FORAGE PRODUCTION CROP INSURANCE PROGRAM

Bill Murphy

Farmers traditionally have faced a multitude of risks in production and marketing their crops. Risk can be broadly categorized into 5 primary areas: Yield, Price, Financial, legal liability and Human Resources. Of these areas, the Federal Government has traditionally provided support in the areas of yield, price and financial risks. However, recent legislation has significantly altered the way the Government responds to agriculture sector disasters.

The 1994 Crop Insurance Reform Act replaced the standing ad hoc disaster program with an expanded crop insurance program. Prior to the Act, Congress could enact ad hoc disaster on a majority vote. The funding was made available through emergency spending criteria, with out the need for off set savings. In other words, this was direct deficit spending. In addition, once a state or region was approved for the program, Congress became pressured to expand the boundaries beyond the original designated area. Often a disaster in one part of the country would ultimately provide disaster funding for most of the nation. The cost associated with this program grew dramatically up to 1994. Although ad hoc disaster programs are still possible, there is a requirement for an off set against another budgetary item. With the continued pressure for a balanced budget, the ability to draw funds from other programs will become more difficult in future years. In most cases, this leaves crop insurance as the only risk management tool for production losses available to forage producers.

The 1994 Act also established the Non-insured Assistance Program (NAP) to cover crops which are not insured by a crop insurance program. This is a standing program and does not require legislation to enact. However, the crop must suffer an area wide loss of greater than 35% of the normal yield. Once this program trigger is met, the individual producer is protected up to 50% of their normal yield, with a payment rate of 60% of the anticipated price for the crop. This program is administered by the Farm Service Agency. Due to the difficulty of triggering the program, many producers of crops not currently insured under the crop insurance program are requesting program development. If fact, new program development is the greatest pressure the agency is currently under.

The Federal Agricultural Improvement and Reform Act of 1996 further impacted the Federal “safety net” by eliminating deficiency payments and lowering funding for other price support programs. The deficiency payments were replaced with transition payments but they are limited to a 7 year period which began in 1996. Although forage was not a program crop, the freedom of producers to determine what crops and how much to plant may ultimately impact these ranchers through increased production and new competition.

The combined effect of these two pieces of legislation is that ranchers today are farming in a new risk environment. The newly expanded crop insurance program is perhaps the remaining pillar of the previous network of federal programs designed to mitigate price, yield and financial risks. Since forage production is insurable in most California counties, it is critical that growers understand the crop insurance program and make a knowledgeable decision as to participation.
INSURED CROP
Forage which is intended for harvest as livestock feed and that is grown after the year of establishment. Adequate stand/minimum required living plants per square foot after the year of establishment:

Type Irrigated Alfalfa - Adequate stand (alfalfa plants per square foot) - for the Sacramento, San Joaquin and Imperial Valleys; 14.0 the first year, 9.3 the second year, 7.0 the third year.

- Adequate stand (Alfalfa plants per square foot) - for the Intermountain region; 8.0 the first year; 5.3 the second year; 4.0 the third through sixth year.

Any acreage of alfalfa will not be insurable the fourth and succeeding crops year after the year of establishment for the Sacramento, San Joaquin and Imperial Valleys.
(If the year of establishment is 1997 for a field of alfalfa, then the alfalfa is insurability for the 1998, 1999, and 2000 crop year.)
Any acreage of alfalfa will not be insurable the seventh and succeeding crops year after the year of establishment for the Intermountain region of California.

FALL ALFALFA AND SPRING ALFALFA
Irrigated Fall Alfalfa: A pure stand of alfalfa or a stand or a stand of alfalfa and grass in which 60 percent or more of ground cover is alfalfa for acreage insured under the Winter Coverage Endorsement.

Irrigated Spring Alfalfa: A pure stand of alfalfa or a stand or a stand of alfalfa and grass in which 60 percent or more of ground cover is alfalfa. Irrigated Spring Alfalfa is NOT insured under the Winter Coverage Endorsement.

Note: fall and spring alfalfa types do not refer to spring seeding or fall seeding. Fall and spring alfalfa types refer to whether the winter coverage endorsement applies and if the insured has continuous year-round coverage.

INSURABLE ACREAGE
a) The insured crop will be alfalfa or alfalfa grass mixture planted for harvest as livestock feed.
b) Grown the year after establishment and has an adequate stand at the beginning of the insurance period.
c) Grown in the county for which a premium rate is provided by the actuarial table in which you have a share.
d) Not grown with a non-forage crop.
e) Does not exceed the age limitations for forage stands contained in the Special Provisions.
**INSURANCE PERIOD - Basic Policy (Irrigated spring alfalfa type)**

Insurance attaches on acreage with an adequate stand:
For the first and subsequent calendar years following the year of establishment for California on February 1 and ends December 31.
- The year of establishment for spring planted is designated by the calendar year in which seeding occurred.
- The year of establishment for fall planted is designated by the calendar year after the year in which the crop was planted.

