2014 Farm Bill Decisions

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Major Farm Bill Changes

• Focused on risk management
  – Program options let you decide what type of risk management you want

• Decisions depend on price outlook
  – No clear cut right decision for producers
Major Farm Bill Changes

• In general
  – Program complexity increases
  – Benefits lower
  – Producer decisions more difficult

• Integrates the use of crop insurance with farm bill programs

• Added new Dairy Margin Protection Program
Farm Bill Changes

• How will producers make election decisions?
• Who will help them?

Commodity Program Decisions

1. Update payment yields
2. Reallocate base acres
3. Choose:
   – Price Loss Coverage (PLC)
   – Agricultural Revenue Coverage – County (ARC-C)
   – Agricultural Revenue Coverage – Individual (ARC-I)
Update Payment Yields

• Decision choices
  – Update your payment yields to 90% of average yields from 2008 to 2012
  – Keep your current payment yields
    • Current payment yields are from 1998-2001 or 1981-1985

• Who & When
  – Decision is made by landowner for each FSA farm*
  – Probably late October to end of the year or later
    * An FSA farm is generally defined based on ownership
Update Payment Yields

• **Provisions**
  – Decision can be made crop by crop
  – Can update yields and not reallocation base acres
  – Payment yields are used only for PLC

• **Decision strategy**
  – Choose the higher payment yields by crop
  – Even if not selecting PLC, updated payment yields may be beneficial in the future
Update Payment Yields

• **Information needed and sources**
  – Yield history 2008 – 2012
    • Possibly self-certify
    • APH yields?
    • Other?

Update Payment Yields

• **Challenges**
  – Do you have documentation?
  – There will be audits
Base Acre Reallocation

• Decision choices

  – Reallocate base acres
    • Based on program crops planted & prevented planted from 2009 to 2012
  – Retain current base acre allocation
    • Current base acres 1998-2001 or 1981-1985
    • Total base acres cannot be increased, only reallocated

Base Acre Reallocation

• Who & When

  – Decision is made by landowner

  – If no decision is made, farm retains current base acres

  – Probably late October to end of the year or later
Base Acre Reallocation

• Provisions
  – Decision applies to all crops on an FSA farm
  – Can reallocate base acres and not update yields
  – Both PLC & ARC programs make payments on base acres starting with 2014 crop year

• Provisions
  – All years included in calculation even if crop was not planted
  – Prevented planted acres count if due to conditions beyond producer’s control
  – Double crop acres count if deemed by Secretary of Ag as an established practice in the area
Base Acre Reallocation

• **Decision strategy**
  – Two perspectives:
    • Minimize financial risk
    • Maximize government payments

Base Acre Reallocation

• **Decision strategy**
  – Minimize financial risk
    • Choose to allocate base acres to be closest to 2015 through 2018 expected crop plantings
    • Probably will be most similar to 2009 to 2012 plantings
Base Acre Reallocation

- **Decision strategy**
  - Maximize government payments
  - ARC & PLC payments dependent on future prices
  - Depends on landowner’s and producer’s price outlook for each crop
    - PLC relative to reference price
    - ARC historical prices vs expected prices

- **Information needed and sources**
  - Need base acre history 2009 – 2012
  - FSA letter provided this to every landowner
Base Acre Reallocation

• Example

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Alfalfa</td>
<td>not covered crop</td>
<td>20</td>
<td>20</td>
<td>20</td>
<td>not applicable</td>
<td>not applicable</td>
<td>not applicable</td>
<td>not applicable</td>
</tr>
<tr>
<td>Corn</td>
<td>50</td>
<td>50</td>
<td>40</td>
<td>30</td>
<td>40</td>
<td>40.0</td>
<td>50%</td>
<td>50</td>
</tr>
<tr>
<td>Oats</td>
<td>10</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0.0</td>
<td>0%</td>
<td>0</td>
</tr>
<tr>
<td>Soybeans</td>
<td>30</td>
<td>30</td>
<td>32</td>
<td>50</td>
<td>32</td>
<td>36.0</td>
<td>45%</td>
<td>45</td>
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<tr>
<td>Wheat</td>
<td>10</td>
<td>0</td>
<td>8</td>
<td>0</td>
<td>8</td>
<td>4.0</td>
<td>5%</td>
<td>5</td>
</tr>
<tr>
<td>Total covered crops</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>80</td>
<td>100%</td>
<td>100</td>
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</tbody>
</table>

