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# CC336 1987 Production Adjustment Program (Worksheets for Feed Grains and Wheat Producers)

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1987 PRODUCTION ADJUSTMENT PROGRAM
(Worksheets for Feed Grains and Wheat Producers)

by

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This publication provides a brief summary of program provisions of the 1987 production adjustment program worksheets for producers to use in making participation decisions. The worksheets make possible a comparison of the expected return over variable costs among the participation alternatives (five alternatives are listed below).

Because participation decisions are short run or annual planning decisions, return over variable costs is used to compare the alternatives. A producer will typically select the alternative which is expected to produce the highest return over variable costs. This return above variable costs would hopefully cover fixed costs, such as land taxes and interest, machinery depreciation and interest, and family living and/or fixed labor costs. Fixed costs are not included in the worksheets because they are constant, regardless of the participation decision.

The worksheets include an example for an irrigated corn farm in central Nebraska. Three blank forms are included for producers to use in making calculations on their own farm.

The worksheets make it possible to calculate returns over variable costs for five alternatives:

(1) Non-participation                                                    Worksheet 1

(2) Participation in basic program.                                      Worksheet 2
    (Maximum permitted acreage is 80% of feed
    grain base or 72.5% of wheat base.)

(3) Participation in basic program plus optional
    paid land diversion for feed grains.                                 Worksheet 2
    (Maxiumum permitted acreage is 65% of
    feed grain base.)

(4) Participation under the 50-92 provision.                            Worksheet 3
    (Planted acreage would be in a range of
    50 to 92 percent of maximum permitted
    acreage, with deficiency payments collected
    on 92% of the maximum permitted acreage.)

(5) Participation under the 50-92 provision plus
    optional paid land diversion for feed grains.                        Worksheet 3
    (Planted acreage would be in a range of 50 to
    92 percent of maximum permitted acreage, which
    would be 65% of the feed grain base.)

Producers may need more than one set of blank worksheets to assess all their alternatives.  Also, if a producer has more than one program crop or more than one farm (as defined by ASCS number), multiple sets of worksheets will be needed.  One word of caution:  If you have more than one program crop or farm, you must add payments from multiple crops or farms together to determine if you will be subject to a payment limitation.

## Provisions for 1987 Feed Grain and Wheat Acreage Reduction Programs

The basic provisions for 1987 feed grain and wheat programs are as follows:

|  | | Corn | Sorghum | Barley | Oats | Wheat |
|---|---|---|---|---|---|---|
| 1. | Basic loan rate (natl ave., $/bu) | 2.28 | 2.18 | 1.86 | 1.18 | 2.85 |
| 2. | Adjusted loan rate (natl ave., $/bu) | 1.82 | 1.74 | 1.49 | .94 | 2.28 |
| 3. | Target price ($/bu) | 3.03 | 2.88 | 2.60 | 1.60 | 4.38 |
| 4. | Maximum deficiency payment ($/bu) | 1.21 | 1.14 | 1.11 | .66 | 2.10 |
| 5. | Projected deficiency payment ($/bu) | 1.21 | 1.14 | 1.11 | .55 | 2.10 |
| 6. | Deficiency payment subject to $50,000 limit ($/bu) | .75 | .71 | .74 | .43 | 1.53 |
| 7. | Deficiency payment subject to $200,000 limit ($/bu) | .46 | .43 | .37 | .23 | .57 |
| 8. | Maximum permitted acreage (MPA) as a % of crop acreage base (CAB) | 80 | 80 | 80 | 80 | 72.5 |
| 9. | Minimum acreage reduction requirement (ARP), (% of CAB) | 20 | 20 | 20 | 20 | 27.5 |
| 10. | Optional paid land diversion (PLD) (% of CAB) | 15 | 15 | 15 | 15 | |
| 11. | Acreage conservation reserve (ACR) factor without PLD (% of planted acres) | 25 | 25 | 25 | 25 | 37.93 |
| 12. | ACR with PLD (% of planted acres) | 30.77 | 30.77 | 30.77 | 30.77 | - |
| 13. | Paid diversion rate ($/bu) | 2.00 | 1.90 | 1.60 | .80 | - |
| 14. | Crop acreage base | - - - - -1982-86 Average- - - - - | | | | |
| 15. | Program (ASCS effective) yield | - - - - -1981-85 Average- - - - - (after throwing out years with highest and lowest yields) | | | | |
| 16. | Haying/grazing on acreage conservation reserve (ACR) | -Grazing only from 10/1 to 4/30 - | | | | |
| 17. | 50/92 provision | - - - - - - - -yes - - - - - - - - | | | | |
| 18. | Haying/grazing on conserving use (CU) acres | - - Haying or grazing anytime - - | | | | |
| 19. | Cross-compliance | - - Must stay within base for - - - - - - other program crops - - - | | | | |
| 20. | Offsetting compliance | - - - - - - - - -no - - - - - - - - | | | | |
| 21. | Grain reserve | - Entry allowed only if stocks are less than 7% of projected 1987-88 usage of feedgrains or 17% of projected 1987-88 usage of wheat. | | | | |
| 22. | Advance payments | - 40 percent of projected deficiency payments; 50% of estimated diversion payments. | | | | |
| 23. | Subsequent payments | - Remaining diversion payment is likely to be made in the summer of 1987 after crop acreage has been certified. Remaining deficiency payments are likely to be made as follows: | | | | |

|  | 2nd payment | final payment |
|---|---|---|
| Corn | March, 1988 | October, 1988 |
| Sorghum | " | " |
| Barley | December, 1987 | July, 1988 |
| Oats | " | " |
| Wheat | " | " |

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24. Payment limitations - $50,000 per person for diversion and that portion of the deficiency payment that represents the difference between the target price and the basic loan rate. The remaining deficiency payment is subject to a $200,000 per person limitation.

25. Generic certificates- One-half of advance payments to be made in generic certificates; subsequent payments also may be partially or wholly in generic certificates.

26. Program sign-up - Through March 30, 1987

## Worksheet Limitations

The worksheets that follow have two limitations worth mentioning.

First, that portion of deficiency and diversion payments made in generic certificates (certs) may have - in fact, is likely to have - a value that exceeds its face value. While this premium would not be subject to the payment limitation, it would increase the overall return from program participation. To estimate the value of the market premium on certs, first estimate the percentage of total deficiency and diversion payments that will be made in certificates. Then, multiply this percentage by the total estimated value of deficiency and diversion payments (cash payments plus face value of certificates). Finally, multiply the subsequent result by the expected certificate premium and add to the total return for program participation. Suppose, for example, the following situation existed with respect to estimated program payments:

|  | Amount | % in certs | Cert payment |
|---|---|---|---|
| Deficiency payment subject to $50,000 payment limit | $20,000 | 40* | 8,000 |
| Deficiency payment subject to $200,000 payment limit | 10,000 | 50* | 5,000 |
| Diversion payment | 5,000 | 50* | 2,500 |
| TOTAL | | | 15,500 |

* Example only -- actual percentages may vary.

If the cert premium turned out to be 10%, this would increase the overall benefit from program participation by $1,550 ($15,500 x 10%).

Comparisons using the worksheets do not consider the time value of money. Advance deficiency and diversion payments provide cash flow earlier than would be the case if a producer did not participate in the acreage reduction program. On the other hand, the last portion of a deficiency payment is not made until long after a crop is harvested. Thus, waiting for this last portion of the cash flow from a crop may offset the advantage of advance payments. Producers should also remember that maximum second and final deficiency payments are subject to the national average cash price for the commodity remaining below the basic loan rate and adjusted loan rate, respectively.

Information presented here is based on program provisions as of February 27, 1987.