Example #1: If the crop is planted in the fall of 1996, the year of establishment is 1997, and the first year of insurability is 1998.
Example #2: If the crop is planted in the spring of 1997, the year of establishment is 1997, and the first year of insurability is 1998.

Irrigation spring type can be insured under the CAT Endorsement

**INSURANCE PERIOD - Forage Production Winter Coverage Endorsement (Irrigated fall alfalfa type)**

Insurance attaches on acreage with an adequate stand:
For the first and subsequent calendar years following the year of establishment for California on January 1 and ends December 31.

**WINTER COVERAGE ENDORSEMENT (continuous year-round coverage)**
- The new Forage Production Policy Provisions has an optional Winter Coverage Endorsement and Requires a signed contract change by September 30, 1997
- Irrigated Fall Alfalfa Type refers to the Winter Coverage Endorsement

Winter Coverage Endorsement is NOT available under the CAT Coverage

**CAUSES OF LOSS**

a) Adverse weather conditions;
b) Fire;
c) Insects, but not damage due to insufficient or improper application of pest control measures;
d) Plant diseases, but not damage due to insufficient or improper application of disease control measures;
e) Wildlife;
f) Earthquake;
g) Volcanic eruption; or
h) Failure of the irrigation water supply, if caused by an insured peril that occurs during the insurance period.
**PRODUCTION GUARANTEE**
The production guarantee is based on the producers actual production history (APH) with a database of ten years. A minimum of a 4 year database is used. If less than four years of actual records are provided a percentage of the county average will be used. Producers should provide as many years as possible to develop the APH yield. The APH yield is then multiplied by the selected level election to arrive at the guarantee per acre.

**ESTABLISHED PRICE ELECTIONS PER TON**

<table>
<thead>
<tr>
<th>Forage Production - California</th>
<th>CAT PRICE</th>
<th>PRICE ELECTION</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>$61</td>
<td>$101</td>
</tr>
</tbody>
</table>

**COVERAGE LEVELS**
CAT Level - 50% of the Producer's Average yield @ 60% of the Established Price Election.

a) 100 % premium subsidy - $50 administration fee.
b) No winter coverage available.

**ADDITIONAL LEVELS OF COVERAGE**
- 50% of the Producer’s Average Yield (At 100% of the Price Election)
- 55% of the Producer’s Average Yield
- 60% of the Producer’s Average Yield
- 65% of the Producer’s Average Yield
- 70% of the Producer’s Average Yield
- 75% of the Producer’s Average Yield

**UNIT OF MEASUREMENT**
The unit of measurement is in tons (rounded to tenths)

**PRODUCTION TO COUNT**
Production to count at the time of loss will include: harvested production and appraised production. When forage is harvested as other than air-dry hay, the production to be counted will be adjusted to the equivalent of air-dry hay.
COUNTIES WITH FORAGE PRODUCTION INSURANCE:

Colusa  Kings  Kern
Mono    Lassen  Modoc
Siskiyou Riverside  Shasta
Tulare  Solona  Tehama
Yolo

1998 FORAGE PRODUCTION PREMIUM & LOSS CALCULATIONS EXAMPLES

Average Production History (APH) Yield of 6.0 tons/acre used in calculating premiums and losses for the following examples. A base period of 4 to 10 will be used when calculating the average yield per acre. Rates differ by county, the following examples were based on Solano County rate. The following are intended as examples only.

75 % LEVEL of COVERAGE

<table>
<thead>
<tr>
<th>Premium</th>
</tr>
</thead>
<tbody>
<tr>
<td>Average yield/Acre</td>
</tr>
<tr>
<td>75 % Level</td>
</tr>
<tr>
<td>Guarantee/Acre</td>
</tr>
<tr>
<td>Price Election/Ton</td>
</tr>
<tr>
<td>Coverage/Acre</td>
</tr>
<tr>
<td>Base Premium Rate</td>
</tr>
<tr>
<td>Base Premium/Acre</td>
</tr>
<tr>
<td>Producer Premium Percentage</td>
</tr>
<tr>
<td>Producer Paid Premium/Acre</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Loss</th>
</tr>
</thead>
<tbody>
<tr>
<td>Guarantee/Acre</td>
</tr>
<tr>
<td>Production to Count</td>
</tr>
<tr>
<td>Production Lost</td>
</tr>
<tr>
<td>Price Election/Ton</td>
</tr>
<tr>
<td>Indemnity/Acre</td>
</tr>
</tbody>
</table>
### 65% LEVEL OF COVERAGE