ARC or PLC

• Decision choices
  – Price Loss Coverage (PLC)
  – Agricultural Risk Coverage –county (ARC-C)
  – Agricultural Risk Coverage –individual (ARC-I)
ARC or PLC

• Who Decides
  – Unanimous decision by producer and all landlords for the farm
    • If don’t agree, PLC becomes default program and farm forfeits 2014 payments
  – Producer educator and negotiator with landlords

ARC or PLC

• Who Decides
  – Factsheet for landlords will be available from U of M Extension
    • http://www.extension.umn.edu/agriculture/business/farm-bill/
  – Short online video will also be available
  – Landlord webinars
ARC or PLC

• **When**
  
  – Program selection late 2014 and first part of 2015

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PLC

• **Provisions**
  
  – Price support program
  
  – Can select PLC for some crops and ARC county for other crops
  
  – Only PLC crops eligible for Supplemental Coverage Option (SCO)
PLC

• Provisions
  – Payment made on 85% of base acres
  – Uses farm’s payment yield
  – Producers receive payment if Marketing Year Average (MYA) price falls below Reference Price

PLC

• Definitions
  – Marketing Year Average (MYA) = average national price for 12 month marketing year
    • Sept-Aug for corn, soybean, sunflower
    • June-May for wheat, barley, oats
    • July-June for canola, flaxseed, dry peas
PLC

• Definitions
  – Reference prices – set in the Farm Bill

<table>
<thead>
<tr>
<th>Crop</th>
<th>Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>Corn</td>
<td>3.70/bu</td>
</tr>
<tr>
<td>Soybeans</td>
<td>8.40/bu</td>
</tr>
<tr>
<td>Wheat</td>
<td>5.50/bu</td>
</tr>
<tr>
<td>Barley</td>
<td>4.95/bu</td>
</tr>
<tr>
<td>Oats</td>
<td>2.40/bu</td>
</tr>
<tr>
<td>Dry peas</td>
<td>11.00/cwt</td>
</tr>
</tbody>
</table>

• Provisions
  – Payment Rate
    Reference price – MYA price (or loan rate if higher)
  – Payment
    Payment rate x payment yield x 85% of crop’s base acres
PLC

• **Calculation**

\[
\text{Payment} = (\text{reference price} - \text{MYA price}) \times \text{payment yield} \times 0.85 \times \text{base acres}
\]

**Example:** MYA price for corn falls to $3.50 and a farm had a payment yield of 160 bu. and a corn base of 350 acres:

\[
($3.70 - $3.50) \times 160 \text{ ac.} \times 0.85 \times 350 \text{ bu} = $9,520
\]

ARC - County

• **Provisions**

– Revenue support program

– Payments are made when the Actual County Revenue for a crop falls below the County Revenue Guarantee
ARC - County

• Provisions
  – Can select ARC for some crops and PLC for other crops
  – Uses average county yields, not farm’s yields
  – Payment made on 85% of base acres

• Definitions
  – Benchmark revenue
    • 5-year Olympic average county yields x 5-year Olympic average MYA prices
  – Revenue guarantee
    • 86% of benchmark revenue
    • Changes each year depending on previous 5 years
ARC - County

- **Definitions**
  - Actual revenue
    - Annual county average yield x MYA prices
  - Payment rate
    - Revenue guarantee – actual revenue
      - Cannot exceed 10% of benchmark revenue
  - Payment
    - Payment rate x 85% of crop’s base acres

ARC County

- **Calculation**
  
  Payment = ((benchmark revenue x .86) – actual revenue) x (base acres x .85)
ARC County Example - Corn

<table>
<thead>
<tr>
<th>Year</th>
<th>MYA Price</th>
<th>County Yield</th>
</tr>
</thead>
<tbody>
<tr>
<td>2009</td>
<td>3.70*</td>
<td>183.0</td>
</tr>
<tr>
<td>2010</td>
<td>5.18**</td>
<td>180.4</td>
</tr>
<tr>
<td>2011</td>
<td>6.22</td>
<td>165.7</td>
</tr>
<tr>
<td>2012</td>
<td>6.89</td>
<td>156.7</td>
</tr>
<tr>
<td>2013 est.</td>
<td>4.50</td>
<td>185.0</td>
</tr>
<tr>
<td>5-year Olympic average</td>
<td>5.30</td>
<td>176.4</td>
</tr>
<tr>
<td>Benchmark Revenue</td>
<td>$935 = 5.30 x 176.4</td>
<td></td>
</tr>
<tr>
<td>Guarantee</td>
<td>$804 = 935 x 0.86</td>
<td></td>
</tr>
</tbody>
</table>

*2009 MYA price of $3.55 is replaced by Reference Price of $3.70 per rules in 2014 farm bill. **Prices and yields in red are used to calculate 5-year Olympic average.

