THE CONSERVATION RESERVE PROGRAM

A Look into the Cost and Benefits

By Colleen M. Buck
Food Security Act of 1985 signed by President Ronald Reagan
Pays rental payments to producers for retiring land
CRP is divided up into three regions
  - Northern Plains
    - Montana, North Dakota, South Dakota
  - Southern Plains
    - Colorado, Kansas, New Mexico, Oklahoma, Texas
  - Southwest Corn Belt
    - Iowa, Illinois, Missouri, Wisconsin
What are the environmental and economical costs and benefits of putting land into CRP for Montana producers?
Overview

- Sign-ups
  - General
  - Continuous
- Contracts
  - 10-15 years
- Rental Payments
  - Follow commodity prices
- Increased Commodity Prices
  - Early withdrawals from contracts
Definitions

- Eligible Producers- “owned and operated land for at least twelve months.”
- Eligible Land- “must be cropland that is planted or considered planted to an agriculture commodity four of the previous six crop years…and is physically and legally capable of being planted in a normal manner to an agriculture commodity.”
- Agriculture Commodity- “any crop planted and produced by annual tilling of the soil…”
Definitions Continued

- **Annual Rental Payment**: “the annual payment specified in the CRP contract that is made to a participant to compensate a participant for placing eligible land in the CRP.”

- **Cost-Share Payments**: “the payments made by the CCC to assist program participants in establishing the practices required in a contract.”

- **Payment Period**: “the 10-15 year contract period for which the participant receives an annual rental payment.”
Enrollment Considerations

Potential Problems

- Increasing Commodity Prices
- Reduced Acreage Capacity
  - 32 million acres
  - 4.6 million less than 2007
  - New Sign-Ups by 2012
Environmental Benefits

- Improved Soil Fertility
- Reduced Erosion
  - 450 million tons per year
- Improved Water Quality
- Wildlife Habitat
- Increased Wildlife
  - Sage Grouse, Deer, Pheasants
- Revenues from hunting
  - North Dakota Study
    - $12.8 million annually
    - $9.45/acre
Costs

- Opportunity
  - Production
  - Rental
- Improvement
  - Government assistance
- Production
  - After 10-15 years
Montana Situation

- 3 million acres in CRP
  - Grassland
  - Wetlands
  - Other Habitats
- 6,247 Farms
- 60.9 million acres in production
  - 29,800 farms
  - 2040 acres
- Seven regions
Montana Situation Continued

Wheat Yield Measured in Bu/Acre

Montana Average Wheat Bushels/Acre

Expenses

Data from USDA Statistics Site
Two sections of land (1280 acres)
- Average producing land
- Poor producing land

Three potential scenarios
- Plant all 1280 acres wheat
- Retire all 1280 acres
- Plant 640 acres of wheat and retire 640 acres

Data from 2000-2010
Formulas/Methods

- Wheat Production
  - Average Bu/acre * acres * Price/Bu
- Revenues from wheat production
  - Wheat Production – Expenses (operating costs)
- CRP Revenues
  - Acres * Rental Payment/acre
- Data was entered into these formulas and the results were analyzed to draw conclusions
## Results

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<tr>
<th>Year</th>
<th>Bu/Acre</th>
<th>Price/Bu</th>
<th>RP/Acre</th>
<th>Acre</th>
<th>Wheat Production</th>
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## Results in 2007 GDP $’s

- **Index Numbers:** 2002- 92.28, 2007- 106.71
- **Change in price levels:** \(\frac{(106.71-92.28)}{92.28}\) = .1564 or 15.64%
- **1.1564*66,814 = $77,262**
- **Calculation done with all 2002 numbers**

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CRP is economically beneficial with poor producing land

Average producing land will generate a profit

A portion of land in CRP will reduce production costs for average producing land

Even though CRP acreage is being reduced the environmental and economic benefits far outweigh the economic costs
• CRP percentage of Expenses
  • 2002 - 28.87%
  • 2007 - 26.47%
Recommendations

- The CRP can be a very beneficial program to be involved with provided the opportunity costs are minimized and profit is maximized.
- The format for the program is consistent but the payments are not.
- Each region and state has its own payments and prices.
- Look into CRP in your state to assess the benefits/costs.
Research Limitations

- Finding expenses
- Monetary value for environmental benefits
History

Thesis

What are the environmental and economical costs and benefits of putting land into CRP for Montana producers?

Overview of CRP

Problems

Environmental Benefits

Costs

Montana

Results

Conclusion
Bibliography

Questions?