

# CROP INSURANCE FOR MARYLAND FIELD CROPS AND LIVESTOCK

Multi-peril crop insurance is a valuable risk management tool which allows you to insure against losses on your farm due to adverse weather conditions, price fluctuations, and unavoidable pests and diseases. It shifts unavoidable production risks to an insurance company for the payment of a fixed amount of premium per acre.

The crop insurance program is the centerpiece of the Federal government's effort to provide a safety net for farmers. Crop insurance is available nationwide and gives farmers the freedom to choose the level of coverage they need based on their own risk experiences and preferences. A minimum level of crop insurance, called Catastrophic Risk Protection or CAT insurance, is available to all farmers regardless of farm size. There is no premium cost (all premiums are paid by the Federal government) for CAT coverage; there is however, an administrative fee of \$300 for each crop insured in the county. Higher levels of crop insurance (buy-up protection) are also federally subsidized, with farmers nationwide paying 33 to 62 percent of the actual cost of the insurance depending on the level of coverage selected. Farmers must be in conservation compliance, demonstrating that their operation conforms to highly erodible land and wetland conservation



COLLEGE OF  
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DEPARTMENT OF AGRICULTURAL AND  
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## AREC FACT SHEET

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provisions, in order to be eligible for crop insurance subsidies.

In recent years, around 900,000 acres in Maryland have been covered by crop insurance, with more than \$300 million of insurance protection purchased by farmers annually. Of the over \$200 million paid for crop losses in Maryland in the past 10 years, 70 percent was for drought and 12 percent was for excess moisture or flood (**Figure 1**).

Crop insurance policies are available for at least one commodity in every county in Maryland, with a total of 20 agricultural enterprises represented across the state. Field crops covered include corn, corn silage, soybeans, wheat, barley, spring oats, grain sorghum, forage seedings, forage production (including pasture), and tobacco. Field crops account for 99 percent of all the acres covered by crop insurance in Maryland and represent about 94 percent of the value of insurance protection sold on a per acre basis.

The purpose of this publication is to help you understand how crop insurance can help you manage risk by:

- Introducing the types of crop insurance plans available,
- Explaining how an actual production history (APH) is calculated,
- Discussing what is meant by insurance units,
- Illustrating how insurance premiums and loss payments are calculated,
- Comparing the benefits and costs of two commonly used crop insurance products for corn, soybeans, and wheat,
- Identifying crop insurance options for livestock producers, and
- Listing important crop insurance deadlines in Maryland.

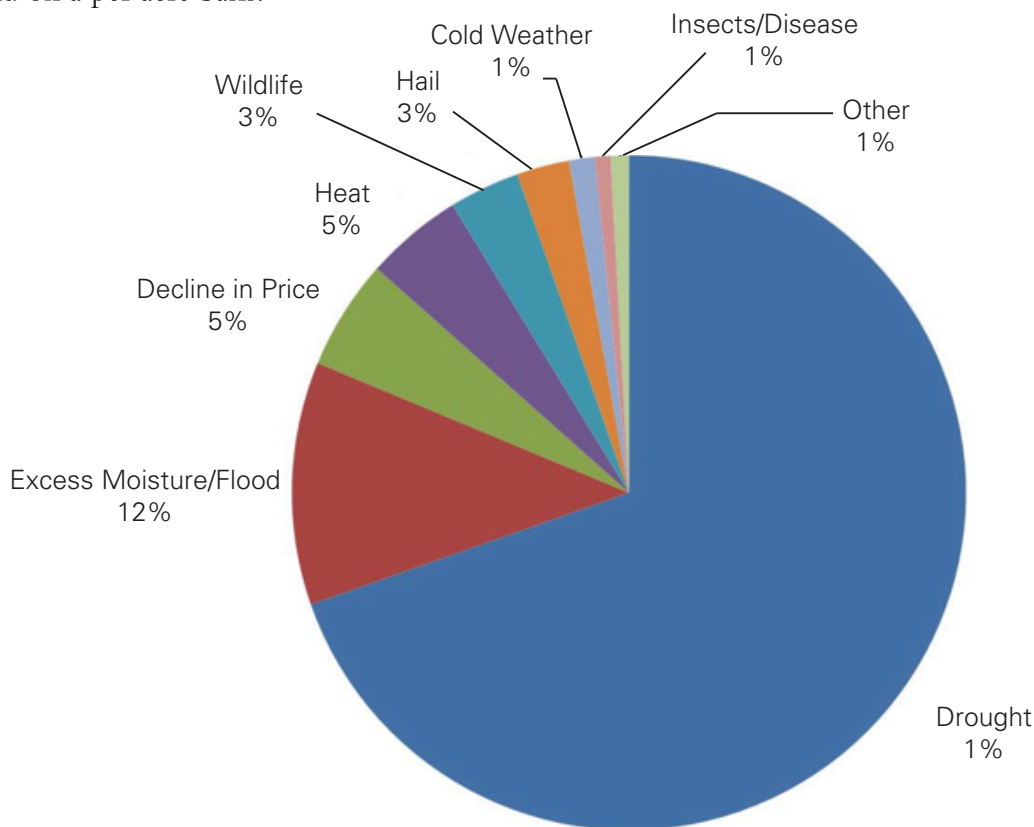


Figure 1. Causes of losses paid by crop insurance since 2005 in Maryland. Source: "Cause of Loss Historical Data Files" for the period from 2005 to 2014 <http://www.rma.usda.gov/data/cause.html>

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## TYPES OF CROP INSURANCE PLANS

Farmers who grow field crops have a wide range of crop insurance policies from which to choose. Yield protection coverage is available at CAT and buy-up levels for major crops in most counties. Revenue protection, dollar value, and group risk policies may also be available. Insurance protection is also available on a whole-farm basis (Whole-Farm Revenue Protection, or WFRP) in every county in Maryland.

If crop insurance is not available for a crop in your county, coverage may still be available via a written agreement. If you are in a county where premium rates are not on file for a crop which is insured elsewhere in the country, you may be able to get protection via a written agreement, providing that you have production records for the past three years, for that or a similar crop. Contact a crop insurance agent for more information on using written agreements.

Before considering a particular kind of crop insurance policy, you should first consider how much financial risk you are willing and able to bear and what you need to protect. Some common objectives are:

- Reducing year-to-year income variability,
- Replacing lost feed,
- Providing a minimum cash flow to cover input costs, and
- Securing adequate credit.