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ARC County Example – Corn
continued

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>2014 MYA Price (estimate)</td>
<td>$3.90</td>
</tr>
<tr>
<td>2014 County Yield (trend estimate)</td>
<td>189</td>
</tr>
<tr>
<td>2014 Actual Revenue (estimate)</td>
<td>$737</td>
</tr>
<tr>
<td>Guarantee (86% of Benchmark from prev. slide)</td>
<td>$804</td>
</tr>
<tr>
<td>Maximum payment (10% of Benchmark)</td>
<td>$93.50</td>
</tr>
<tr>
<td>Payment Rate (Guar. – Actual; up to max.)</td>
<td>$67.00</td>
</tr>
<tr>
<td>Base acres for farm (corn)</td>
<td>330</td>
</tr>
<tr>
<td>Payment (Payment Rate x 85% of base acres)</td>
<td>$18,793.50</td>
</tr>
</tbody>
</table>
ARC - Individual

• Provisions

– Similar to ARC County, payments are made when the Actual Revenue falls below the Revenue Guarantee

– But based on revenue sum for all commodities on a farm

– Payment made on 65% of base acres

• Provisions

– If select ARC-Individual, it applies to all of program crops on an FSA farm

– Planted acres on all of producer’s ARC-I enrolled farms in the state used to determine proportion of crop for calculating revenue
ARC - Individual

• Definitions
  – Benchmark Revenue
    • Revenue is calculated for each commodity = farm yield x MYA price
    • Olympic average revenues calculated for each commodity for 5 most recent years
    • Farm’s benchmark revenue is weighted sum of average revenue for each commodity based on proportion of planted acres for each crop

ARC - Individual

• Definitions
  – Revenue guarantee
    • 86% of the farm’s benchmark revenue
ARC - Individual

• Definitions
  – Actual Revenue
    • Revenues calculated for each commodity
      – individual farm yield x MYA price
    • Actual Revenue for farm is weighted sum of each commodity’s actual revenue based on planted acres

• Definitions
  – Payment rate
    • Payment Rate = Guarantee – Actual Revenue
      – Cannot exceed 10% of Benchmark Revenue
  – Payment
    • Payment Rate x 65% of base acres for all covered commodities on the farm
ARC Individual

• Calculation

Payment = ((benchmark revenue x .86) – actual revenue) x .65 x farm’s total base acres

ARC Individual Example

<table>
<thead>
<tr>
<th>For current year</th>
<th>Corn</th>
<th>Soybean</th>
</tr>
</thead>
<tbody>
<tr>
<td>Olympic Average Revenue</td>
<td>957</td>
<td>570</td>
</tr>
<tr>
<td>Planted acres, current year</td>
<td>60</td>
<td>40</td>
</tr>
<tr>
<td>Benchmark Revenue for farm</td>
<td>(957 x 0.6) + (570 x 0.4) = $802</td>
<td></td>
</tr>
<tr>
<td>Guarantee for farm</td>
<td>$802 x 0.86 = $690</td>
<td></td>
</tr>
<tr>
<td>Actual Revenue by crop</td>
<td>749</td>
<td>454</td>
</tr>
<tr>
<td>Weighted Actual Revenue</td>
<td>(749 * 0.6) + (454 * 0.4) = $631</td>
<td></td>
</tr>
<tr>
<td>Maximum payment rate (10% of Benchmark Revenue)</td>
<td>802 * 0.10 = $80</td>
<td></td>
</tr>
<tr>
<td>Payment Rate</td>
<td>690 – 631 = $59</td>
<td></td>
</tr>
<tr>
<td>Payment</td>
<td>59 * 0.65 * 100 = $3,835</td>
<td></td>
</tr>
</tbody>
</table>
PLC or ARC

• **Decision strategy**
  – Weighing the different approaches:
    • Bigger picture – risk management
    • Price expectations over next five years

PLC or ARC

• **Risk management approach**
  – PLC helps producers manage:
    • Catastrophic low prices (deep loss)
    • Multiple years of low prices
PLC or ARC