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## OPTION 1: DO NOT PARTICIPATE IN PROGRAM

Program Crop    _Corn_

### Information Needed

a. _600_ ac Acres you intend to plant    c. $ _1.50_ /bu Expected market price
b. _130_ bu/ac Expected yield    d. $ _150_ /ac Expected cash costs

### Expected Returns

$$\underset{(a)}{\underline{600}}\text{ ac} \times \underset{(b)}{\underline{130}}\text{ bu/ac} = \underset{(e)}{\underline{78,000}}\text{ bu}$$

$$\underset{(e)}{\underline{78,000}}\text{ bu} \times \$\underset{(c)}{\underline{1.50}}\text{/bu} = \underset{(f)}{\$ \underline{117,000}}$$

### Expected Cash Costs

$$\underset{(a)}{\underline{600}}\text{ ac} \times \$\underset{(d)}{\underline{150}}\text{/ac} = \underset{(g)}{\$ \underline{90,000}}$$

### Expected Return over Cash Costs
### for Option 1 (f-g)    $ _27,000_

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## SUMMARY: EXPECTED RETURNS OVER CASH COSTS

| | | |
|---|---|---|
| OPTION 1: | NON PARTICIPATION | $ _27,000_ |
| OPTION 2: | PARTICIPATION (BASIC) | $ _93,528_ |
| OPTION 3: | PARTICIPATION (BASIC) | |
| | PLUS PAID LAND DIVERSION | $ _92,241_ |
| OPTION 4: | PARTICIPATION (50/92 RULE) | $ _80,774_ |
| OPTION 5: | PARTICIPATION (50/92 RULE) | |
| | PLUS PAID LAND DIVERSION | $ _83,726_ |

OPTION 2: __X__  Participate in basic program
OPTION 3: _____  Participate in basic program
                 plus paid land diversion

## CROP OR USE SELECTIONS (FILL IN BLANKS)

Program crop _____ Corn

Alternative crop (applicable
only if you reach $50,000
payment limit) _____ Soybeans

Acreage conservation
reserve (ACR) _____ (No Crop)

## Information Needed

a. __600__ ac. Crop acreage base (CAB)

b. __80__ % Maximum permitted acreage
(MPA) of program crop, basic
program, (% of CAB)

c. _____ % Optional paid land diversion
(PLD) (feed grains only) (% of
CAB)

d. _____ % MPA with PLD (% of CAB)

e. __480__ ac. Acres of program crop

f. __25__ % ACR factor

g. __130__ bu/ac Expected yield,
program crop

h. __120__ /bu ASCS effective yield,
program crop

i. $__1.50__ /bu Expected market price,
program crop

j. $__1.78__ /ac County loan rate,
program crop

k. $__150__ /ac Expected cash costs,
program crop

l. $__.75__ /bu Anticipated deficiency
payment subject to $50,000
payment limitation.

m. $__.46__ /bu Anticipated deficiency
payment subject to
$200,000 payment
limitation.

n. $__2.00__ /bu Optional diversion
payment rate

o. $__0__ /ac Expected value of
production on ACR

p. $__10__ /ac Expected cash costs
on ACR

q. __45__ units/ac Expected yield,
alternative crop

r. $__4.50__ /unit Expected market
price, alternative crop

s. $__75__ /ac Expected cash costs,
alternative crop

t. $__.025__ /bu/mo Storage cost,
program crop

## Expected Returns

From Production

$$\underset{\text{(e)}}{480} \text{ ac X } \underset{\text{(g)}}{130} \text{ bu/ac} = \underset{\text{(u)}}{62,400} \text{ bu}$$

Cash Sale or Loan

$$\underset{\text{(u)}}{\phantom{000}} \text{ bu X } \$\underset{\text{(i)}}{\phantom{000}} \text{/bu} =$$

$$\underset{\text{(u)}}{62,400} \text{ bu X } \$\underset{\text{(j)}}{1.78} \text{/bu} = \underset{\text{(v)}}{\$111,072}$$

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From deficiency payment (This portion of deficiency payment (w) plus optional paid land diversion (z) is subject to a $50,000 payment limitation. See adjustment section that follows.)

$\underline{480}$ ac X $\underline{120}$ bu/ac X $ $\underline{.75}$ /bu = $\underline{\$43,200}$
  (e)              (h)                    (l)                    (w)

From deficiency payment (subject to $200,000 payment limitation)

$\underline{480}$ ac X $\underline{120}$ bu/ac X $ $\underline{.46}$ /bu = $\underline{\$26,496}$
  (e)              (h)                    (m)                    (x)

From optional paid land diversion

$\underline{0}$ % X $\underline{\phantom{xx}}$ ac X $\underline{\phantom{xx}}$ bu/ac = $\underline{\phantom{xx}}$ bu
  (c)            (a)                (h)                  (y)

$\underline{\phantom{xx}}$ bu X $ $\underline{\phantom{xx}}$ /bu = $\underline{\phantom{xxx}\$\phantom{xx}0}$
  (y)                (n)                                 (z)

From ACR

( $\underline{480}$ ac x $\underline{25}$ %) + ( $\underline{600}$ ac x $\underline{0}$ %) = $\underline{120}$ ac
   (e)            (f)              (a)            (c)              (aa)

$\underline{120}$ ac x $ $\underline{0}$ /ac = $\underline{\phantom{xx}. \phantom{x}0}$
  (aa)            (o)                        (bb)

TOTAL  RETURNS  BEFORE ADJUSTMENT (v + w + x + z + bb)    $\underline{\$180,768}$
                                                                    (cc)

## Adjustment for Payment Limitation

1. $ $\underline{43,200}$ + $ $\underline{0}$ = $ $\underline{43,200}$
      (w)            (z)            (dd)

2. Does (dd) exceed $50,000?    _____ yes $\underline{\phantom{x}X\phantom{x}}$ no

3. If no, proceed to next section (expected cash costs)

4. If yes, subtract $50,000 from $\underline{\phantom{xxxx}}$ = $\underline{\phantom{xxxx}}$
                                    (dd)            (ee)

5. ACR adjustment factor: $\underline{\phantom{xxxx}}$   ($\underline{\phantom{xx}}$ + $\underline{\phantom{xx}}$) = $\underline{\phantom{xxxx}}$
                             (ee)         (dd)      (x)         (ff)

6. Reduction in ACR (Acres recovered for alternative crop):   $\underline{\phantom{xx}}$ ac x $\underline{\phantom{xx}}$ = $\underline{\phantom{xx}}$ ac
                                                                 (aa)           (ff)          (gg)

7. Required ACR after adjustment:   $\underline{\phantom{xx}}$ ac - $\underline{\phantom{xx}}$ ac = $\underline{\phantom{xx}}$ ac
                                       (aa)            (gg)          (hh)

8. Return on adjusted ACR:   $\underline{\phantom{xx}}$ ac x $\underline{\phantom{xx}}$ /ac = $\underline{\phantom{xx}}$ $
                               (hh)           (o)           (ii)

9. Alternative crop income
      $\underline{\phantom{xx}}$ ac x $\underline{\phantom{xx}}$ units/ac x $ $\underline{\phantom{xx}}$ /unit = $\underline{\phantom{xx}}$ $
        (gg)          (q)                    (r)              (jj)

TOTAL ADJUSTED RETURNS  (v + w + x + z - ee + ii + jj) = $\underline{\phantom{xxxx}}$
                                                            (kk)

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For production

$$\underline{480}\text{ ac} \times \$ \underline{150}\text{ /ac} = \qquad \$\underline{72,000}$$
(e)        (k)           (ll)

For acres in ACR

$$\underline{120}\text{ ac} \times \$ \underline{10}\text{ /ac} = \qquad \$\underline{1,200}$$
(aa or hh)*     (p)         (mm)