## Plans of Insurance Available

**Actual Production History (APH)** insurance protects you against yield losses due to natural causes such as drought, excessive moisture, hail, wind, frost, insects, and disease. You select the amount of average yield to insure, from 50 to 75 percent (and up to 85 percent for barley, corn, grain sorghum, soybeans, and wheat). You can also select between 55 and 100 percent of the crop price established annually by USDA's Risk Management Agency (RMA). If your harvested production plus any appraised production is less than the yield insured, you are paid an indemnity based on the difference. Indemnities are calculated by multiplying this difference by the percentage of the price you selected when crop insurance was purchased and by your share in the crop. APH policies are available in Maryland for oats (six counties) and tobacco (five counties). APH policies are also available in some Maryland counties for horticultural crops including apples, green peas, peaches, potatoes, processing beans, sweet corn, and tomatoes (fresh market and processing).

**Yield protection** insurance protects you in the same manner as APH insurance, except a projected price is used to determine your insurance coverage in addition to your yield. You can also select between 55 and 100 percent of the crop price determined annually by USDA-RMA (referred to as the "projected price" and based on Chicago Board of Trade (CBOT) futures prices for barley, corn, grain sorghum, soybeans, and wheat). If your production is less than the yield insured, you are paid for the loss based on the difference multiplied by the price you selected when the crop insurance was purchased. Yield protection policies are available in most Maryland counties for corn, soybean, and wheat and in some counties for barley, grain sorghum, and forage (alfalfa and alfalfa mixtures).





Before considering a particular kind of crop insurance policy, you should first consider how much financial risk you are willing and able to bear and what you need to protect. Common objectives include reducing year-to-year income variability, replacing lost feed, providing a minimum cash flow to cover input costs, and securing adequate credit.

### Catastrophic Risk Protection Endorsement (CAT)

is an additional minimal coverage level of crop insurance with per acre premiums that are fully subsidized by the Federal government. It was introduced in 1995 to replace ad hoc disaster assistance programs with an insurance-based producer safety net based on a farmer's own actual production history. For an administrative fee of \$300/crop/county, you get a crop insurance yield guarantee of 50 percent of your farm's actual production history approved yield, with any losses reimbursed at 55 percent of the established crop price election. Compared to higher levels of coverage, CAT provides only a low level of protection against yield losses, but is not available on all types of policies. For some diversified farmers, this low level of coverage may be enough to protect them against severe cash-flow shortfalls.

**Area Yield Protection (AYP)** is an insurance plan which provides coverage based on county yields and is part of the Area Risk Protection Insurance (ARPI) insurance policy. AYP insurance is available for wheat in four counties in Maryland. Under this insurance plan, when the county yield for the insured crop falls below your chosen trigger level, you receive a

loss payment. Final county yields are based on data from USDA's National Agricultural Statistics Service (NASS), crop insurance records, and other sources. Payments are not based on your individual yields. Coverage levels are available for 70 to 90 percent of the expected county yield (CAT coverage is also available under AYP). ARPI protection involves less paperwork and costs less than individual farm-level coverage. However, your individual crop losses may not be covered if the county yield does not show a similar level of loss. You are best protected with this type of insurance if your crop losses typically follow the same pattern as your county.

**Pasture, Rangeland, and Forage (PRF)** coverage is available for hay, and forage and apiculture coverage is available for honey bees and byproducts in all counties in Maryland under the Rainfall Index (RI) plan of insurance. Unlike traditional county-based ARPI, RI is based on where your farm is located in grids which measure 0.25 degrees of longitude and latitude (approximately 13.4 x 17.3 miles in Maryland). The RI policy protects you against yield losses related to lack of precipitation and uses a rainfall index as a measure of crop productivity. The rainfall index is based on National Oceanic and Atmospheric Administration Climate Prediction Center (NOAA CPC) data. You have the flexibility of insuring all or part of your acreage for all or part of the year, but you must choose at least two, 2-month time periods during a calendar year. You also select a productivity factor of between 60 and 150 percent of the county base value to match the amount of your protection to the value of the forages you grow. Loss payments are made under this insurance plan for every 2-month period you insured where the rainfall index for your grid is less than the coverage level you selected.

**Dollar Plan** coverage provides protection against declining value due to damage which causes a yield shortfall. The amount of insurance is based on the typical cost of growing a crop in a specific area. A loss occurs when the annual value of the crop is less than the amount of insurance. The maximum dollar amount of insurance is stated on the actuarial document.



You may select a percent of the maximum dollar amount equal to CAT (catastrophic level of coverage) or higher coverage levels. The Dollar Plan is available for forage-seeding in 10 counties, fresh-market sweet corn in 9 counties, and nursery in all 23 counties (plus Baltimore City) in Maryland.

**Revenue protection** plans that provide protection against both yield and price risk are available for corn, grain sorghum, soybean, barley, and wheat. You select a level of revenue to protect based on your price and yield expectations. Losses are paid if your revenues fall below the revenue guarantee based on CBOT prices.



PHOTO: EDWIN REMSBERG

Two revenue plans are available. The first plan of insurance is called Revenue Protection which uses the higher of a projected (early-season) or harvest CBOT futures price to set the revenue guarantee. Under this insurance plan, harvest versus early-season projected prices are covered for up to 100% increases and unlimited decreases. The second plan of insurance is called Revenue Protection with Harvest Price Exclusion which for a reduced premium sets your revenue guarantee at the projected early-season price only. The revenue counting against your guarantee for both revenue programs is your production multiplied by the applicable price based on CBOT prices. Revenue protection coverage in Maryland is available for barley (18 counties), corn (23 counties), soybean (22 counties), wheat (23 counties), and grain sorghum (16 counties). The CAT coverage level is not available for the Revenue Protection insurance plan.

**Whole-Farm Revenue Protection (WFRP)** policies insure the revenue of your entire farm rather than an individual crop by guaranteeing a percentage of your approved farm revenue. You can buy WFRP alone or with other buy-up level crop insurance policies. For example, if you raise corn and soybeans along with livestock and other crops, you could still cover your corn and soybeans under individual crop insurance policies and use WFRP as an umbrella policy over the rest of your operation. You cannot use CAT coverage with WFRP.

WFRP uses information from the past five consecutive years of your Schedule F tax records to calculate the policy's approved revenue guarantee. Operations that have expanded over time may be allowed to increase the approved revenue amount based on an indexing procedure. Depending on the number of commodities grown, you have the choice of coverage between 50 and 85% of your approved revenue. Coverage and premium costs depend on the level of diversification in your operation; the maximum level of insured revenue is \$8.5 million. To be eligible for WFRP coverage, no more than 50 percent of total revenue on your farm can be from products purchased for resale. WFRP also provides replant coverage if it not already covered under an underlying individual crop policy.

Claims for losses under WFRP are settled after taxes are filed for the insurance year. WFRP is available in every Maryland county (including Baltimore City); the sign-up deadline is March 15.