• Risk management approach
  – ARC–C helps producers manage:
    • Shallow revenue losses
    • Declining revenue
    • Multiple year losses
    • Yield losses

PLC or ARC

• Risk management approach
  – ARC–I helps producers manage risk on farms that:
    • Have volatile yields
    • Are different from other farms in the county
PLC or ARC

- Risk management approach
  - How will you use crop insurance and commodity programs to manage risk
  - Will SCO with PLC be a cost effective option
    - Premium cost
    - County insurance vs. individual farm
    - Are higher insurance coverage levels available

PLC or ARC

- Price expectations over next five years
Yields could also offset

Price Outlook (Corn Ex.)

FAPRI Price Projections

Aug. 2014 FAPRI Prices
Benchmark Price
86%
76%
Ref Price

Source: Joe Outlaw
Price Outlook (Corn Ex.)

Yields could also offset

FAPRI Price Projections

Aug. 2014 FAPRI Prices
Benchmark Price
86%
76%
Ref Price

Source: Joe Outlaw

PLC or ARC

• Price expectations over next five years
  – Breakeven prices
    • If MYA corn price 2014 - 2018 averages above $3.30 ARC-county will have higher payments
    • If MYA soybean price averages above $7.40 ARC-county payments higher than PLC
    • If MYA wheat price averages above $5.10 ARC-county payments higher than PLC
      – Breakeven price varies by yield
PLC or ARC

• Price expectations over next five years
  – MN corn & soybean historic average prices are $.18 below national prices, wheat $.12
  – Be aware of:
    • Catastrophic prices – PLC more protection
    • Disaster yields – ARC more protection

PLC or ARC

• Price expectations over next five years
  – Will ARC-C early year payments have more weight
PLC or ARC

• **Decision strategy**
  – Each farm is different
  – Producers have different price outlooks
  – Run different price and yield scenarios using the national decision aids

PLC or ARC

• **National decision aids**
  – [http://www.farmdoc.illinois.edu/farmbilltoolbox/index.asp](http://www.farmdoc.illinois.edu/farmbilltoolbox/index.asp)
  – [https://afpc.tamu.edu/models/decisionaid.php](https://afpc.tamu.edu/models/decisionaid.php)
PLC or ARC

• Decision strategy
  – Is ARC – Individual an option for your farm
  – Maybe useful for farms:
    • Whose yields not correlated with county yields
    • Have highly variable yields
      – May work if use for only one farm with one crop
    • That want to expand vegetable production

• Decision strategy
  – Other thoughts
    • Diversify risk management use both ARC-C and PLC
    • Payment limits
PLC or ARC

• Decision strategy
  – Complex?
    • Making a 5 yr decision (or much longer) with 1 yr of information
  – We are not in the South!
    • Generic base
    • STAX

PLC or ARC

• Decision strategy - questions
  – Is ARC-I a viable option for you?
  – Is SCO a cost effective insurance option?
  – What risks are you most concerned about managing?
  – What is your price outlook?
PLC or ARC

- **Decision strategy - questions**
  - Do you want to diversify your risk management with both ARC-C and PLC?
  - How do your program decisions fit with your crop insurance decisions?

Program & Insurance

- **Linking program & insurance decisions**
  - Should consider these decisions together
  - Will producers do this?
Ethics

• Crop insurance agents can influence decision
  – What is best for producer
  – What is best for agent

Helping Your Clients
Estimate of Sign-up Timeline

<table>
<thead>
<tr>
<th>Month</th>
<th>Event</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aug 2014</td>
<td>Dairy Election</td>
</tr>
<tr>
<td>Sept</td>
<td>Reallocate Base &amp; Update Yields</td>
</tr>
<tr>
<td>Oct</td>
<td>Choice Between ARC &amp; PLC</td>
</tr>
<tr>
<td>Nov</td>
<td>Annual Sign-up</td>
</tr>
<tr>
<td>Dec</td>
<td></td>
</tr>
<tr>
<td>Jan</td>
<td></td>
</tr>
<tr>
<td>Feb</td>
<td></td>
</tr>
<tr>
<td>March</td>
<td></td>
</tr>
<tr>
<td>April</td>
<td></td>
</tr>
<tr>
<td>May</td>
<td></td>
</tr>
<tr>
<td>June 2015</td>
<td></td>
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</tbody>
</table>