For alternative crop if (dd) exceeds $50,000.

$$\underline{\qquad}\text{ ac} \times \$ \underline{\qquad}\text{ /ac} = \qquad \$\underline{0}$$
(gg)        (s)          (nn)

For storage

$$\underline{62,400}\text{ by} \times \$ \underline{.025}\text{ /bu/mo} \times \underline{9}\text{ mo} = \qquad \$\underline{14,040}$$
(u)      (t)                  (oo)

For interest                           $\underline{\quad 0 \quad}$
                                       (pp)

     TOTAL CASH COSTS (ll + mm + nn + oo + pp)    $\$\underline{87,240}$
                                                      (qq)

<u>Expected Return Over Cash Costs for Option 2 or 3</u> (cc − qq) or    $\$\underline{93,528}$
                                          (kk − qq)**

*   Use (aa) if (dd) is less than $50,000; use (hh) if (dd) exceeds $50,000

**   Use (cc) if (dd) is less than $50,000; use (kk) if (dd) is more than $50,000.

OPTION 2: _____ Participate in basic program
OPTION 3: __X__ Participate in basic program
                plus paid land diversion

## CROP OR USE SELECTIONS (FILL IN BLANKS)

Program <u>crop</u>                                    <u>Corn</u>
<u>Alternative crop</u> (applicable
   only if you reach $50,000
   payment limit)                             <u>Soybeans</u>
<u>Acreage conservation</u>
   reserve (ACR)                              <u>(no crop)</u>

## Information Needed

a. __600__ ac. Crop acreage base (CAB)
b. __80__ % Maximum permitted acreage (MPA) of program crop, basic program, (% of CAB)
c. __15__ % Optional paid land diversion (PLD) (feed grains only) (% of CAB)
d. __65__ % MPA with PLD (% of CAB)
e. __390__ ac. Acres of program crop
f. __30.77__ % ACR factor
g. __130__ bu/ac Expected yield, program crop
h. __120__ /bu ASCS effective yield, program crop
i. $ __1.50__ /bu Expected market price, program crop
j. $ __1.78__ /ac County loan rate, program crop
k. $ __150__ /ac Expected cash costs, program crop

l. $ __.75__ /bu Anticipated deficiency payment subject to $50,000 payment limitation.
m. $ __.46__ /bu Anticipated deficiency payment subject to $200,000 payment limitation.
n. $ __2.00__ /bu Optional diversion payment rate
o. $ __0__ /ac Expected value of production on ACR
p. $ __10__ /ac Expected cash costs on ACR
q. __45__ units/ac Expected yield, alternative crop
r. $ __4.50__ /unit Expected market price, alternative crop
s. $ __75__ /ac Expected cash costs, alternative crop
t. $ __.025__ /bu/mo Storage cost, program crop

## Expected Returns

From Production

$$\underbrace{390}_{(e)} \text{ ac X } \underbrace{130}_{(g)} \text{ bu/ac} = \underbrace{50,700}_{(u)} \text{ bu}$$

Cash Sale or Loan

$$\underbrace{\phantom{50,700}}_{(u)} \text{ bu X } \$ \underbrace{\phantom{1.78}}_{(i)} \text{ /bu} =$$

$$\underbrace{50,700}_{(u)} \text{ bu X } \$ \underbrace{1.78}_{(j)} \text{ /bu} = \quad \$ \underbrace{90,246}_{(v)}$$

From deficiency payment (This portion of deficiency payment (w) plus
optional paid land diversion (z) is subject
to a $50,000 payment limitation.  See
adjustment section that follows.)

$$\underset{(e)}{390}\ ac \times \underset{(h)}{120}\ bu/ac \times \$\underset{(l)}{.75}\ /bu = \underset{(w)}{\$\ 35,100}$$

From deficiency payment (subject to $200,000 payment limitation)

$$\underset{(e)}{390}\ ac \times \underset{(h)}{120}\ bu/ac \times \$\underset{(m)}{.46}\ /bu = \underset{(x)}{\$\ 21,528}$$

From optional paid land diversion

$$\underset{(c)}{15}\ \% \times \underset{(a)}{600}\ ac \times \underset{(h)}{120}\ bu/ac = \underset{(y)}{10,800}\ bu$$

$$\underset{(y)}{10,800}\ bu \times \$\underset{(n)}{2.00}\ /bu = \underset{(z)}{\$\ 21,600}$$

From ACR

$$(\underset{(e)}{390}\ ac \times \underset{(f)}{30.77}\ \%) + (\underset{(a)}{600}\ ac \times \underset{(c)}{15}\ \%) = \underset{(aa)}{210}\ ac$$

$$\underset{(aa)}{210}\ ac \times \$\underset{(o)}{0}\ /ac = \underset{(bb)}{0}$$

TOTAL   RETURNS   BEFORE ADJUSTMENT (v + w + x + z + bb)  $\underset{(cc)}{\$\ 168,474}$

## Adjustment for Payment Limitation

1. $\underset{(w)}{\$\ 35,100} + \underset{(z)}{\$\ 21,600} = \underset{(dd)}{\$\ 56,700}$

2. Does (dd) exceed $50,000?  __X__ yes  _____ no

3. If no, proceed to next section (expected cash costs)

4. If yes, subtract $50,000 from $\underset{(dd)}{\$\ 56,700} = \underset{(ee)}{\$\ 6,700}$

5. ACR adjustment factor: $\underset{(ee)}{\$\ 6,700} \div (\underset{(dd)}{\$\ 56,700} + \underset{(x)}{21,528}) = \underset{(ff)}{.0856}$

6. Reduction in ACR (Acres recovered for alternative crop): $\underset{(aa)}{210}\ ac \times \underset{(ff)}{.0856} = \underset{(gg)}{18.0}\ ac$

7. Required ACR after adjustment: $\underset{(aa)}{210}\ ac - \underset{(gg)}{18.0}\ ac = \underset{(hh)}{192.0}\ ac$

8. Return on adjusted ACR: $\underset{(hh)}{192.0}\ ac \times \$\underset{(o)}{0}\ /ac = \underset{(ii)}{\$\ 0}$

9. Alternative crop income

$$\underset{(gg)}{18.0}\ ac \times \underset{(q)}{45}\ units/ac \times \$\underset{(r)}{4.50}\ /unit = \underset{(jj)}{\$\ 3,645}$$

TOTAL ADJUSTED RETURNS  (v + w + x + z - ee + ii + jj) = $\underset{(kk)}{\$\ 165,419}$

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## Expected Cash Costs

For production

$$\underset{\text{(e)}}{390} \text{ ac} \times \$\,\underset{\text{(k)}}{150}\ /\text{ac} = \qquad\qquad \$\,\underset{\text{(ll)}}{58,500}$$

For acres in ACR

$$\underset{\text{(aa or gg)*}}{192.0} \text{ ac} \times \$\,\underset{\text{(p)}}{10}\ /\text{ac} = \qquad\qquad \$\,\underset{\text{(mm)}}{1,920}$$

For alternative crop if (dd) exceeds $50,000.

$$\underset{\text{(ii)}}{18.0} \text{ ac} \times \$\,\underset{\text{(s)}}{75}\ /\text{ac} = \qquad\qquad \$\,\underset{\text{(nn)}}{1,350}$$

For storage

$$\underset{\text{(u)}}{50,700} \text{ bu} \times \$\,\underset{\text{(t)}}{.025}\ /\text{bu/mo} \times \underset{}{9}\ \text{mo} = \qquad \$\,\underset{\text{(oo)}}{11,408}$$

For interest

$$\qquad\qquad\qquad\qquad\qquad\qquad\qquad\qquad \$\,\underset{\text{(pp)}}{0}$$

TOTAL CASH COSTS (ll + mm + nn + oo + pp)  $\$\,\underset{\text{(qq)}}{73,178}$

Expected Return Over Cash Costs for Option 2 or 3 (cc - qq) or   $\$\,92,241$
(kk - qq)**

\*  Use (aa) if (dd) is less than $50,000; use (gg) if (dd) exceeds $50,000

\*\*  Use (cc) if (dd) is less than $50,000; use (kk) if (dd) is more than $50,000.