***Whole-Farm Revenue Protection (WFRP) policies insure the revenue of your entire farm rather than an individual crop by guaranteeing a percentage of your approved farm revenue. You can buy WFRP alone or with other buy-up level crop insurance policies.***

## Other Coverage Options

**Prevented Planting Coverage** provides protection whenever an eligible crop cannot be planted because of adverse weather conditions, provided it is a condition general to the geographic area. In Maryland, prevented planting coverage is automatically part of all individual barley, corn, soybean, grain sorghum, oat, wheat, and dry bean policies, including CAT policies. Basic prevented planting coverage provides an amount of protection equal to 60 percent of the insurance guarantee; higher levels of protection at the 65- and 70-percent level are available for additional premium. Prevented planting coverage is not available on area plans.

**Supplemental Coverage Option (SCO)** is a new crop insurance option which provides additional county-level coverage for a portion of your underlying crop insurance policy deductible for corn, soybeans, oats, wheat, barley, and grain sorghum. SCO is also available for apples, peaches, green peas, processing beans, and processing sweet corn. You buy SCO as an endorsement to your Yield Protection, Revenue Protection, Revenue Protection with Harvest Price Exclusion policy, or Actual Production History. The amount of SCO coverage you can purchase is based on the level of protection in your individual crop insurance policy. SCO coverage begins to pay when the county average yield or revenue for the crop falls below 86 percent of its expected level. The maximum amount of your SCO coverage is paid out when the county average yield or revenue falls to the coverage level of your underlying crop insurance policy. The Federal government pays 65 percent of the premium cost for SCO. If you elected to participate in the Agriculture Risk Coverage (ARC) program (a new program started under the 2014 Farm Bill and administered by the USDA-Farm Service Agency), you are not eligible for SCO coverage.

## DETERMINING YOUR ACTUAL PRODUCTION HISTORY

The first step in participating in the crop insurance program is to establish your Actual Production History (APH). It is used to set the guarantees under both the yield and revenue plans of insurance. Assessing the need for crop insurance protection must be based on your farm's production potential and risk exposure. It is a good idea to establish the APH for each insurance unit with a crop insurance agent long before the sign-up date. An APH yield is needed even if you are only interested in the Catastrophic Risk Protection (CAT) level of coverage. APH will also allow you to evaluate higher levels of coverage under the yield and revenue protection insurance plans if they are available in your county.

Establishing an APH yield requires a minimum of four years of records for each crop and land unit to be insured. Information used to prove crop yields include verifiable sale receipts, farm or commercial storage records, and feed consumption records. The records must be for continuous years, starting with the most recent year and continuing back in time. Once a missing year is reached, no yield data before that year may be used. Dropping out a yield from one year because of poor production is not allowed. If the crop to be insured was not planted in a certain year, this is not considered a missing year of records. In that case, a zero acreage report is submitted and continuous records are maintained even without data for that year. This is especially important for farmers who rotate crops.



PHOTO: EDWIN REMSBERG

Establishing an APH yield requires a minimum of four years of records for each crop and land unit to be insured. If at least four successive years of records are not available, a transitional or T-yield is substituted for each missing year.

If at least four successive years of records are not available, a transitional or T-yield is substituted for each missing year. Each insured crop within a county has an assigned T-yield, provided in the actuarial documents. It is usually based on the latest available 10-year county average yield. Farmers with no records at all are assigned 65 percent of the T-yield as their APH yield. Farmers with one year of records receive 80 percent of the T-yield for the other three years to calculate their APH yield. Farmers with two years of records receive 90 percent of the T-yield for the other two years. Farmers with three years of records receive 100 percent of the T-yield for the one remaining year. Once each year has been assigned a yield, the APH is an average of the four yields. If only a couple years of yield records exist, the APH yield may be considerably below the actual expected yield, because of the reduced T-yields.

New farmers or those who have never planted the crop in the county to be insured receive 100 percent of the T-yield for determining their APH yield. If they continue to plant the crop for four years, the T-yields will be replaced with the actual production each year. New farmers who have been closely associated with a particular farming operation, such as children taking over a family farm who have previously been involved in the management of the farm, may use the previous operator's records to establish their APH yield.

When four years of production history are available, your APH is the average of all of the yearly reported yields. Additional years of data will be averaged into your APH yield until 10 years are included. Once 10 years of yields are available, your APH becomes a moving 10-year average. When a new year of production history is added, the oldest record is dropped from the APH calculation.

Generally, when a new yield record is added to your APH history, the APH cannot decrease by more than 10 percent in any one year. The APH cannot fall to less than 70 percent of the T-yield for farmers with only one year of yield records, 75 percent for farmers with two to four years of yield records, and 80 percent

for farmers with five or more years of yield records. This “floor” prevents one year with a severe crop failure from having a disproportionately large influence on your APH yield, especially when only a few years of yield records are available. There is also an option to substitute 60 percent of the T-yield for actual yields which are less than 60 percent of the T-yield (80 percent for new and beginning farmers). There is a slightly higher premium when this option is selected.

### **Trend-Adjusted Actual Production History (TA)**

Maryland farmers have the option to use Trend Adjusted Actual Production History (TA) yields to increase their APH yields for corn, soybean, and wheat when yields have increased through time in the county. This adjustment better reflects increases in yield experienced by farmers using certain farming practices, including hybrids with modified genetic traits. The TA option has been available to Maryland farmers since 2013.

Because the APH is based on 4 to 10 years of a yield data, producers with long yield histories can be penalized because their older yields lag behind their more recent ones. In this situation, producers with less yield history can actually have higher average yields. The TA factor was designed to overcome this problem. It adjusts eligible yields, in qualifying APH databases, to reflect long-term increases in county historical yields.

The TA factor is equal to the estimated annual increase in county yield, and is based on county average yields determined by USDA-NASS each year. Each yield reported for the individual insurance unit's APH history is adjusted upward by the trend adjustment factor.

The TA option is available for either yield protection or revenue protection policies, at all levels of guarantee. A producer who wishes to participate must farm in an eligible county. Currently, 23 Maryland counties have a TA yield factor for corn, 21 counties have a TA yield factor for soybeans, and 15 counties have a TA yield factor for wheat. The producer would also need to have an actual yield in at least one of the past four



years. Producers need to choose the TA yield endorsement for their existing or new insurance policy by the applicable sales closing date for the crop. The TA option is not available for corn silage, organic corn or soybeans, and CAT policies.

## SELECTING AN INSURANCE UNIT FOR CROP INSURANCE

You have several options on how to divide your land to determine APH yields, loss payments, and premiums under crop insurance. Each parcel of land for which premiums are calculated and for which potential insurance claims are made is called an “insurance unit.” Unit types include basic, optional, and enterprise units. Your farming operation may contain several insurance units. In this situation, it is possible for you to have a crop loss on one unit and receive a loss payment, while the other units on the same farm produce a record crop. As a result, you may prefer to divide your land into as many units as possible. Check with a crop insurance agent to find out how many and what type of insurance units your crops qualify for, and how this could affect your premiums.



