A Report from the:

Risk Management Agency, U.S. Department of Agriculture, regarding:

"The Department of Agriculture's Strategic Plan and Timetable to Implement Organic Price Elections for all Organic Crops Produced in Compliance with the National Organic Program Regulations under the Organic Foods Production Act of 1990"

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Introduction

The Risk Management Agency (RMA) provides this report, pursuant to the following instructions contained in the Explanatory Statement of the Consolidated Appropriations Act of 2014:

"There is concern about the pace of progress in implementing an organic price election for all organic crops as required in the Food, Conservation, and Energy Act of 2008¹. USDA is urged to make every effort to implement this requirement as quickly as possible. The Department is requested to provide a report to the Committees with its strategic plan and timetable to implement organic price elections for all organic crops produced in compliance with the National Organic Program regulations under the Organic Foods Production Act of 1990 (7 U.S.C. 6501 et seq.)."

In this report, RMA details: 1) the progress we have made to establish and implement crop-specific organic price elections for our existing crop insurance programs; 2) alternative options we have developed that can broadly be utilized to provide organic coverage; and 3) our efforts to establish organic coverage for additional RMA-insured crops in the future that are produced in compliance with the National Organic Program regulations under the Organic Food Production Act of 1990 (7 U.S.C. 6501 et seq.).

Data requirements to develop actuarially sound organic price elections

RMA Data Quality Requirements: RMA develops organic price elections for select crops based on data quality and availability. To meet RMA data requirements, the price data must reflect a representative sample of the relevant organic producer population, and be accurate, unbiased, and available to RMA on a recurring basis. Due to the varying size and locations of different organic markets, data requirements may vary by crop and location; however, generally RMA requires a minimum of five consecutive years of data to assure accurate organic prices. To derive exact price elections (as opposed to factors to be applied to conventional prices), the data must either be production-weighted or coupled with data indicating quantity of units sold at each

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¹ In the Food, Conservation, and Energy Act of 2008, Congress states RMA "... shall enter into 1 or more contracts for the development of improvements in Federal crop insurance policies covering crops produced in compliance with standards issued by the Department of Agriculture under the national organic program established under the Organic Foods Production Act of 1990 (7 U.S.C.6501 et seq.)." This contract "... shall include the development of a procedure, including any associated changes in policy terms or materials required for implementation of the procedure, to offer producers of organic crops an additional price election that reflects actual prices received by organic producers..." Additionally, "the procedure shall be expanded as quickly as practicable as additional data on prices of organic crops collected by the Secretary and other sources of information becomes available, with a goal of applying this procedure to all organic crops not later than the fifth full crop year that begins after the date of enactment of Food, Conservation, and Energy Act of 2008."

price level. The most credible data source is a disinterested party, with no personal financial stake in the outcome of the Federal crop insurance program or other conflict of interest.

Appropriate Pricing Level: Commodity prices tend to reflect the value of inputs (materials, labor, interest on operating capital, etc.) employed in the production and marketing of a crop at a given stage in the production-marketing processes. For example, a pre-harvest price will generally reflect the value of inputs required to produce the crop, but not the value of inputs required to harvest and market the crop. RMA price elections generally are established at either a pre-harvest or a farm-gate level (i.e., at a production stage prior to hauling, packing, storing, marketing, etc.) since value added from subsequent activity is not incurred on a failed crop and is incurred after the insurance period has ended. Insuring crops at a retail or wholesale price would over-insure the crop and violate requirements to be actuarially sound, creating potential market-distorting situations.

Accordingly, organic price data reported at a pre-harvest/farm-gate level or accompanied with information (i.e., credible, reliable and annually reported post-harvest cost estimates) that allows the price data to be adjusted to a pre-harvest/farm-gate level is the most useful to RMA in establishing organic price elections.