## PARTICIPATION OPTIONS (SELECT ONE)

OPTION 4: __X__ Participate in 50-92 program
OPTION 5: _____ Participate in 50-92 program
plus paid land diversion

## CROP OR USE SELECTIONS (FILL IN BLANKS)

Program crop **Corn**
Alternative crop
(applicable only
if you reach $50,000
payment limit) **Soybeans**
Acreage conservation
reserve(ACR) **(no crop)**
Conserving use (CU) **Sudan grass**

## Information Needed

a. __600__ ac. Crop acreage base (CAB)
b. __80__ % Maximum permitted acreage
   (MPA) of program crop, basic
   program (% of CAB)
c. _____ % Optional paid land diversion
   (PLD) (feed grains only)
   (% of CAB)
d. _____ % MPA with PLD (% of CAB)
e. __240__ ac. Acres of program crop
f. __25__ % ACR factor
g. __130__ bu/ac Expected yield,
   program crop
h. __120__ bu/ac ASCS effective yield,
   program crop
i. $__1.50__/bu Expected market price,
   program crop
j. $__1.78__/bu County loan rate,
   program crop
k. $__150__/ac Expected cash costs,
   program crop
l. $__.75__/bu Anticipated deficiency
   payment subject to $50,000
   payment limitation

m. $__.46__/bu Anticipated deficiency
   payment subject to $200,000
   payment limitation
n. $__2.00__/bu Optional diversion
   payment rate
o. $__0__/ac Expected value of
   production on ACR
p. $__10__/ac Expected cash costs
   on ACR
q. __45__ units/ac Expected yield,
   alternative crop
r. $__4.50__/unit Expected market price,
   alternative crop
s. $__75__/ac Expected cash costs
   alternative crop
t. $__38__/ac Expected value of
   production, conserving
   use (CU) acres.
u. $__17__/ac Expected cash costs
   CU acres
v. __360__ ac acres planned for ACR
   and CU
w. $__.025__/bu/mo Storage cost,
   program crop

## Eligibility Calculation for Deficiency Payment

1. $\underset{(a)}{600}$ ac X $\underset{(b)\underline{or}(d)*}{80}$ % = $\underset{(x)}{480}$ ac

   *Use (b) for Option 4;  use (d) for Option 5.

2. Does $\underset{(e)}{240}$ ac fall within a range of 50-92% of $\underset{(x)}{480}$?

   $\underline{\quad X \quad}$ yes $\underline{\qquad}$ no

   Continue only if the answer is <u>yes</u>.

3. ($\underset{(e)}{240}$ ac X $\underset{(f)}{25}$ %) + ($\underset{(a)}{600}$ ac X $\underset{(c)}{0}$ %) = $\underset{(y)}{60}$ ac

4. $\underset{(v)}{360}$ ac - $\underset{(y)}{60}$ ac = $\underset{(z)}{300}$ ac

5. $\underset{(x)}{480}$ ac X 8% = $\underset{(aa)}{38.4}$ ac

6. Does $\underset{(z)}{300}$ ac exceed $\underset{(aa)}{38.4}$ ac?   $\underline{\quad X \quad}$ yes $\underline{\qquad}$ no

   Continue only if the answer is <u>yes</u>.

7. $\underset{(v)}{360}$ ac - $\underset{(aa)}{38.4}$ ac - ($\underset{(a)}{600}$ X $\underset{(c)}{0}$ %) = $\underset{(bb)}{321.6}$ ac

8. $\underset{(e)}{240}$ ac + $\underset{(bb)}{321.6}$ ac = $\underset{(cc)}{561.6}$ ac

9. $\left( \underset{(cc)}{561.6} \text{ ac} \div 100 \right) + \underset{(f)}{25}$ % = $\underset{(dd)}{449.3}$ ac

10. $\underset{(x)}{480}$ X 92% = $\underset{(ee)}{441.6}$ ac

11. The lower of $\underset{(dd)}{449.3}$ ac or $\underset{(ee)}{441.6}$ ac = $\underset{(ff)}{441.6}$ ac (acres on which deficiency payment will be paid)

12. ($\underset{(ff)}{441.6}$ ac X $\underset{(f)}{25}$ %) + ($\underset{(a)}{600}$ ac X $\underset{(c)}{0}$ %) = $\underset{(gg)}{110.4}$ ac (ACR require-ment)

13. $\underset{(a)}{600}$ ac - $\underset{(e)}{240}$ ac - $\underset{(gg)}{110.4}$ ac = $\underset{(hh)}{249.6}$ ac (minimum CU to earn maximum deficiency (92%) and maintain crop history)

## Expected Returns

From production of program crop

$$\underset{(e)}{240} \text{ ac} \times \underset{(g)}{130} \text{ bu/ac} = \underset{(ii)}{31,200} \text{ bu}$$

Cash sale or loan

$$\underset{(ii)}{\phantom{xxx}} \text{ bu} \times \$ \underset{(i)}{\phantom{xxx}} \text{/bu} =$$

$$\underset{(ii)}{31,200} \text{ bu} \times \$ \underset{(j)}{1.78} \text{/bu} = \qquad \$ \underset{(jj)}{55,536}$$

From deficiency payment (This portion of deficiency payment (kk) plus optional paid land diversion (nn) is subject to a $50,000 payment limitation. See adjustment section that follows.)

$$\underset{(ff)}{441.6} \text{ ac} \times \underset{(h)}{120} \text{ bu/ac} \times \$ \underset{(l)}{.75} \text{/bu} = \qquad \$ \underset{(kk)}{39,744}$$

From deficiency payment (subject to $200,000 payment limitation)

$$\underset{(ff)}{441.6} \text{ ac} \times \underset{(h)}{120} \text{ bu/ac} \times \$ \underset{(m)}{.46} \text{/bu} = \qquad \$ \underset{(ll)}{24,376}$$

From optional paid land diversion

$$\underset{(c)}{0} \% \times \underset{(a)}{\phantom{xxx}} \text{ ac} \times \underset{(h)}{\phantom{xxx}} \text{ bu/ac} = \underset{(mm)}{\phantom{xxx}} \text{ bu}$$

$$\underset{(mm)}{\phantom{xxx}} \text{ bu} \times \$ \underset{(n)}{\phantom{xxx}} \text{/bu} = \qquad \$ \underset{(nn)}{0}$$

From production from ACR

$$\underset{(gg)}{110.4} \text{ ac} \times \$ \underset{(o)}{0} \text{/ac} = \qquad \$ \underset{(oo)}{0}$$

From production from CU

$$\underset{(hh)}{249.6} \text{ ac} \times \$ \underset{(t)}{38} \text{/ac} = \qquad \$ \underset{(pp)}{9,485}$$

TOTAL RETURNS BEFORE ADJUSTMENT (jj + kk + ll + nn + oo + pp) = $ \underset{(qq)}{129,141}$

## Adjustment for Payment Limitation

1. $\$\underset{\text{(kk)}}{39,744} + \underset{\text{(nn)}}{0} = \$\underset{\text{(rf)}}{39,744}$