<table>
<thead>
<tr>
<th>Premium</th>
<th>Average Yield/Acre</th>
<th>6.0 Tons</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>65 % Level</td>
<td>x 65</td>
</tr>
<tr>
<td></td>
<td>Guarantee/Acre</td>
<td>= 3.9 Tons</td>
</tr>
<tr>
<td></td>
<td>Price Election/Ton</td>
<td>x $99.00</td>
</tr>
<tr>
<td></td>
<td>Coverage/Acre</td>
<td>$ 386.10</td>
</tr>
<tr>
<td></td>
<td>Base Premium Rate</td>
<td>x 0.39</td>
</tr>
<tr>
<td></td>
<td>Base Premium/Acre</td>
<td>$ 15.06</td>
</tr>
<tr>
<td></td>
<td>Producer Premium Percentage</td>
<td>x 583</td>
</tr>
<tr>
<td></td>
<td>Producer Paid Premium/Acre</td>
<td>$ 8.78</td>
</tr>
</tbody>
</table>

| Guarantee/Acre  | 3.9 Tons |
| Production to Count | 3.0 Tons |
| Production Lost   | .9 Tons  |
| Price Election/Ton| x $99.00 |
| Indemnity/Acre    | = $89.10 |

### 55% LEVEL of COVERAGE

<table>
<thead>
<tr>
<th>Premium</th>
<th>Average Yield/Acre</th>
<th>6 Tons</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>55% Level</td>
<td>x .55</td>
</tr>
<tr>
<td></td>
<td>Guarantee/Acre</td>
<td>3.3 Tons</td>
</tr>
<tr>
<td></td>
<td>Price Election/Ton</td>
<td>x $99.00</td>
</tr>
<tr>
<td></td>
<td>Coverage/Acre</td>
<td>$ 326.70</td>
</tr>
<tr>
<td></td>
<td>Base Premium Rate</td>
<td>x .031</td>
</tr>
<tr>
<td></td>
<td>Base Premium/Acre</td>
<td>$ 10.13</td>
</tr>
<tr>
<td></td>
<td>Producer Premium Percentage</td>
<td>x .497</td>
</tr>
<tr>
<td></td>
<td>Producer Paid Premium/Acre</td>
<td>$ 5.03</td>
</tr>
</tbody>
</table>

| Guarantee/Acre  | 3.3 Tons |
| Production to Count | 3.0 Tons |
| Production Lost   | .3 Tons  |
| Price Election/Ton| x $99.00 |
| Indemnity/Acre    | $29.70  |
CATASTROPHIC COVERAGE

Catastrophic coverage of 50% of the average yield and 60% of the high price election may be obtained for an administrative fee of $50.00 per crop not to exceed $200.00 for the county or $600.00 if you farm in multiple counties.

(EXAMPLE)
6.0 Tons x 50% = 3.0 tons. Coverage / Acre
\[
\begin{array}{c|c|c|c}
\text{Price Election} & \text{CAT Price} & \text{Guarantee/Acre} & \text{Coverage/Acre} \\
\hline
$99.00 / ton & 60\% & $59.40 & 3.0 \text{ tons} & $178.20 \\
\end{array}
\]

California Grower Concerns with the current program:

a) No adjustment for quality, production based program only
   - No national or state standards available for program development
b) Multiple cuttings in the intermountain region reduce chances for overall production loss. Current program is based on yearly average production.
c) Short term improvements are unlikely. Research over the last few years to address producer concerns have yielded little improvement.

Other Programs Available:
There are two programs available in other parts of the country which could be implemented in the State with grower interest.

a) Group Risk Plan - GRP
b) Forage Seeding Policy
1998 GROUP RISK PLAN OF FORAGE PRODUCTION OUTLINE

Group Risk Plan (GRP) is a plan of insurance which compares an expected county average yield to the performance of the county yield for the insured year. GRP provides protection against loss of crop production which affects a large number of farmers.

COVERAGE LEVELS

Farmers may choose one of six coverage levels. These levels are: 65%, 70%, 75%, 80%, 85% or 90% of the expected county yield.

EXPECTED COUNTY YIELD

Expected county yield is the yield on which GRP is based. This yield is based on 30 year or more of annual National Agricultural Statistics Service (NASS) county yields, adjusted for trends. In most cases, the expected yield is higher than the simple average because FCIC's adjustment recognizes the contribution to yield from inputs like new technology, improved farming practices, better seed varieties and other factors.