Actuarially Sound Insurance Programs: RMA emphasizes compliance with these data requirements since the price election is a key component used to establish liability and premium rates for our insured customers, as well as to determine indemnity payments. RMA's ability to offer actuarially sound crop insurance products is dependent on the establishment of price elections that reflect the true value of the insured crop. Quality data has been the primary constraint to offering organic price elections.

Existing organic price elections

Available Organic Price Elections: Prior to the 2014 crop year, RMA released premium organic price elections for the following crops: avocados (California), corn, cotton (non-ELS), fresh stonefruit (freestone peaches, nectarines, and plums in California), processing tomatoes (California) and soybeans. For the 2014 crop year, RMA began offering organic price elections for almonds (California), fresh apples (Idaho, Oregon, and Washington), blueberries (all types in California; Early to Late Highbush type in Oregon, and Washington), Concord variety grapes (Oregon and Washington), mint (peppermint), oats, pears (Oregon and Washington) and additional stonefruit (fresh apricots in California; all fresh stonefruit in Idaho, Oregon, and Washington). We intend to offer organic price elections for additional crops in future years, but the limiting factor is the availability of quality data.

The organic price elections are derived using disparate data sources. Currently, all organic price elections are created using factors developed from Agricultural Marketing Service (AMS) data, or directly from private data sources.

For some crops like corn and soybeans, organic and conventional price quotes from AMS are used to derive an organic/conventional price factor, which is then applied to the conventional price election to derive an organic price election. Factors are used because AMS daily/weekly price quotes typically do not include sales volumes, restricting RMA's ability to develop volume-weighted price estimates on an annual basis directly from AMS data. The AMS price quotes are also obtained at shipping point or terminal locations, sometimes far removed from the pre-harvest/farm-gate price level RMA needs to develop price elections. There is no clear method for adjusting these price quotes to a pre-harvest/farm gate level. For some crops, only a few years of AMS organic data is available, falling short of the preferred minimum of five years. AMS reporting for some crops is variable from one year to the next. RMA continually monitors the availability and nature of AMS data to evaluate whether or not organic price factors for additional crops can be developed.

For certain crops, RMA has been able to secure proprietary data sets from trade groups and industry sources. We secure these data sets internally and maintain source confidentiality, and will not disclose these data or data sources to interested external parties. Private data sources can be crucial since they might be the only source of information available, but there are some concerns with these data sources as well. In some cases, RMA might not be able to verify the sample sizes and representativeness of private data sets. In other cases, the price data may not be reported at a pre-harvest/farm-gate level. Also, RMA cannot guarantee the future availability of such data sets because a private party offers data to RMA at their discretion. Thus, not all private data can be used to develop organic price elections.

Available Organic Coverage through Policy Contract Requirement: In addition to those crops for which we provide organic price elections, certain RMA crop policies require the insured crop be produced under contract. The contract must stipulate a base price, which serves as the crop insurance price election. This contract requirement is in place for buckwheat, camelina, sesame, green peas, machine-harvested cucumbers, mustard, processing sweet corn, and pumpkins. The contract requirement provides the potential for organic price coverage since the terms of the contract can be customized for organic production and thus reflect an organic price.

Previous efforts to acquire data

Contracted Study: In 2009, RMA funded a study to determine whether sufficient data exists to derive distinct price elections for organic crops. The report for this study, titled "Organic Crops: Report on Research of Additional Price Elections," was published in 2010 and is available at http://www.rma.usda.gov/pubs/2010/price-research.pdf. This was a broad-based study that intended to evaluate all organic commodities produced in compliance with the National Organic Program. The contractor researched a wide array of pricing arrangements to determine where organic price data was available, consistent with RMA's data requirements.

The study concluded that adequate data was only available to develop organic price elections for cotton. However, the study suggested: 1) RMA investigate the feasibility of insuring organic crops through contract pricing arrangements; and 2) RMA develop conventional/organic *price factors* using price data reported at a value-added level higher than a pre-harvest/farm-gate level (e.g., AMS data is often shipping point or terminal level price data). The price factors could then be applied to conventional price elections to derive organic price elections without the need to adjust the AMS price data to a pre-harvest/farm-gate level.

