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B R I E F I N G

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AUMs Available from Emergency Grazing of CRP and Estimated AUM Costs

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Objective

Analysis

for Informed

Decision Making

Introduction:

We are headed into the Spring of 2002 in a continued drought. Many Montana counties have requested or will request through the Farm Service Agency (FSA) of the USDA approval for emergency grazing of CRP land. Final approval rests with the Secretary of Agriculture.

Usually the rules applicable to the grazing of CRP lands under emergency provisions require that contract holders leave 25 percent of each field or contiguous field for wildlife benefit or graze no more than 75 percent of the Natural Resources Conservation Service-prescribed stocking rate. Contract holders will likely be assessed a 25 percent reduction in their per acre CRP payment for those acres involved in the emergency grazing.

There is other information to consider. The average Animal Unit Month (AUM) private grazing fee was $14.10 in Montana in 2000, the latest grazing year for which USDA published data are currently available. (For those not familiar with an AUM, it is the measure of the forage requirement for a month for a lactating cow with a calf at its side). The average per acre CRP rental rate for Montana contracts is reported as $33.34.

So what is the cost per AUM when CRP is grazed? The estimated AUM stocking rate assigned by the Natural Resources Conservation Service (NRCS) for each grass species, adjusted for the program requirement of leaving 25 percent of the available forage for wildlife, will provide estimates of the effective AUMs per acre. The cost per acre of CRP released under the emergency grazing program will be 25 percent of the per acre CRP payment. The per AUM of CRP grazing cost is 0.25 of the CRP per acre payment divided by the effective AUMs per acre.

Grazing CRP Land under Normal Precipitation Conditions:

The Montana state office of NRCS issued Montana Bulletin No. MT 180-1-10 in May, 2001. Unpublished data on the AUMs per acre for re-seeded native grass species were provided by NRCS.** These stocking rates are by grass species under usual annual precipitation conditions, not *drought* conditions.

The NRCS information is used as the starting point for a market-based valuation of the grazing that can be realized from CRP lands under drought conditions. The stocking rates suggested for each grass species were adjusted to 75 percent of those values to reflect the program requirement to leave forage for wildlife. The effective AUMs per acre divided into 25 percent of the CRP per acre payment rate will provide estimates of the costs of an AUM of CRP grazing.

Even under usual precipitation conditions, especially in those areas with average annual precipitation of less than 14 inches, the costs of CRP grazing on an AUM basis is relatively high compared to recent state average AUM charges.

There are definite limitations to the value of grazing estimates provided in Table 1. Some of these limitations are:

(1) In recent years CRP contract holders planted grass mixtures that included several native grasses. Often re-seeded native species will be less productive than many introduced species. There are tabled values of bluebunch wheatgrass, green needlegrass, and thickpike wheatgrass.

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Table 1: Approximation of the Cost per AUM of CRP Grazing under Usual Moisture Conditions

(1) Grass Species	(2) Annual Precip., in inches	(3) AUMS per Acre	(4) 75% of AUMS per Acre	(5) Average CRP Rental Rate ($)	(6) 25% of Average CRP Rental Rate	(7) Cost of AUM of CRP Grazing
Crested Wheatgrass	10-14	0.70	0.5425	$33.34	$8.335	$15.36
	15-18	1.20	.9000			$9.26
Siberian Wheatgrass	10-14	0.75	0.5625	$33.34	$8.335	$14.82
	15-18	1.20	0.900			$9.26
Pubescent Wheatgrass	10-14	0.75	0.5625	$33.43	$8.335	$14.82
	15-18	1.25	0.9375			$8.89
	>18	1.50	1.1250			$7.41
Intermediate Wheatgrass	15-18	1.25	0.9375	$33.34	$8.335	$8.89
	>18	1.60	1.200			$6.95
Tall Wheatgrass	10-14	2.00	1.5000	$33.34	$8.335	$5.56
	15-18	2.50	1.8750			$4.45
Slender Wheatgrass	15-18	0.50	0.3750	$33.34	$8.335	$22.22
	>18	0.65	0.4875			$17.09
Smooth Bromegrass	15-18	1.30	0.9750	$33.34	$8.335	$8.55
	>18	2.00	1.5000			$5.56
Orchardgrass	15-18	1.20	0.9000	$33.34	$8.335	$9.26
	>18	1.50	1.1250			$7.41
Russian Wildrye	10-14	0.60	0.4500	$33.34	$8.335	$18.53
	15-18	1.00	0.7500			$11.11
Timothy	15-18	1.00	0.7500	$33.34	$8.335	$11.11
	>18	1.50	1.1250			$7.41
Western Wheatgrass	10-14	0.70	0.5425	$33.34	$8.335	$15.36
	15-18	0.90	0.6750			$12.35
	>18	1.00	0.7500			$11.11
Bluebunch Wheatgrass	10-14	0.65	0.4875	$33.34	$8.335	$17.09
	15-18	0.80	0.6000			$13.89
	>18	0.90	0.6750			$12.65
Green Needlegrass	10-14	0.75	0.5625	$33.34	$8.335	$14.82
	15-18	1.0	0.7500			$11.11
	>18	1.1	0.8250			$10.10
Thickspike Wheatgrass	10-14	0.65	0.4875	$33.44	$8.335	$17.04
	15-18	0.80	0.6000			$13.89
	>18	0.90	0.6750			$12.35