PHOTO: EDWIN REMSBERG

Each parcel of land for which premiums are calculated and potential insurance claims are made is called an “insurance unit.” Check with a crop insurance agent to find out how many and what type of insurance units your crops qualify for, and how this could affect your premiums.

**Basic Units.** You receive one basic unit for the land you own and cash rent within a county. You also

receive one basic unit for each landlord or tenant with whom you crop share rent. A crop share landowner or tenant may also insure their own interest in the crop as a separate unit. Each different crop creates a separate unit, and tracts of land in different counties must be insured as separate units. Each crop/county may have a different type of policy and level of coverage, and could receive a loss payment separate from the other units. Separate production records must be kept for each basic unit. Insuring all acres as basic units entitles producers to a 10-percent discount on their premiums.

**Optional Units.** Basic units may often be divided into optional units when a crop is grown under distinctly different production practices. For example, a farmer with both irrigated and non-irrigated acres of the same crop may qualify for optional units. Optional units may also allow for coverage choices in relation to yield variability in different units due to soil type or field maintenance history. Optional units may also be established by FSA farm serial number (FSN) or Written Unit Agreements for situations such as section equivalents into square mile section equivalents similar to the U.S. Rectangular Survey of the Midwest and large operations with more than 640 acres of cropland in an existing unit. Separate APH records must be reported for each optional unit, and production records must be maintained. You would not receive the 10-percent premium discount allowed for basic units.

**Enterprise Units.** Setting up your crop insurance coverage as enterprise units is another way to receive additional premium discounts of as much as 50%. An enterprise unit combines all acres of a particular crop within a county in which you have a financial interest into a single unit, regardless of whether they are owned or rented, or how many landlords are involved. These units are available for revenue and yield protection plans for barley, corn, grain sorghum, soybeans, and wheat. They may also be available for other crops if allowed in the actuarial documents for your county.

## ***Setting up your crop insurance coverage as enterprise units is another way to receive additional premium discounts of as much as 50%.***

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To qualify for enterprise units, you must:

- Be eligible for two or more optional units (usually two or more FSNs or by written agreement resulting in section equivalents or oversized FSNs),
- Have at least two of the eligible optional units contain the lesser of 20 acres or 20 percent of the insured crop acreage of the total enterprise unit (multiple optional units may be combined to meet this requirement), and
- Combine all your acreage of the crop in the county into one unit.

Because enterprise units are usually larger than basic units or optional units, yields tend to be less variable and are less likely to trigger a loss payment in a given year. This can be partially mitigated by selecting higher levels of coverage from the premium savings. Also, when widespread severe disasters occur which would trigger a loss on all optional units for the crop, loss payments would be similar for optional and enterprise unit structures.

### **HOW CROP INSURANCE PREMIUMS ARE CALCULATED**

Crop insurance premiums depend on your APH yield, the coverage level you prefer, the price election you select, the unit structure, and the county premium rate for the insurance plan you chose. Based on the level of coverage and the crop insured, you pay between 33 and 62 percent of the calculated premium, with the Federal government paying the balance. If you use basic or enterprise units rather than optional units, you are eligible for additional premium discounts.

For yield protection policies you select a coverage level of 50, 55, 60, 65, 70, or 75 percent of your APH yield (80- and 85-percent coverage levels are also available for corn, grain sorghum, soybeans, wheat, and barley). By multiplying your APH yield by the coverage level you select, you calculate your yield guarantee, which is the trigger level for receiving a payment for yield losses from the insurance company. For revenue protection policies (available only for corn, grain sorghum, soybeans, wheat, and barley) you select a coverage level of 50, 55, 60, 65, 70, 75, 80 and 85 percent of your expected revenue. By multiplying your expected revenue (APH yield times the projected futures price) by the coverage level you select, you calculate your minimum revenue guarantee, which is the trigger level for receiving a payment for revenue losses from the insurance company.

In a sense, selecting a coverage level establishes your “deductible,” similar to the deductible on your automobile or homeowners insurance. For example, if a coverage level of 75 percent is selected, then you “self-insure” for the first 25 percent of the loss. If the loss was more than 25 percent, your crop insurance would cover the difference. Like other types of insurance, larger deductibles have lower premiums, but also leave you with more risk. You also have some choice of the established price election (percentage of the established crop price for non-revenue insurance plans), depending on the yield guarantee selected. Selecting a lower price election reduces your crop insurance premiums. In practice, however, most farmers select the 100-percent price election.

An important thing to remember about crop insurance premiums is that premium rates are directly tied to your APH yield and projected price or price elections for the crop you are insuring. If commodity prices increase the projected price or price elections, then your amount of crop insurance protection and premiums will also increase.

**Some important crop insurance equations:**

***Yield protection policy guarantees and premiums:***

Yield guarantee = APH yield x coverage level

Total premium/acre = Yield guarantee x price election x premium rate

Subsidy amount = Total premium/acre x subsidy factor

Producer premium/acre = Total premium/acre – subsidy amount

***Yield protection policy loss payments:***

If actual yield is less than the yield guarantee:

Loss payment = (yield guarantee – actual production) x price election

If actual yield is equal to or greater than the yield guarantee: Loss payment = 0

***Revenue protection policy guarantees and premiums:***

Revenue guarantee = APH yield x coverage level x projected price based on CBOT futures price

Total premium/acre = Revenue guarantee x premium rate

Subsidy amount = Total premium/acre x subsidy factor

Producer premium/acre = Total premium/acre – subsidy amount

***Revenue protection policy loss payments:***

If you purchased a “Revenue Protection with Harvest Price Exclusion” policy, your revenue guarantee is set by the projected price prior to the sales closing date. For the “Revenue Protection” policy, the revenue guarantee is recalculated (no additional premium) if the harvest price based on CBOT futures is greater than the projected price:

Revenue guarantee = APH yield x coverage level x applicable price based on CBOT futures price

If actual revenue is less than the revenue guarantee:

Loss payment = Revenue guarantee – actual revenue

If actual revenue is equal to or greater than the revenue guarantee: Loss payment = 0

***Dollar plan guarantees and premiums:***

Dollar guarantee = County Reference Maximum Dollar Amount of coverage x coverage level

Total premium/acre = Dollar guarantee x premium rate

Subsidy amount = Total premium/acre x subsidy factor

Producer premium/acre = Total premium/acre – subsidy amount

***Dollar plan loss payments:***

If the value of production to count is less than the Dollar guarantee:

Loss payment = Dollar guarantee – value of production to count

If the value of production to count is greater than or equal to the Dollar guarantee: Loss payment = 0



## COMPARING CROP INSURANCE ALTERNATIVES FOR FIELD CROPS

To demonstrate the different types of crop insurance coverage available, farmers wishing to insure corn in Talbot County, soybeans in Queen Anne's County, and wheat in Caroline County will be used as examples (Table 1). Each farmer wants to compare the cost and protection afforded by various levels of yield and revenue protection insurance versus having no crop insurance. The examples assume hypothetical indemnity prices and reflect premiums that assume the farmer selected optional units. APH yields of 130 bushels per acre for corn, 45 bushels for soybeans, and 75 bushels for wheat were used in the examples.