RMA implemented the contractor's recommendations: organic price elections are now offered for corn, cotton and soybeans; for certain crops (including corn and soybeans), RMA uses conventional/organic price factors derived from AMS shipping point data to establish organic price elections; and, RMA developed the Contract Price Addendum (see separate section below) as a means to provide coverage for organic producers with contract price arrangements.

National Agricultural Statistics Service (NASS) Organic Survey: RMA contracted with NASS through a partnership agreement to collect organic acreage, production, and sales data from certified organic growers. Under this agreement, NASS constructed a survey, compiled aggregated values from the responses, and published a report entitled 2011 Certified Organic Production Survey. All certified organic farming operations within USDA's organic registry were surveyed, although participation was not mandatory. This report complimented a previous NASS report, 2008 Organic Production Survey, a supplement to the 2007 Census of Agriculture. Additionally, individual survey responses were analyzed to evaluate the responses and data more completely.

RMA analyzed published data from the 2008 and 2011 NASS surveys, as well as unpublished data from the individual responses from the 2011 NASS survey. Response rates were often good. For many crops, more than 80 percent of certified growers responded to the survey. However, reliability of the data was variable. The sample size was often small due to the limited number of entities involved with organic production: some estimates were derived from a single response. The survey obtained no responses for several crops. For some crops, the variance in

values reported in the individual responses was very high, with the coefficient of variation (standard deviation/mean) often exceeding 1.00, thereby undermining our confidence in the computed overall average price. For some crops, reported prices were at a level beyond a pre-harvest/farm gate level. RMA would still need separate post-harvest cost information in order to adjust these price data to pre-harvest/farm gate values. Finally due to their intermittent nature (i.e., two surveys in a four-year span), the NASS reports fail to meet the RMA data preference that specifies data must be available on an annual basis.

Due to the nature of data, these two NASS surveys are inadequate for the purpose of deriving actuarially sound organic price elections. Nonetheless, the NASS surveys are still the most comprehensive form of organic data collection available since all certified organic growers were given the opportunity to participate. RMA plans to fund another NASS organic survey for 2014. (See section on additional NASS survey below.)

Development of alternative tools to provide organic coverage

Contract Price Addendum: RMA developed and implemented the Contract Price Addendum (CPA) for the 2014 crop year. Although not exclusively developed for organic producers, the CPA is a tool that can provide organic coverage to producers of a wide array of crops for which we do not currently offer organic price elections. Under the CPA, organic producers who grow crops under guaranteed contracts can opt to use prices established in those contracts as their price elections in place of RMA's announced values. Because of the prevalence of contract use in organic production, the CPA is anticipated to be an excellent tool for a large number of organic producers to insure their crops at the exact price they receive for their crops.

Beginning in the 2014 crop year, RMA made the CPA available for 62 different crops (CPA fact sheet is available at: http://www.rma.usda.gov/pubs/rme/addendum.pdf). The CPA can be used by organic producers to establish individualized projected and harvest prices under RMA's revenue programs. The CPA can also be used instead of announced organic price elections when doing so is advantageous to the producer. This allows producers who receive a contract price that is greater than the conventional RMA price election to obtain a guarantee that is more reflective of the actual value of their crop. In most cases, RMA will cap an individual's contract price allowed under the CPA to an amount equal to twice the announced conventional price election or 1.5 times the announced organic price election. These caps are in place to help prevent program abuse.