(2) The feed value of CRP land grazed in 2002 will depend on prior management. If the CRP cover was left in place in 2001

and prior years much of the standing forage available for grazing will be unpalatable. The nutritional value will be 50 to 65 percent of that of managed pasture or range.

(3) The $14.10 average charge per AUM for private treaty grazing is likely too high for grazing CRP. The private treaty AUM rate often compensates the landowner for services in addition to the roughage grazed including fencing and water for the livestock being grazed. Often CRP lands are not fenced for livestock nor is livestock water readily available. If livestock fencing and watering need to be provided on the CRP lands, the private AUM rate would overstate the value of grazing CRP.

(4) If the CRP contract holder is in an area where drought prevailed in the 2001 grazing season and continued through the winter of 2001-2002, then the effective AUMs per acre on CRP lands will likely be substantially below those expected under normal precipitation conditions, especially if the CRP was grazed under emergency conditions in 2001.

Decisions Relative to Grazing CRP Land Under Drought Conditions:

CRP contract holders should consider several factors when making the decision whether to graze CRP land under emergency provisions due to the continuing drought. The first factor that may receive consideration is which CRP lands should be grazed. Another factor is the actual cost per AUM of CRP grazing. And another is the cost of alternatives for providing feed for your livestock.

CRP lands were grazed in 2001 in many Montana counties. But in each of these counties many more acres of CRP land were neither grazed nor hayed. Under continuing drought conditions, the CRP lands not recently hayed or grazed may be those considered first for grazing in 2002.

In terms of process it will be useful to determine the predominant grass species in your CRP stands. Then referencing columns 3 of Table 1, you may want to adjust downward the **AUMs per Acre** tabled values to reflect the continuing drought conditions. These revised estimates are then multiplied by 0.75 to reflect that 25 percent of the forage is to be left for wildlife. Now the producer knows the adjusted carrying capacity of a CRP acre measured in AUMs or a portion of an AUM. Next the producer calculates what would be 25 percent of the scheduled CRP rental payment per acre. This 25 percent of the CRP rental rate (columns 6, Table 1) is divided by the adjusted AUM carrying capacity to determine the cost per AUM of grazing derived from CRP (In Table 1, there are reported in column 7).

Consider an example. A producer with a specific grass species on CRP expects that the drought- impacted CRP land will yield about 0.67 AUMs per acre. When the allowance is made for wildlife (0.67 x 0.75), only 0.50 of an AUM per acre is available for grazing. The CRP rental rate is $40 per acre, so the contract holder would forego $10 per acre ($40 x 0.25) if the CRP was grazed. The CRP grazing would cost $20 per AUM ($10 per acre/0.50 AUM per acre).

Then the livestock producer has some basis for comparison. The remaining issue, based on the producer's decision to keep the livestock inventory, is what other alternatives are there to obtain forage for the livestock. Do any of these alternatives come at a cost less than $20 per AUM?