The top section of Table 1 shows how yield protection and revenue protection insurance protect the cash flow for the corn grower in Talbot County. In this example, CAT would only pay the farmer \$148/acre for a total crop loss. Higher levels of yield and revenue protection provide better cash-flow protection for this farmer. A minimum cash flow of \$265 to \$433/acre is guaranteed in exchange for a producer-paid premium of \$3.42 to \$36.47/acre.

The middle section of Table 1 shows how yield protection and revenue protection insurance protect the cash flow for the soybean producer in Queen Anne's County. CAT would only pay this farmer \$121/acre for a total crop loss. Higher levels of yield and revenue protection provide better cash-flow protection for this farmer. A minimum cash flow of \$218 to \$359/acre is guaranteed in exchange for a producer-paid premium of \$1.44 to \$21.90/acre.

The bottom section of Table 1 illustrates how yield protection and revenue protection insurance protect the cash flow for the wheat farmer in Caroline County. In this example, CAT would only pay the farmer \$122/acre for a total crop loss. Higher levels of yield and revenue protection provide better cash-flow protection for this farmer. A minimum cash flow of \$220 to \$365/acre is guaranteed in exchange for a producer-paid premium of \$1.84 to \$20.94/acre.

Under either the yield or revenue protection plans, the farmer is guaranteed a less-variable cash flow as the level of crop insurance protection goes up. An important distinction is that yield protection only provides protection against yield losses while revenue protection provides protection against both yield losses and price declines. Revenue insurance also provides more protection when futures price are higher at harvest than the projected price, unless the less expensive revenue protection with harvest price exclusion was purchased. When harvest price is higher, the higher futures price is used when the farmer's revenue guarantee is determined, but the premium is locked in using the lower projected price. In years when the harvest time futures price is less than the early price (set from futures prices in February), the effective loss payment trigger point will be higher than the selected level of coverage.

The only advantage of having no crop insurance is saving the premium cost, but this is lessened because crop insurance is a deductible business expense. Elimination of this cost would have a minor positive impact on your cash flow during good years and a potentially disastrous impact on your cash flow in a poor year. Choosing a crop insurance plan and level of coverage is a personal business decision. Not everyone feels the same about production risk and everyone has different financial resources. One way to choose would be to determine how much cash-flow protection you need and choose a coverage level, price election, and insurance unit that accomplishes your goal.

***The only advantage of having no crop insurance is saving the premium cost, but this is lessened because crop insurance is a deductible business expense. Elimination of this expense would have a minor positive impact on your cash flow during good years and a potentially disastrous impact on your cash flow in a poor year.***

**Table 1. HOW CROP INSURANCE PROTECTS YOUR CASH FLOW.** Source, USDA-RMA, Quick Estimate Cost Estimator.  
Impact of coverage level on premium cost and minimum cash flow (\$/acre).

**Corn example:** Premiums are for a 130 bushel APH yield in Talbot County, Maryland at a projected price of \$4.15 per bushel based on the Chicago Board of Trade.

-----Yield protection-----					-----Revenue protection-----			Supplemental Coverage Option	
Coverage Level <sup>1</sup>	Application Fee	Farmer-Paid Premium <sup>2</sup>	Yield Guarantee	Minimum Cash Flow <sup>3</sup>	Farmer Paid Premium	Revenue Guarantee <sup>4</sup>	Minimum Cash Flow <sup>3</sup>	SCO Premium <sup>5</sup>	Additional Cash Flow Protection
CAT	\$300	\$0.00	65.0	\$148.36	n/a	\$0.00	\$0.00	n/a	n/a
50%	\$30	\$3.42	65.0	\$266.33	\$4.23	\$269.75	\$265.52	\$13.40	\$194.22
55%	\$30	\$4.76	71.5	\$291.97	\$6.02	\$269.73	\$290.71	\$12.58	\$167.25
60%	\$30	\$5.94	78.0	\$317.76	\$7.69	\$323.70	\$316.01	\$11.57	\$140.27
65%	\$30	\$8.29	84.5	\$342.39	\$11.02	\$350.68	\$339.66	\$10.16	\$113.30
70%	\$30	\$10.01	91.0	\$367.64	\$13.74	\$377.65	\$363.91	\$8.47	\$86.32
75%	\$30	\$13.09	97.5	\$391.54	\$18.49	\$404.63	\$386.14	\$6.38	\$59.35
80%	\$30	\$17.84	104.0	\$413.76	\$25.82	\$431.60	\$405.78	\$3.80	\$32.37
85%	\$30	\$24.83	110.5	\$433.75	\$36.47	\$458.58	\$422.11	\$0.69	\$5.40

**Soybean example:** Premiums are for a 45 bushel APH yield in Queen Anne's County, Maryland at a projected price of \$9.78 per bushel based on the Chicago Board of Trade.

-----Yield protection-----					-----Revenue protection-----			Supplemental Coverage Option	
Coverage Level <sup>1</sup>	Application Fee	Farmer-Paid Premium <sup>2</sup>	Yield Guarantee	Minimum Cash Flow <sup>3</sup>	Farmer Paid Premium	Revenue Guarantee <sup>4</sup>	Minimum Cash Flow <sup>3</sup>	SCO Premium <sup>5</sup>	Additional Cash Flow Protection
CAT	\$300	\$0.00	22.5	\$121.03	n/a	\$0.00	\$0.00	n/a	n/a
50%	\$30	\$1.44	22.5	\$218.61	\$1.74	\$220.05	\$218.31	\$3.52	\$158.44
55%	\$30	\$2.13	24.8	\$240.41	\$2.73	\$242.54	\$239.81	\$3.52	\$136.70
60%	\$30	\$2.78	27.0	\$261.28	\$3.77	\$264.06	\$260.29	\$3.50	\$114.43
65%	\$30	\$4.04	29.3	\$282.51	\$5.68	\$286.55	\$280.87	\$3.47	\$92.58
70%	\$30	\$5.03	31.5	\$303.04	\$7.20	\$308.07	\$300.87	\$3.07	\$70.42
75%	\$30	\$6.78	33.8	\$323.78	\$9.85	\$330.56	\$320.71	\$2.47	\$48.48
80%	\$30	\$9.71	36.0	\$342.37	\$14.26	\$352.08	\$337.82	\$1.48	\$26.41
85%	\$30	\$15.18	38.3	\$359.39	\$21.90	\$374.57	\$352.67	\$0.31	\$4.41

**Wheat example:** Premiums are for a 75 bushel APH yield in Caroline County, Maryland at a projected price of \$5.93 per bushel based on the Chicago Board of Trade.