2. Does $\$\underset{\text{(rr)}}{39,744}$ exceed $50,000?  _____ yes  $\underline{X}$ no

3. If no, proceed to next section (expected cash costs).

4. If yes, subtract $50,000 from $\$\underline{\phantom{xxx}}_{\text{(rr)}} = \$\underline{\phantom{xxx}}_{\text{(ss)}}$

5. ACR adjustment factor: $\$\underline{\phantom{xx}}_{\text{(ss)}} \div (\$\underline{\phantom{xx}}_{\text{(rr)}} + \underline{\phantom{xx}}_{\text{(ll)}}) = \underline{\phantom{xx}}_{\text{(tt)}}$

6. Reduction in ACR
   (Acres recovered for
   alternative crop):  $\underline{\phantom{xx}}_{\text{(gg)}}$ ac x $\underline{\phantom{xx}}_{\text{(tt)}} = \underline{\phantom{xx}}_{\text{(uu)}}$ ac

7. Required ACR after
   adjustment  $\underline{\phantom{xx}}_{\text{(gg)}}$ ac $- \underline{\phantom{xx}}_{\text{(uu)}}$ ac $= \underline{\phantom{xx}}_{\text{(vv)}}$ ac

8. Return on adjusted ACR:

   $\underline{\phantom{xx}}_{\text{(vv)}}$ ac x $\$\underline{\phantom{xx}}_{\text{(o)}}$ /ac $= \$\underline{\phantom{xx}}_{\text{(ww)}}$

9. Alternative crop income recovered

   $\underline{\phantom{xx}}_{\text{(uu)}}$ ac x $\underline{\phantom{xx}}_{\text{(q)}}$ units/ac x $\$\underline{\phantom{xx}}_{\text{(r)}}$ /unit $\$\underline{\phantom{xx}}_{\text{(xx)}}$

   TOTAL ADJUSTED RETURNS  (jj + kk + ll + nn + pp -
   ss + ww + xx)  $= \$\underline{\phantom{xx}}_{\text{(yy)}}$

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## Expected Cash Costs

For production

$$\underline{240}_{(e)} \text{ ac } X \ \$ \ \underline{150}_{(k)} /ac = \qquad\qquad \$\underline{36,000}_{(zz)}$$

For acres in ACR

$$\underline{110.4}_{(gg \text{ or } vv)*} \text{ ac } X \ \$ \ \underline{10}_{(p)} /ac = \qquad\qquad \$\underline{1,104}_{(aaa)}$$

For acres in CU

$$\underline{249.6}_{(hh)} \text{ ac } X \ \$ \ \underline{17}_{(u)} /ac = \qquad\qquad \$\underline{4,243}_{(bbb)}$$

For alternative crop if (rr) exceeds $50,000

$$\underline{\phantom{--}}_{(uu)} \text{ ac } X \ \$ \ \underline{\phantom{--}}_{(s)} /ac = \qquad\qquad \$\underline{0}_{(ccc)}$$

For storage (program crop)

$$\underline{31,200}_{(ii)} \text{ bu } X \ \$ \ \underline{.025}_{(w)} /bu/mo \ X \ \underline{9} \text{ mo.} = \qquad \$\underline{7,020}_{(ddd)}$$

For interest

$$\$\underline{0}_{(eee)}$$

$$\text{TOTAL CASH COSTS (zz + aaa + bbb + ccc + ddd + eee)} = \$\underline{48,367}_{(fff)}$$

## Expected Return Over Cash Costs for Option 4 or 5

$$\begin{array}{l}\text{(qq - fff) or}\\ \text{(yy - fff) ***}\end{array} = \$\underline{80,774}$$

\* Use (gg) if (rr) is less than $50,000;
use (vv) if (rr) exceeds $50,000

\*\* Use (qq) if (rr) is less than $50,000;
use (yy) if (rr) is more than $50,000

PARTICIPATION OPTIONS (SELECT ONE)

OPTION 4: _____ Participate in 50-92 program
OPTION 5: __X__ Participate in 50-92 program
plus paid land diversion

CROP OR USE SELECTIONS (FILL IN BLANKS)

Program crop **Corn**

Alternative crop
(applicable only
if you reach $50,000
payment limit) **Soybeans**

Acreage conservation
reserve(ACR) **(no crop)**

Conserving use (CU) **Sudan grass**

## Information Needed

a. __600__ ac. Crop acreage base (CAB)

b. __80__ % Maximum permitted acreage
(MPA) of program crop, basic
program (% of CAB)

c. __15__ % Optional paid land diversion
(PLD) (feed grains only)
(% of CAB)

d. __65__ % MPA with PLD (% of CAB)

e. __195__ ac. Acres of program crop

f. __30.77__% ACR factor

g. __130__ bu/ac Expected yield,
program crop

h. __120__ bu/ac ASCS effective yield,
program crop

i. $__1.50__/bu Expected market price,
program crop

j. $__1.78__/bu County loan rate,
program crop

k. $__150__/ac Expected cash costs,
program crop

l. $__.75__/bu Anticipated deficiency
payment subject to $50,000
payment limitation

m. $__.46__/bu Anticipated deficiency
payment subject to $200,000
payment limitation

n. $__2.00__/bu Optional diversion
payment rate

o. $__0__/ac Expected value of
production on ACR

p. $__10__/ac Expected cash costs
on ACR

q. __45__ units/ac Expected yield,
alternative crop

r. $__4.50__/unit Expected market price,
alternative crop

s. $__75__/ac Expected cash costs
alternative crop

t. $__38__/ac Expected value of
production, conserving
use (CU) acres.

u. $__17__/ac Expected cash costs
CU acres

v. __405__ ac acres planned for ACR
and CU

w. $__.025__/bu/mo Storage cost,
program crop

## Eligibility Calculation for Deficiency Payment

1. $\underset{(a)}{600}$ ac X $\underset{(b)\underline{or}(d)*}{65}$ % = $\underset{(x)}{390}$ ac

*Use (b) for Option 4; use (d) for Option 5.

2. Does $\underset{(e)}{195}$ ac fall within a range of 50-92% of $\underset{(x)}{390}$ ?

$\underline{\quad X \quad}$ yes $\underline{\qquad}$ no

Continue only if the answer is yes.

3. ($\underset{(e)}{195}$ ac X $\underset{(f)}{30.77}$%) + ($\underset{(a)}{600}$ ac X $\underset{(c)}{15}$ %) = $\underset{(y)}{150}$ ac

4. $\underset{(v)}{405}$ ac − $\underset{(y)}{150}$ ac = $\underset{(z)}{255}$ ac

5. $\underset{(x)}{390}$ ac X 8% = $\underset{(aa)}{31.2}$ ac

6. Does $\underset{(z)}{255}$ ac exceed $\underset{(aa)}{31.2}$ ac? $\underline{\quad X \quad}$ yes $\underline{\qquad}$ no

Continue only if the answer is yes.

