shares agreed to by both parties and as deemed reasonable by a county FSA committee. All parties determined to be at risk will need to purchase their own NAP grazing policies. For Federal AUM/AU grazing leases, the Montana State FSA committee has determined that both the operator and the landowner are at risk. Because such leases are fairly standard, risk shares are determined to be 60 percent for the operator and 40 percent for the owner (the Forest Service or the Bureau of Land Management). As Federal agencies, the Forest Service and the

Bureau of Land Management are ineligible for NAP payments. Operators will need to obtain NAP coverage treating Federal land as a separate NAP unit. NAP requires that AUMs or AUs be converted to acres.

### **Important NAP Dates**

The application closing date for perennial forage crops for the next crop year is usually December 1 of the prior year. Producers interested in purchasing NAP coverage for perennial grass, pastures, and mixed forage crops need to contact their FSA county office to complete the NAP coverage application and pay appropriate fees by December 1.

For most fall-seeded annuals to be used as a forage, the application closing date is September 30 of the year prior to the production year. For most spring-seeded annuals the application closing date is March 15 of the production year.

### **A Linkage Requirement:**

Producers who received Crop Disaster Program payments for crop years 2003 or 2004 (and did not have crop insurance or NAP coverage) are expected under the "linkage requirement" to acquire crop insurance or NAP for the next two crop years. For some producers, this requirement is relevant for the 2006 crop year.

### **Summary**

NAP remains an important risk management tool through which producers may manage production risks for forage production harvested for hay and forage production that is grazed. NAP is applicable to grass hay, mixed forage hay, and grains harvested as hay throughout Montana. NAP is applicable to rangeland and other grazing in Western Montana.



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