-----Yield protection-----					-----Revenue protection-----			Supplemental Coverage Option	
Coverage Level <sup>1</sup>	Application Fee	Farmer-Paid Premium <sup>2</sup>	Yield Guarantee	Minimum Cash Flow <sup>3</sup>	Farmer Paid Premium	Revenue Guarantee <sup>4</sup>	Minimum Cash Flow <sup>3</sup>	SCO Premium <sup>5</sup>	Additional Cash Flow Protection
CAT	\$300	\$0.00	37.5	\$121.31	n/a	\$0.00	\$0.00	n/a	n/a
50%	\$30	\$1.84	37.5	\$220.54	\$2.30	\$222.38	\$220.08	\$3.79	\$160.11
55%	\$30	\$2.52	41.3	\$242.39	\$3.31	\$244.91	\$241.60	\$3.72	\$138.04
60%	\$30	\$3.11	45.0	\$263.74	\$4.30	\$266.85	\$262.55	\$3.60	\$115.64
65%	\$30	\$4.30	48.8	\$285.08	\$6.26	\$289.38	\$283.12	\$3.41	\$93.49
70%	\$30	\$5.15	52.5	\$306.18	\$7.79	\$311.33	\$303.54	\$3.08	\$71.16
75%	\$30	\$6.71	56.3	\$327.15	\$10.57	\$333.86	\$323.29	\$2.57	\$48.97
80%	\$30	\$9.09	60.0	\$346.71	\$14.76	\$355.80	\$341.04	\$1.70	\$26.69
85%	\$30	\$12.63	63.8	\$365.70	\$20.94	\$378.33	\$357.39	\$0.34	\$4.45

**Notes:**

1. CAT: catastrophic crop insurance (yield protection only), which provides protection for losses greater than 50% at 55% of the indemnity price (in the examples, \$2.28 for corn, \$5.38 for soybean, and \$3.26 for wheat), is available at no premium cost to the farmer (flat application fee of \$300/crop/county regardless of acreage covered). Higher levels of coverage ("buy-up protection") are available for either yield protection or revenue protection insurance for additional premium (\$30/crop/county application fee).
2. Premiums quoted here reflect the example county and selection of optional units. Your premiums may be higher or lower depending on the county where you farm and the unit structure you select. Selecting basic units would lower the premium by 10%. For this example, selecting enterprise units could lower the premium by 30-55% depending on type of protection and coverage level. Premiums for revenue protection with the harvest price exclusion policies are around 20% less than for the revenue protection policy in this example.
3. Minimum cash flow is the dollar value of the yield or revenue guarantee less premium cost.
4. Revenue guarantee is based on the projected price for each commodity. If the harvest price based on CBOT futures is higher than the projected price, then the revenue guarantee will also increase (unless you choose Revenue Protection with Harvest Price Exclusion).
5. The SCO premium is in addition to the premium for either yield protection or revenue protection. SCO coverage is only available to farmers who did not sign up for USDA-FSA's Agricultural Risk Coverage (ARC).

## CROP INSURANCE FOR LIVESTOCK PRODUCERS

### Coverages for Forages

Crop insurance products have also been developed for farmers who produce forages for on-farm use. Yield protection coverage is available in 23 Maryland counties for corn silage and the APH plan if insurance is available for 10 counties for forage production (alfalfa and alfalfa mixtures). Forage seedlings containing at least 50 percent approved legumes may be insured under the Dollar Plan. Hay and pasture acreage can also be insured under the PRF Rainfall Index plan of insurance.

Corn silage and forage producers who want yield protection coverage will need to develop an APH yield and keep accurate farm management records on total acres and production (except for ARPI plans). Because of the numerous ways forages can be harvested and stored, and depending on when they are fed, field visits by a representative of your crop insurance company are often required to verify production. Field visits are required if production cannot be measured after harvest (i.e., storage of high-moisture corn or silage in airtight storage structures). Records which can help establish APH yields for forages include acreage data, field harvest records, livestock feeding records (including grazing data), silo measurements, inventory records, and sales receipts. If you anticipate a loss, contact your crop insurance agent

immediately to file notice of damage, and ask for instructions on how to proceed. It may be necessary for an adjuster to make pre-harvest field inspection or to leave unharvested sample areas for later inspection.

Producers may harvest grain-type corn insured under the revenue or yield protection plans, insured as grain, for silage. The producer may elect to insure corn for silage with a tonnage guarantee (optional for grain type corn, mandatory for silage type corn which does not produce ears). Under the yield protection plan, on the acreage-reporting date you must indicate which acreage you choose to insure as silage and which acreage you choose to insure as grain. The insurance provider must be notified before you harvest any acreage in a manner other than as originally reported for coverage (for example, it was reported as grain, but will be harvested for silage, or it was reported as silage, but will be harvested for grain). If there is a production loss, appraisals will be made according to how you reported the acreage for coverage as grain or silage. If you reported acreage as silage and the crop has a low grain content (less than 4.5 bu./ton) due to insurable causes, a pre-harvest appraisal should be requested as you may be eligible for quality adjustment. Although most counties have crop insurance for grain sorghum, only those hybrids planted for harvest as grain are covered. Dual-purpose varieties which can be harvested for either grain or silage are not insurable.



Yield protection policies for forages are available in 10 counties in Maryland, but only for alfalfa and alfalfa mixtures. Premiums are based on the amount of alfalfa in the field. One set of rates applies to pure stands of alfalfa or a stand of alfalfa and grass in which 60 percent or more of ground cover is alfalfa, while the other applies to mixed stands of alfalfa and grass in which alfalfa makes up more than 25 percent but less than 60 percent of the ground cover. Stands with less than 25 percent alfalfa are not insurable. Forage production policies have a minimum requirement for an adequate stand based on the number of living plants per square foot after the year of establishment. For pure alfalfa stands, an adequate stand is 9.0 alfalfa plants per square foot the first year, 6.0 plants the second year, and 4.5 plants the third and later years. For an alfalfa/grass mixture, an adequate stand is defined as 6.0 alfalfa plants per square foot the first year, 4.0 plants the second year, and 3.0 the third and later years.

The grid-based PRF Rainfall Index policy available throughout Maryland may be a good choice for insuring your hay crops and pastures. Advantages of this coverage include flexibility of when to insure during the year and how much to insure, as you are not required to insure all your acreage. PRF Rainfall Index also allows you to adjust coverage to better match the value of your crop and the productive capacity of your land.

Forage seeding policies are available in 10 Maryland counties and provide a dollar amount of insurance. This coverage is available for both fall-seeded and spring-seeded fields. To be insurable, at least 50 percent of the seed mixture use must be alfalfa, clover, Birdsfoot trefoil, or any locally recognized and approved legume species, by weight. Acreage covered by a forage seeding policy also cannot be grazed during the insurance period.