PRODUCTIONGUARANTEE

GRP coverage is a dollar amount of protection per acre chosen by the insured. Insureds can choose any amount of protection per acre between 30 and 100 percent of the maximum protection per acre listed on the actuarial table.

Maximum protection per acre is 50 percent greater than the expected county average revenue (expected county yield multiplied by the tradition MPCI established price).

EXAMPLE: If the traditional MPCI expected price for forage is $99 and the expected yield is 8.0 tons, the expected county average revenue is $792. The maximum amount of protection would be $1,188 (150% of $792 and the minimum is $356 (30% of $1,188).

INDEMNITY CALCULATIONS

Indemnities are paid when the final county payment yield for the insured year is below the insured's trigger yield.

Definitions:

a) Trigger Yield is the expected county yield multiplies by the coverage level chosen by the insured.

b) Payment Yield is the NASS yield for the insured year. Payment yield is released by FCIC several months after harvest.

c) Payment Factor is the measurement of GRP loss which is used to determine the amount of indemnity: Final payment factor is the result of the following formula:

\[
\frac{(\text{Trigger Yield} - \text{Final Payment Yield})}{\text{Trigger Yield}}
\]
### GRP Example:

<table>
<thead>
<tr>
<th>Description</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Expected County Yield</td>
<td>8.0 tons</td>
</tr>
<tr>
<td>Coverage Level chosen</td>
<td>90%</td>
</tr>
<tr>
<td>Dollar protection per acre chosen</td>
<td>$1,188</td>
</tr>
<tr>
<td>Trigger Yield (8.0 tons expected yield * 90% coverage level):</td>
<td>7.2 tons</td>
</tr>
<tr>
<td>Insured year payment yield</td>
<td>6.0 tons</td>
</tr>
<tr>
<td>Payment factor (7.2 trigger yield - 6.0 county yield) / 7.2 trigger yield</td>
<td>.167</td>
</tr>
<tr>
<td>GRP payment/acre</td>
<td>$198.40</td>
</tr>
</tbody>
</table>

### PAPERWORK REQUIRED FOR GRP

Only annual report is the acreage report which is submitted by the acreage reporting date.

### ADVANTAGES OF THE GRP PLANS OF INSURANCE:

a) Reduced Premium Costs  
b) Reduced paperwork  
   1) No production yield report  
   2) reduced loss adjustment expenses- No production to count required for loss payment  
c) GRP payments can be made when individual farm has no loss  
   - GRP payments result when there are adverse growing conditions over a large area  
     which causes the county yield to fall below the insured’s trigger yield. Even if a farm  
     escapes the conditions causing GRP indemnities and produces a normal crop, the insured  
     will be paid an indemnity based on the production level of the entire county.

### DISADVANTAGES OF THE GRP PLANS OF INSURANCE:

a) There can be an individual farm loss and no GRP payment  
   - Farms which are subject to spot losses from certain and frequent perils such as flood may get  
     better coverage from traditional MPCI  
b) Lenders may not accept GRP as loan collateral since the indemnity payments are determined  
   on the county level of production not the individual level of insurance.
FORAGE SEEDING

INSURED CROP
Forage seeding is a dollar amount of insurance plan. Provides a dollar amount of insurance per acre for the insured from the time the acreage is seeded to alfalfa until a normal stand of forage, intended for harvest as livestock feed, is established with an adequate stand.

INSURANCE PERIOD:
Attaches at the time it is planted.
Ceases:
   a) total destruction of the crop, (if it is not practical to replant the crop)
   b) initial harvest of the crop
   c) May 21 of the calendar year following seeding for spring-planted forage; or
      October 15 of the calendar year following seeding for fall-planted forage.

INSURABLE ACREAGE
Alfalfa or forage mixture containing 50 percent alfalfa, clover or other locally recognized and approved forage species by weight.
Any acreage of the insured crop damaged before the final planting date, to the extent that such acreage has less than a normal stand, must be replanted unless we agree it is not practical to replant.

AMOUNTS OF INSURANCE
Risk Management Agency (RMA) establishes a referenced dollar amount of insurance. Insured chooses 50%, 55%, 60%, 65%, 70% and 75% of the referenced dollar amount of insurance to determined the amount of insurance coverage/acre.

For Example: In Nevada the referenced dollar amount of insurance is $177/acre. Insured can choose $54/acre (CAT Level 30% of $177) $89/acre for 50% coverage (50% of $177) up to $132/acre if he chooses 75% coverage (75% of $177).

REPLANTING PAYMENT
If the insured plants in the fall, and damage occurs over the winter time, the policy will pay the insured a replanting payment to the insured to replant his crop in the spring to get the alfalfa stand established.
Replanting payment is 50% of the unit's indemnity payment.