7. $\underset{(v)}{405}$ ac − $\underset{(aa)}{31.2}$ ac − ($\underset{(a)}{600}$ X $\underset{(c)}{15}$ %) = $\underset{(bb)}{283.8}$ ac

8. $\underset{(e)}{195}$ ac + $\underset{(bb)}{283.8}$ ac = $\underset{(cc)}{478.8}$ ac

9. $\left(\underset{(cc)}{478.8} \text{ ac} \div 100\right)$ + $\underset{(f)}{30.77}$ % = $\underset{(dd)}{366.1}$ ac

10. $\underset{(x)}{390}$ X 92% = $\underset{(ee)}{358.8}$ ac

11. The lower of $\underset{(dd)}{366.1}$ ac or $\underset{(ee)}{358.8}$ ac = $\underset{(ff)}{358.8}$ ac (acres on which deficiency payment will be paid)

12. ($\underset{(ff)}{358.8}$ ac X $\underset{(f)}{30.77}$ %) + ($\underset{(a)}{600}$ ac X $\underset{(c)}{15}$ %) = $\underset{(gg)}{200.4}$ ac (ACR requirement)

13. $\underset{(a)}{600}$ ac − $\underset{(e)}{195}$ ac − $\underset{(gg)}{200.4}$ ac = $\underset{(hh)}{204.6}$ ac (minimum CU to earn maximum deficiency (92%) and maintain crop history)

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## Expected Returns

From production of program crop

$$\underline{195}_{(e)} \text{ ac} \times \underline{130}_{(g)} \text{ bu/ac} = \underline{25,350}_{(ii)} \text{ bu}$$

Cash sale or loan

$$\underline{\phantom{XXX}}_{(ii)} \text{ bu} \times \$\underline{\phantom{XXX}}_{(i)} \text{ /bu} =$$

$$\underline{25,350}_{(ii)} \text{ bu} \times \$\underline{1.78}_{(j)} \text{ /bu} = \qquad\qquad\qquad \$\underline{45,123}_{(jj)}$$

From deficiency payment (This portion of deficiency payment (kk) plus optional paid land diversion (nn) is subject to a $50,000 payment limitation. See adjustment section that follows.)

$$\underline{358.8}_{(ff)} \text{ ac} \times \underline{120}_{(h)} \text{ bu/ac} \times \$\underline{.75}_{(1)} \text{ /bu} = \qquad \$\underline{32,292}_{(kk)}$$

From deficiency payment (subject to $200,000 payment limitation)

$$\underline{358.8}_{(ff)} \text{ ac} \times \underline{120}_{(h)} \text{ bu/ac} \times \$\underline{.46}_{(m)} \text{ /bu} = \qquad \$\underline{19,806}_{(11)}$$

From optional paid land diversion

$$\underline{15}_{(c)} \% \times \underline{600}_{(a)} \text{ ac} \times \underline{120}_{(h)} \text{ bu/ac} = \underline{10,800}_{(mm)} \text{ bu}$$

$$\underline{10,800}_{(mm)} \text{ bu} \times \$\underline{2.00}_{(n)} \text{ /bu} = \qquad\qquad\qquad \$\underline{21,600}_{(nn)}$$

From production from ACR

$$\underline{200.4}_{(gg)} \text{ ac} \times \$\underline{0}_{(o)} \text{ /ac} = \qquad\qquad\qquad \$\underline{0}_{(oo)}$$

From production from CU

$$\underline{204.6}_{(hh)} \text{ ac} \times \$\underline{38}_{(t)} \text{ /ac} \qquad = \qquad\qquad \$\underline{7,775}_{(pp)}$$

TOTAL RETURNS BEFORE ADJUSTMENT (jj + kk + 11 + nn + oo + pp) = $\underline{126,596}_{(qq)}$

## Adjustment for Payment Limitation

1.  $\underline{\$32,292}_{(kk)} + \underline{21,600}_{(nn)} = \underline{\$53,892}_{(rr)}$

2.  Does $\underline{\$53,892}_{(rr)}$ exceed $50,000? ___X___ yes _____ no

3.  If no, proceed to next section (expected cash costs).

4.  If yes, subtract $50,000 from $\underline{\$53,892}_{(rr)} = \underline{\$3,892}_{(ss)}$

5.  ACR adjustment factor: $\underline{\$3,892}_{(ss)} \div (\underline{\$53,892}_{(rr)} + \underline{19,806}_{(11)}) = \underline{.0528}_{(tt)}$

6.  Reduction in ACR
    (Acres recovered for
    alternative crop): $\underline{200.4}_{(gg)}$ ac x $\underline{.0528}_{(tt)} = \underline{10.6}_{(uu)}$ ac

7.  Required ACR after
    adjustment $\underline{200.4}_{(gg)}$ ac - $\underline{10.6}_{(uu)}$ ac = $\underline{189.8}_{(vv)}$ ac

8.  Return on adjusted ACR:

    $\underline{189.8}_{(vv)}$ ac x $\underline{\$\quad0}_{(o)}$/ac = $\underline{\$\quad0}_{(ww)}$

9.  Alternative crop income recovered

    $\underline{10.6}_{(uu)}$ ac x $\underline{45}_{(q)}$ units/ac x $\underline{\$4.50}_{(r)}$/unit $\underline{\$\;2147}_{(xx)}$

    TOTAL ADJUSTED RETURNS (jj + kk + 11 + nn + pp -
    ss + ww + xx) = $\underline{\$124,851}_{(yy)}$

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## Expected Cash Costs

For production

$$\underset{\text{(e)}}{195} \text{ ac} \times \$ \underset{\text{(k)}}{150} \text{/ac} = \qquad \underset{\text{(zz)}}{\$ 29,250}$$

For acres in ACR

$$\underset{\text{(gg or vv)*}}{189.8} \text{ ac} \times \$ \underset{\text{(p)}}{10} \text{/ac} = \qquad \underset{\text{(aaa)}}{\$ 1,898}$$

For acres in CU

$$\underset{\text{(hh)}}{204.6} \text{ ac} \times \$ \underset{\text{(u)}}{17} \text{/ac} = \qquad \underset{\text{(bbb)}}{\$ 3,478}$$

For alternative crop if (rr) exceeds $50,000

$$\underset{\text{(uu)}}{10.6} \text{ ac} \times \$ \underset{\text{(s)}}{75} \text{/ac} = \qquad \underset{\text{(ccc)}}{\$ 795}$$

For storage (program crop)

$$\underset{\text{(ii)}}{25,350} \text{ bu} \times \$ \underset{\text{(w)}}{.025} \text{/bu/mo} \times \underset{}{9} \text{ mo.} = \qquad \underset{\text{(ddd)}}{\$ 5,704}$$

For interest

$$\qquad\qquad\qquad\qquad\qquad\qquad\qquad\qquad \underset{\text{(eee)}}{\$ 0}$$

TOTAL CASH COSTS (zz + aaa + bbb + ccc + ddd + eee) = $\underset{\text{(fff)}}{\$ 41,125}$

---

## Expected Return Over Cash Costs for Option 4 or 5

(qq - fff) or
(yy - fff) *** = $ 83,726

\* Use (gg) if (rr) is less than $50,000;
use (vv) if (rr) exceeds $50,000

\*\* Use (qq) if (rr) is less than $50,000;
use (yy) if (rr) is more than $50,000

OPTION 1:   DO NOT PARTICIPATE IN PROGRAM

Program Crop   _____

Information Needed

a. _____ ac Acres you intend to plant       c. $ _____ /bu Expected market price
b. _____ bu/ac Expected yield               d. $ _____ /ac Expected cash costs

Expected Returns

$$\underline{\qquad}_{(a)}\ ac\ x\ \underline{\qquad}_{(b)}\ bu/ac\ =\ \underline{\qquad}_{(e)}\ bu$$

$$\underline{\qquad}_{(e)}\ bu\ x\ \$\underline{\qquad}_{(c)}\ /bu\ =\qquad\$\underline{\qquad}_{(f)}$$

Expected Cash Costs

$$\underline{\qquad}_{(a)}\ ac\ x\ \$\underline{\qquad}_{(d)}\ /ac\ =\qquad\$\underline{\qquad}_{(g)}$$

Expected Return over Cash Costs
for Option 1  (f-g)        $ _____

---

SUMMARY:   EXPECTED RETURNS OVER CASH COSTS

|  |  |  |
|---|---|---|
| OPTION 1: | NON PARTICIPATION | $ _____ |
| OPTION 2: | PARTICIPATION (BASIC) | $ _____ |
| OPTION 3: | PARTICIPATION (BASIC) | |
|  | PLUS PAID LAND DIVERSION | $ _____ |
| OPTION 4: | PARTICIPATION (50/92 RULE) | $ _____ |
| OPTION 5: | PARTICIPATION (50/92 RULE) | |
|  | PLUS PAID LAND DIVERSION | $ _____ |