### Coverages for Livestock

Dairy and swine producers also have insurance products available to manage their market risk. The Livestock Gross Margin (LGM) for dairy insurance protects from unexpected declines in income over feed costs (IOFC, or the market value of your milk minus feed costs). It uses adjusted futures prices to determine the difference between expected gross margin (insurance guarantee) and your actual gross margin. You can purchase LGM-Dairy insurance monthly and have the option to buy protection which provides a safety net of minimum IOFC for from one to ten months into the future. The insurance guarantee is met by either income from the market place and/or an insurance indemnity. The monthly enrollment period is the last business Friday and Saturday in the month for January through October, and the third week in November and December.



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The LGM-Swine program protects against the loss of gross margin (market value of livestock minus feed costs) by using futures prices to determine the expected gross margin and the actual gross margin. The LGM-Swine policy can be used to protect farrow-to-finish, feeder pig-to-finish, and segregated early weaned (SEW) operations. LGM-Swine is sold monthly and each insurance period is six months long and overlaps other insurance periods. Coverage begins one month after you buy a policy so coverage is available only for the last five months of the period. The insurance policy is continuous and renews automatically. You choose a deductible of from \$0 to \$20, in \$2 increments, with this policy.

## CROP INSURANCE BENEFITS FOR BEGINNING FARMERS

If you are starting your own farming business, you may be eligible for additional crop insurance benefits. These include: 1) eligibility for an additional 10% premium subsidy for buy-up coverage, 2) exemption from the administrative fee for catastrophic (CAT) and buy-up policies, 3) use of the production history of an existing farming operation if you were previously involved in the decision making or physical activities of the farm, and 4) use of an 80% yield plug for replacing low APH yields rather than the 60% yield plug available to everyone else.

These benefits are available if you and all others with a beneficial interest (10 percent or more) in the business have not actively operated or managed a farm with an insurable interest in any crop or livestock for more than five years. You can exclude a crop year's insurable interest if you were under age 18, enrolled in post-secondary studies, or on active duty in the U.S. military.



PHOTO: EDWIN REMSBERG

If you are starting your own farm business, you may be eligible for additional crop insurance benefits, including eligibility for an additional 10% premium subsidy for buy-up coverage, exemption from the administrative fee for CAT and buy-up policies, use of the APH of an existing farming operation if you were previously involved, and use of an 80% yield plug for replacing low APH yields rather than the 60% yield plug available to others.

## HOW CAN I FIND A CROP INSURANCE AGENT?

- Ask your neighbors for their recommendations. Other farmers are one of the best sources of information on where to find a knowledgeable crop insurance agent.
- Check with the insurance agency where you purchase other types of insurance. Often you can obtain crop insurance through an agent you already use for your farm, automobile, liability, fire, health, or life insurance needs. Many insurance agencies have agents who specialize in crop insurance.
- Check with businesses or organizations you use for farm business management services. Your banker, cooperative, or farm organization may be able to recommend insurance agencies who handle crop insurance.
- Use the USDA-RMA web site (<http://www.rma.usda.gov/tools/agent.html>) to locate an agent in your area.

Table 2. IMPORTANT DEADLINES FOR FIELD CROP INSURANCE IN MARYLAND. Source, USDA-RMA, Quick Estimate Cost Estimator.

<u>Insurance Plan</u>	<u>Type of Insurance<sup>1</sup></u>	<u>Sales Closing</u>	<u>Final Planting<sup>2</sup></u>	<u>Acreage Reporting</u>	<u>Billing Date</u>	<u>End of Insurance Period</u>
Whole Farm Revenue Protection	Whole Farm	3/15	--	7/15	8/15 or 12/1	--
Apiculture (rainfall index)	ARPI-PRF	11/15	--	11/15	9/1	12/31
Apples	APH	11/20	--	1/15	8/15	11/5
Barley (winter	Yield, Revenue	9/30	10/31	12/15	7/1	7/31
Corn	Yield, Revenue	3/15	6/10	7/15	8/15	10/20 (silage) 12/10 (grain)
Livestock Gross Margin (Dairy, Swine)	LGM	Monthly	--	--	At sign up	--
Forage Production	APH	9/30	--	12/15	7/1	10/15★
Forage Seeding	Dollar	7/31 (fall) 3/15 (spring)	9/10 4/30	12/15 5/15	7/1 7/1	10/15★ 5/21★
Grain Sorghum	Yield, Revenue	3/15	6/20	7/15	8/15	12/10
Green Peas	APH	2/15	4/30 or 5/10	5/15	8/15	9/15
Nursery (field grown and container)	Dollar	5/1★★	--	--	3/1	5/21★
Oats (spring)	APH	3/15	5/10	7/15	8/15	10/31
Pasture and Hay (rainfall index)	ARPI-PRF	11/15	--	11/15	9/1	12/31
Peaches	APH	11/20	--	1/15	8/15	9/30
Potatoes	APH	1/31	5/5	3/15	8/15	10/15
Processing Beans (insured by type)	APH	3/15	7/10, 7/31 or 8/10	8/15	9/15	10/15
Soybeans	Yield, Revenue	3/15	6/20	7/15	8/15	12/10
Sweet Corn (fresh-market)	Dollar	3/15	6/30	7/15	10/1	9/30
Sweet Corn (processing)	APH	3/15	6/30	7/15	8/15	9/20
Tobacco (Maryland type)	APH	3/15	6/25	7/15	1/1	5/15★
Tomatoes (fresh-market)	APH	3/15	5/10	6/15	8/15	10/10
Tomatoes (processing)	APH	3/15	6/15	6/15	8/15	10/10
Wheat	ARPI	9/30	11/30	12/15	7/1	7/31
Wheat	Yield, Revenue	9/30	11/15	12/15	7/1	7/31



<sup>1</sup>APH—actual production history insurance, with loss payment based on an indemnity price established annually by USDA-RMA and deviation from APH yield.

Yield—yield protection insurance, with loss payment based on a projected price based on Chicago Board of Trade (CBOT) data and deviation from APH yield.

Revenue—revenue protection insurance plans (including with and without harvest price exclusion), with loss payment based on lower than gross revenue guarantee based on APH yield and CBOT prices.

Dollar—dollar plan, with loss payment based on value of the crop relative to the dollar amount of insurance.

ARFI—area risk protection insurance. For wheat, loss payments are based on relative county yield level and grower selected yield trigger. For PRF index policies, loss payments are based on a rainfall index based on NOAA data. The farmer chooses the coverage level, protection factor trigger, and when the insurance protection is in force.

LGM—livestock gross margin, loss payment based on difference between expected gross margin and actual gross margin.

<sup>2</sup>Some crops also have early planting dates. This date indicates the earliest a crop may be planted and still remain eligible for replanting coverage, if such coverage is available for the crop.

\*Date is in the following year.

\*\* For nursery crops the policy change date is 5/1, but insurance can be obtained at any time.