Source: Joe Outlaw

Dairy MPP

• Dairy Margin Protection Program
  – A pseudo insurance program with legislated premiums
  – Protects dairy producers from tighter milk price/feed cost margins
Dairy MPP

• Margin =

  National All-Milk Price -

  1.0728 x NASS Corn Price ($/bu)

  0.00735 x AMS Soybean Meal (Central IL) ($/ton)

  0.0137 x NASS Alfalfa Hay ($/ton)

<table>
<thead>
<tr>
<th>Coverage Level</th>
<th>Premium ≤ 4mil lbs PH ($/cwt)</th>
<th>Discounted Premium</th>
<th>Premium &gt;4 M lbs. PH ($/cwt)</th>
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<tr>
<td>$4.00</td>
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<td>$4.50</td>
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<td>$0.00750</td>
<td>$0.020</td>
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<td>$5.00</td>
<td>$0.025</td>
<td>$0.01875</td>
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<tr>
<td>$5.50</td>
<td>$0.040</td>
<td>$0.03000</td>
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<tr>
<td>$6.00</td>
<td>$0.055</td>
<td>$0.04125</td>
<td>$0.155</td>
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<td>$6.50</td>
<td>$0.090</td>
<td>$0.06750</td>
<td>$0.290</td>
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<td>$7.00</td>
<td>$0.217</td>
<td>$0.16250</td>
<td>$0.830</td>
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<td>$7.50</td>
<td>$0.300</td>
<td>$0.22500</td>
<td>$1.060</td>
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<td>$8.00</td>
<td>$0.475</td>
<td>$0.47500</td>
<td>$1.360</td>
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</table>
Actual Dairy Production Margin

MPP Indemnities: 2012 Example

<table>
<thead>
<tr>
<th>Consecutive Two-Month Periods</th>
<th>2012</th>
<th>Two-month Average</th>
<th>Coverage Level &amp; Indemnities</th>
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</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>$4.00</td>
</tr>
<tr>
<td>January</td>
<td>7.46</td>
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<tr>
<td>February</td>
<td>5.78</td>
<td>6.62</td>
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</tr>
<tr>
<td>March</td>
<td>4.96</td>
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<td>April</td>
<td>4.22</td>
<td>4.59</td>
<td>0.57</td>
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<tr>
<td>May</td>
<td>3.40</td>
<td></td>
<td>1.12</td>
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<tr>
<td>June</td>
<td>3.45</td>
<td>3.43</td>
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</tr>
<tr>
<td>July</td>
<td>2.67</td>
<td></td>
<td>0.00</td>
</tr>
<tr>
<td>August</td>
<td>3.08</td>
<td>2.88</td>
<td>0.00</td>
</tr>
<tr>
<td>September</td>
<td>5.60</td>
<td></td>
<td>0.00</td>
</tr>
<tr>
<td>October</td>
<td>7.83</td>
<td>6.71</td>
<td>0.00</td>
</tr>
<tr>
<td>November</td>
<td>8.21</td>
<td></td>
<td>0.00</td>
</tr>
<tr>
<td>December</td>
<td>7.08</td>
<td>7.64</td>
<td>0.00</td>
</tr>
</tbody>
</table>
Premiums May Alter Participation

Premium Rates

$6.50 to $7.00 coverage has $0.54 increase in Tier 2 premium

Payment Frequency

“Catastrophic Coverage”
MPP Decision Aid

Margin Protection Program Decision Tool

2009 Forecast vs Actual

Margin Protection Program Decision Tool
Dairy MPP

• Annual decision
• One data entry – production history
• Two choices
  • Coverage level - $4 to $8
  • Coverage percent of production

Additional Information

http://www.extension.umn.edu/agriculture/business/farm-bill/

http://www.farmdoc.illinois.edu/farmbilltoolbox/index.asp

http://www.dairymarkets.org/MPP/

http://agrisk.umn.edu/Library/Topics.aspx?LIB=AR&ID=40180
Future Training

• **Ag Professional meetings**
  – Nov. 6  Mankato
  – Nov. 7  Marshall
  – Nov. 13 Rochester
  – Nov. 18 Crookston
  – Nov. 19 Fergus Falls
  – Nov. 20 Freeport

Future Training

• **Producer meetings**
  – Dairy
    • 18 meetings
    • Sept. 29 to Nov. 7
  – Crops
    • 60 meetings
    • Probably starting in December
2014 Farm Bill

• Questions?