OPTION 2: _____   Participate in basic program
OPTION 3: _____   Participate in basic program
                     plus paid land diversion

## CROP OR USE SELECTIONS (FILL IN BLANKS)

Program crop                                    _____
Alternative crop (applicable
  only if you reach $50,000                     _____
  payment limit)
Acreage conservation
  reserve (ACR)                                 _____

## Information Needed

a. _____ ac. Crop acreage base (CAB)
b. _____ % Maximum permitted acreage
           (MPA) of program crop, basic
           program, (% of CAB)
c. _____ % Optional paid land diversion
           (PLD) (feed grains only) (% of
           CAB)
d. _____ % MPA with PLD (% of CAB)
e. _____ ac. Acres of program crop
f. _____ % ACR factor
g. _____ bu/ac Expected yield,
           program crop
h. _____ /bu ASCS effective yield,
           program crop
i. $_____ /bu Expected market price,
           program crop
j. $_____ /ac County loan rate,
           program crop
k. $_____ /ac Expected cash costs,
           program crop

l. $_____ /bu Anticipated deficiency
            payment subject to $50,000
            payment limitation.
m. $_____ /bu Anticipated deficiency
            payment subject to
            $200,000 payment
            limitation.
n. $_____ /bu Optional diversion
            payment rate
o. $_____ /ac Expected value of
            production on ACR
p. $_____ /ac Expected cash costs
            on ACR
q. _____ units/ac Expected yield,
            alternative crop
r. $_____ /unit Expected market
            price, alternative crop
s. $_____ /ac Expected cash costs,
            alternative crop
t. $_____ /bu/mo Storage cost,
            program crop

## Expected Returns

From Production

_____ ac X _____ bu/ac = _____ bu
  (e)        (g)            (u)

Cash Sale or Loan

_____ bu X $_____ /bu  =
  (u)        (i)

_____ bu X $_____ /bu  =                    $_____
  (u)        (j)                                 (v)

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From deficiency payment (This portion of deficiency payment (w) plus optional paid land diversion (z) is subject to a $50,000 payment limitation. See adjustment section that follows.)

$$\underline{\qquad}_{(e)} \text{ ac X } \underline{\qquad}_{(h)} \text{ bu/ac X \$}\underline{\qquad}_{(l)} \text{/bu} = \underline{\qquad}_{(w)} \$$$

From deficiency payment (subject to $200,000 payment limitation)

$$\underline{\qquad}_{(e)} \text{ ac X } \underline{\qquad}_{(h)} \text{ bu/ac X \$}\underline{\qquad}_{(m)} \text{/bu} = \underline{\qquad}_{(x)} \$$$

From optional paid land diversion

$$\underline{\qquad}_{(c)} \text{ \% X } \underline{\qquad}_{(a)} \text{ ac X } \underline{\qquad}_{(h)} \text{ bu/ac} = \underline{\qquad}_{(y)} \text{ bu}$$

$$\underline{\qquad}_{(y)} \text{ bu X \$}\underline{\qquad}_{(n)} \text{/bu} = \underline{\qquad}_{(z)} \$$$

From ACR

$$(\underline{\qquad}_{(e)} \text{ ac x }\underline{\qquad}_{(f)} \text{ \%}) + (\underline{\qquad}_{(a)} \text{ ac x }\underline{\qquad}_{(c)} \text{ \%}) = \underline{\qquad}_{(aa)} \text{ ac}$$

$$\underline{\qquad}_{(aa)} \text{ ac x \$}\underline{\qquad}_{(o)} \text{/ac} = \underline{\qquad}_{(bb)} \$$$

TOTAL RETURNS
BEFORE ADJUSTMENT (v + w + x + z + bb) $\underline{\qquad}_{(cc)}$ $

## Adjustment for Payment Limitation

1. $\$\underline{\qquad}_{(w)} + \$\underline{\qquad}_{(z)} = \$\underline{\qquad}_{(dd)}$

2. Does (dd) exceed $50,000? _____ yes _____ no

3. If no, proceed to next section (expected cash costs)

4. If yes, add $50,000 to lesser of $_____ or $200,000 = $_____
   $\qquad\qquad\qquad\qquad\qquad\qquad (x)\qquad\qquad\qquad\qquad\qquad (ee)$

5. ACR adjustment factor: $\$\underline{\qquad}_{(ee)} \div (\$\underline{\qquad}_{(dd)} + \underline{\qquad}_{(x)}) = \underline{\qquad}_{(ff)}$

6. Adjusted ACR: $\underline{\qquad}_{(aa)} \text{ ac x } \underline{\qquad}_{(ff)} = \underline{\qquad}_{(gg)} \text{ ac}$

7. Return on adjusted ACR $\underline{\qquad}_{(gg)} \text{ ac x \$}\underline{\qquad}_{(o)} \text{/ac} = \$\underline{\qquad}_{(hh)}$

8. Acres recovered for alternative crop: $\underline{\qquad}_{(aa)} \text{ ac} - \underline{\qquad}_{(gg)} \text{ ac} = \underline{\qquad}_{(ii)} \text{ ac}$

9. Alternative crop income recovered.

$$\underline{\qquad}_{(ii)} \text{ ac x } \underline{\qquad}_{(q)} \text{ units/ac x \$}\underline{\qquad}_{(r)} \text{/unit} = \$\underline{\qquad}_{(jj)}$$

TOTAL ADJUSTED RETURNS (v + ee + hh + jj) = $\underline{\qquad}_{(kk)}$ $

For production

_____ ac X $_____/ac =                    $_____
   (e)          (k)                                    (11)

For acres in ACR

_____ ac X $_____/ac =                    $_____
(aa or gg)*     (p)                                    (mm)

For alternative crop if (dd) exceeds $50,000.

_____ ac x $_____/ac =                    $_____
  (ii)         (s)                                    (nn)

For storage

_____ bu X $_____/bu/mo X _____mo =  $_____
  (u)        (t)                                         (oo)

For interest                                          $_____
                                                         (pp)

TOTAL CASH COSTS (11 + mm + nn + oo + pp)    $_____
                                                (qq)

<u>Expected Return Over Cash Costs for Option 2 or 3</u> (cc – qq) or  $_____
                                                        (kk – qq)**

  * Use (aa) if (dd) is less than $50,000; use (gg) if (dd)
    exceeds $50,000

** Use (cc) if (dd) is less than $50,000; use (kk) if (dd)
    is more than $50,000.

## PARTICIPATION OPTIONS (SELECT ONE)

OPTION 4: _____ Participate in 50-92 program

OPTION 5: _____ Participate in 50-92 program
plus paid land diversion

## CROP OR USE SELECTIONS (FILL IN BLANKS)

Program crop _____

Alternative crop
(applicable only
if you reach $50,000
payment limit) _____

Acreage conservation
reserve(ACR) _____

Conserving use (CU) _____

## Information Needed

a. _____ ac. Crop acreage base (CAB)

b. _____ % Maximum permitted acreage (MPA) of program crop, basic program (% of CAB)

c. _____ % Optional paid land diversion (PLD) (feed grains only) (% of CAB)

d. _____ % MPA with PLD (% of CAB)

e. _____ ac. Acres of program crop

f. _____ % ACR factor

g. _____ bu/ac Expected yield, program crop

h. _____ bu/ac ASCS effective yield, program crop

i. $_____ /bu Expected market price, program crop

j. $_____ /bu County loan rate, program crop

k. $_____ /ac Expected cash costs, program crop

l. $_____ /bu Anticipated deficiency payment subject to $50,000 payment limitation

m. $_____ /bu Anticipated deficiency payment subject to $200,000 payment limitation

n. $_____ /bu Optional diversion payment rate

o. $_____ /ac Expected value of production on ACR

p. $_____ /ac Expected cash costs on ACR

q. _____ units/ac Expected yield, alternative crop

r. $_____ /unit Expected market price, alternative crop

s. $_____ /ac Expected cash costs alternative crop

t. $_____ /ac Expected value of production, conserving use (CU) acres.

u. $_____ /ac Expected cash costs CU acres

v. _____ ac acres planned for ACR and CU

w. $_____ /bu/mo Storage cost, program crop

## Eligibility Calculation for Deficiency Payment

1. _____ ac X _____ % = _____ ac
      (a)     (b)or(d)*    (x)

   *Use (b) for Option 4; use (d) for Option 5.