Insurance attaches 30 days after enrollment.

## IMPORTANT CROP INSURANCE DATES

Deadlines for sales closing, final planting date, acreage reporting, billing, and contract changes for Maryland crop insurance products are listed in Table 2. As a crop insurance participant, you need to be aware of several important dates for filing information and reporting losses:

**Sales closing date (enrollment and policy change date)** – last day to apply for coverage or make changes to the policy; the sign-up deadline.

**Earliest planting date** – acreage planted before this date is not eligible for replanting payments.

**Final planting date** – last day to plant with full coverage. Late planting may be covered at reduced levels for some crops.

**Acreage reporting date** – last day to report the acreage as planted. If not reported, insurance may not be in effect.

**Date to file notice of crop damage** – within 72 hours of initial discovery of damage (but not later than 15 days after the end of the insurance period for each insurance unit). There may be additional requirements by crop. An adjuster must have the opportunity to inspect the crop before it is destroyed or put to another use.

**Payment due date** – last day to pay the premium without being charged interest.

**Cancellation date** – last day to request cancellation of policy for the next year (same date as sales closing date).

**Production reporting date** – last day to report production for your APH.

**Debt termination date** – date insurance company will terminate policy for nonpayment.

**Premium billing date** – date crop insurance premiums are billed. Crop insurance premiums may be deferred until 30 days after the billing date without interest charges.

**End of insurance period** – the date your crop insurance coverage ends. Any notices of crop damage must be filed within 15 days of the end of the insurance period.

## FARM SERVICE AGENCY (FSA) RISK MANAGEMENT PROGRAMS

The Federal government has other programs designed to help you manage your risk. Four important programs administered by USDA-FSA which could impact your farm are the Noninsured Disaster Assistance Program (NAP), Agricultural Risk Coverage (ARC), Price Loss Coverage (PLC), and the Margin Protection Program (MPP) for dairy producers.

**Noninsured Disaster Assistance Program (NAP).** NAP provides financial assistance to producers

of crops for which multi-peril crop insurance coverage is not available. NAP is designed to help reduce financial losses when natural disasters cause major reductions in production. NAP originally only provided coverage very similar to that provided by CAT policies for insurable crops (50 percent of expected production at 55 percent of the average market price). Higher levels of protection at the 50-, 55-, 60-, and 65-percent levels at 100 percent of the average market price are now available for additional premium.



PHOTO: EDWIN REMSBERG

NAP coverage is available through your local USDA-FSA office. Individuals or entities are eligible to earn benefits under NAP if their average adjusted gross income for the three preceding tax years is \$900,000 or less. Any of the years can be higher than \$900,000 as long as the average of the three years meets the requirement; average gross income compliance must be certified each year. To purchase NAP coverage, you pay a service fee of \$250 per crop per county, with fees capped at \$750 per producer per county, but not to exceed a total of \$1,875 for producers growing crops in multiple counties. NAP payments are limited to a maximum of \$125,000 per crop year per individual or entity. To purchase higher levels of coverage, NAP premiums are capped at \$6,562.50 per producer per year, based on the \$125,000 maximum annual payment at the 5.25-percent premium rate. Beginning, limited resource, and traditionally underserved farmers are eligible for a waiver of the service fee and a 50-percent premium reduction. Sign-up deadlines and coverage periods for NAP vary by

crop; contact your local FSA office for more information.

**Agricultural Risk Coverage (ARC) and Price Loss Coverage (PLC).** ARC and PLC are new programs authorized under the 2014 Farm Bill. Farm operators must choose between participating in either the ARC or PLC program. The program election made by the farm operator remains with the farm for the life of the Farm Bill; however, operators must still enroll their farms annually to be eligible to receive payments. These programs give farm operators and landowners the choice of county- or farm-level revenue coverage (under ARC-CO and ARC-IC) and fixed price supports (under PLC). If either ARC option is chosen, the farm is not eligible for the Supplemental Coverage Option (SCO) available under crop insurance.

The ARC-CO program provides revenue loss coverage at the county level. ARC-CO payments are issued when actual county crop revenue for a covered commodity is less than the ARC-CO guarantee. The ARC-CO guarantee equals 86 percent of the previous five-year national market year average (MYA) price, excluding the years with the highest and lowest price (the ARC guarantee price), multiplied by the five-year average county yield, excluding the years with the highest and lowest yield (the ARC county guarantee yield). If the county yield in any of the five years is below 70 percent of the county transitional yield (T-yield), then 70 percent of the T-yield is substituted for each of those years.

The ARC-IC program provides revenue loss coverage at the farm level. An ARC-IC farm is defined as the sum of the interests of a producer in all FSA farms enrolled in the individual coverage option for ARC in a state. ARC-IC revenue loss payments are made when the current year revenue for all covered commodities planted on an ARC-IC farm falls below 86 percent of the farm benchmark revenue.

PLC program payments are issued when the effective price of a covered commodity is less than the respective reference price for that commodity. The effective price equals the higher of the market year average price or the

national average loan rate for the covered commodity. Producers who have elected PLC and who also participate in the Federal crop insurance program are eligible to purchase SCO coverage.

**Margin Protection Program (MPP).** The MPP is a voluntary risk management program for dairy farms authorized under the 2014 Farm Bill. MPP-Dairy offers protection to dairy producers when the difference between the all-milk price and the average feed cost (the margin) falls below a certain dollar amount selected by the producer. Dairy producers have the choice of a catastrophic coverage level of coverage (for an annual \$100 administrative fee and no additional premium cost) and various levels of buy-up coverage (for additional premium). Catastrophic coverage provides payments to participating producers when the national dairy production margin is less than \$4.00 per hundredweight (cwt). The national dairy production margin is the difference between the all-milk price and average feed costs. Producers may purchase buy-up coverage that provides payments when margins are between \$4.00 and \$8.00 per cwt. To participate in buy-up coverage, a producer must pay a premium that varies with the level of protection elected.

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**More information on crop insurance and  
agricultural risk management can be found on  
the Internet:**

University of Maryland–Crop Insurance  
<https://extension.umd.edu/extension/crop-insurance>

Maryland Department of Agriculture  
<http://www.mda.state.md.us/>

USDA–Risk Management Agency  
<http://www.rma.usda.gov/>

USDA–Farm Service Agency  
<http://www.fsa.usda.gov/>

National Ag Risk Education Library  
<http://www.agrisk.umn.edu/>

Northeast Center for Risk Management Education  
<http://www.necrme.org/>

Penn State Crop Insurance Education  
<http://cropins.aers.psu.edu>

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*This publication is for educational purposes only and does not cover all aspects of the risk management options described. For specific information about how crop insurance can help you manage risk on your operation, make an appointment to go over your options with a crop insurance agent. For more information about the NAP and ARC programs, contact your local FSA office.*



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