2. Does _____ ac fall within a range of 50-92% of _____ ?
         (e)                                  (x)

   _____ yes _____ no

   Continue only if the answer is yes.

3. (_____ ac X _____ %) + (_____ ac X _____ %) = _____ ac
       (e)       (f)       (a)      (c)     (y)

4. _____ ac - _____ ac = _____ ac
      (v)       (y)      (z)

5. _____ ac X 8% = _____ ac
      (x)           (aa)

6. Does _____ ac exceed _____ ac? _____ yes _____ no
         (z)        (aa)

   Continue only if the answer is yes.

7. _____ ac - _____ ac - (_____ X _____ %) = _____ ac
      (v)      (aa)     (a)     (c)      (bb)

8. _____ ac + _____ ac = _____ ac
      (e)      (bb)     (cc)

9. _____ ac ÷ 100 + _____ % = _____ ac
      (cc)           (f)       (dd)

10. _____ X 92% = _____ ac
       (x)         (ee)

11. The lower of _____ ac or _____ ac = _____ ac (acres on which
                 (dd)       (ee)     (ff)   deficiency payment
                                                     will be paid)

12. (_____ ac X _____ %) + (_____ ac X _____ %) = _____ ac (ACR require-
        (ff)       (f)       (a)       (c)     (gg)   ment)

13. _____ ac - _____ ac - _____ ac = _____ ac (minimum CU to earn
       (a)       (e)      (gg)     (hh)   maximum deficiency (92%)
                                                       and maintain crop history)

From production of program crop

_____ac X _____bu/ac = _____bu
(e)          (g)              (ii)

Cash sale or loan

_____bu X $_____/bu =
(ii)          (i)

_____bu X $_____/bu =                              $_____
(ii)          (j)                                        (jj)

From deficiency payment (This portion of deficiency payment (kk)
    plus optional paid land diversion (nn) is subject to a
    $50,000 payment limitation.  See adjustment section that
    follows.)

_____ac X _____bu/ac X $_____/bu =              $_____
(ff)          (h)              (l)                     (kk)

From deficiency payment (subject to $200,000 payment limitation)

_____ac X _____bu/ac X $_____/bu =              $_____
(ff)          (h)              (m)                     (ll)

From optional paid land diversion

_____% X _____ac X _____bu/ac = _____bu
(c)          (a)          (h)              (mm)

_____bu X $_____/bu =                            $_____
(mm)          (n)                                      (nn)

From production from ACR

_____ac X $_____/ac =                            $_____
(gg)          (o)                                      (oo)

From production from CU

_____ac X $_____/ac =                            $_____
(hh)          (t)                                      (pp)

TOTAL RETURNS BEFORE ADJUSTMENT (jj + kk + ll + nn + oo + pp)=  $_____
                                                                  (qq)

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## Adjustment for Payment Limitation

1.  $\$\underline{\phantom{xx}}_{(kk)} + \underline{\phantom{xx}}_{(nn)} = \qquad\qquad \$\underline{\phantom{xx}}_{(rr)}$

2.  Does $\$\underline{\phantom{xx}}_{(rr)}$ exceed \$50,000?  _____yes _____no

3.  If no, proceed to next section (expected cash costs).

4.  If yes, add \$50,000 to lesser of $\$\underline{\phantom{xx}}_{(11)}$ or \$200,000 = $\$\underline{\phantom{xx}}_{(ss)}$

5.  ACR adjustment factor:

    $\$\underline{\phantom{xx}}_{(ss)} - (\underline{\phantom{xx}}_{(rr)} + \underline{\phantom{xx}}_{(11)}) = \underline{\phantom{xx}}_{(tt)}$

6.  Adjusted ACR:  $\underline{\phantom{xx}}_{(gg)}$ac x $\underline{\phantom{xx}}_{(tt)} = \underline{\phantom{xx}}_{(uu)}$ac

7.  Return on adjusted ACR:  $\underline{\phantom{xx}}_{(uu)}$ac x $\$\underline{\phantom{xx}}_{(o)}$/ac = $\$\underline{\phantom{xx}}_{(vv)}$

8.  Acres recovered for alternative crop:

    $\underline{\phantom{xx}}_{(gg)}$ac $- \underline{\phantom{xx}}_{(uu)}$ac $= \underline{\phantom{xx}}_{(ww)}$ac

9.  Alternative crop income recovered

    $\underline{\phantom{xx}}_{(ww)}$ac x $\underline{\phantom{xx}}_{(q)}$units/ac x $\$\underline{\phantom{xx}}_{(r)}$/unit   $\$\underline{\phantom{xx}}_{(xx)}$

    TOTAL ADJUSTED RETURNS (jj + ss + vv + xx) =    $\$\underline{\phantom{xx}}_{(yy)}$

# Expected Cash Costs

For production

$$\underline{\hspace{3cm}}\text{ac} \times \$\underline{\hspace{3cm}}/\text{ac} = \qquad \$\underline{\hspace{3cm}}$$
$$\quad (e) \qquad\qquad (k) \qquad\qquad\qquad\qquad (zz)$$

For acres in ACR

$$\underline{\hspace{3cm}}\text{ac} \times \$\underline{\hspace{3cm}}/\text{ac} = \qquad \$\underline{\hspace{3cm}}$$
$$(gg \text{ or } uu)^* \qquad (p) \qquad\qquad\qquad\qquad (aaa)$$

For acres in CU

$$\underline{\hspace{3cm}}\text{ac} \times \$\underline{\hspace{3cm}}/\text{ac} = \qquad \$\underline{\hspace{3cm}}$$
$$\quad (hh) \qquad\qquad (u) \qquad\qquad\qquad\qquad (bbb)$$

For alternative crop if (rr) exceeds $50,000

$$\underline{\hspace{3cm}}\text{ac} \times \$\underline{\hspace{3cm}}/\text{ac} = \qquad \$\underline{\hspace{3cm}}$$
$$\quad (ww) \qquad\qquad (s) \qquad\qquad\qquad\qquad (ccc)$$

For storage (program crop)

$$\underline{\hspace{3cm}}\text{bu} \times \$\underline{\hspace{3cm}}/\text{bu/mo} \times \underline{\hspace{3cm}}\text{mo.} = \qquad \$\underline{\hspace{3cm}}$$
$$\quad (ii) \qquad\qquad (w) \qquad\qquad\qquad\qquad\qquad\qquad (ddd)$$

For interest

$$\$\underline{\hspace{3cm}}$$
$$(eee)$$

$$\text{TOTAL CASH COSTS (zz + aaa + bbb + ccc + ddd + eee)} = \quad \$\underline{\hspace{3cm}}$$
$$(fff)$$

## Expected Return Over Cash Costs for Option 4 or 5

(qq − fff) or
(yy − fff) *** =    $\underline{\hspace{3cm}}$

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\* Use (gg) if (rr) is less than $50,000;
   use (uu) if (rr) exceeds $50,000

\*\* Use (qq) if (rr) is less than $50,000;
    use (yy) if (rr) is more than $50,000