Actual Revenue History: In recent years, RMA began offering coverage under the Actual Revenue History (ARH) plan of insurance for a limited number of crops (cherries, navel oranges, and strawberries). These crop programs are currently in pilot status. ARH programs allow

producers to insure against revenue losses from low yield, low price, low quality, or any combination of these events. The coverage is customized to the individual producer, utilizing personal historical revenue documentation to establish coverage. This program is similar to RMA's Actual Production History (APH) yield-based programs, except it incorporates the producer's price experience. Organic producers can obtain coverage by providing acceptable records that substantiate their historical revenue, including organic prices received. The price used under ARH is determined at a packinghouse door level (i.e., production delivered from the farm to a packinghouse), and is only slightly different from the pre-harvest/farm-gate price level commonly used in most APH programs. Since organic producers are able to customize coverage to reflect the historical value of their crops, those crops insured under the ARH plan may be provided with organic price coverage.

Adjusted Gross Revenue & AGR-Lite: RMA offers coverage under the Adjusted Gross Revenue (AGR) and AGR-Lite plans of insurance in certain states and counties. These programs are currently in pilot status. AGR/AGR-Lite programs establish individualized coverage based on income information reported on a producer's historical IRS tax form (Schedule "F" or equivalent forms). The producer may include income amounts from all agricultural production – including organic production – to determine the AGR/AGR-Lite guarantee. Most commodities, including animals and animal products, are eligible for inclusion under AGR/AGR-Lite coverage. Organic prices received by the producer are reflected in the income reported to the IRS and, by extension, are also reflected in the AGR/AGR-Lite guarantee.

AGR insurance is available in: California (selected counties), Connecticut, Delaware, Florida (selected counties), Idaho (selected counties), Maine, Maryland (selected counties), Massachusetts, Michigan (selected counties), New Hampshire, New Jersey, New York (selected counties), Oregon (selected counties), Pennsylvania (selected counties), Rhode Island, Vermont, Virginia (selected counties) and Washington (selected counties).

AGR-Lite is available in: Alabama, Alaska (selected counties), Arizona, Colorado, Connecticut, Delaware, Florida, Georgia, Hawaii, Idaho, Illinois, Kansas, Maine, Maryland, Massachusetts, Minnesota, Montana, Nevada, New Hampshire, New Jersey, New Mexico, New York (selected counties), North Carolina, Oregon, Pennsylvania (except Philadelphia County), Rhode Island, South Carolina, Tennessee, Utah, Vermont, Virginia, Washington, West Virginia, Wisconsin and Wyoming.

Whole Farm Revenue Protection: RMA has developed a new insurance program, the Whole Farm Revenue Protection (WFRP) plan of insurance, which was approved by the FCIC Board of Directors (Board) in May 2014. WFRP will provide whole-farm insurance protection covering all commodities on the farm (including organic commodities). The program will improve upon many features of AGR and AGR-lite policies, with a goal of providing producers with an

improved whole-farm risk management product. WFRP will replace coverage currently provided by the AGR and AGR-Lite plans of insurance.

RMA sought input from parties interested in whole-farm insurance in order to help define the target markets for the WFRP product. The feedback centered on the risk management needs of producers and focused on sustainable agriculture and specialty commodities, including organic commodities. This lead to the identification of two key markets, both of which are composed primarily of specialty crop growers: (1) highly diversified farms where shallow and/or isolated commodity losses might be sufficiently absorbed by the operation, but that may benefit from a risk management safety net that provides insurance for larger losses; and (2) farms growing two to five commodities and selling to wholesale markets. These farms tend to need higher coverage levels in order to insure their risk for commodity losses. It was noted that current AGR and AGR-lite products do not provide high enough coverage levels for these producers' needs.

Current data collection efforts

Contract for Research into Organic Crop Marketing: On November 18, 2013, RMA posted a solicitation for a contract titled, "Indefinite Delivery, Indefinite Quantity (IDIQ) for Pricing Reviews and Information and Task Order 1." The contract involves multiple phases that will be accomplished via task orders issued under the IDIQ. The work required under the contract will involve examining organic markets and submitting reports on the research. Further, the work will involve: 1) identifying, contacting, and working with producers and point-of-first-sale purchasers to gather information; and 2) compiling and analyzing results of the research.

Approximately \$980,000 has been approved for this contract. To the extent this funding lasts, task orders are expected to be issued for the following services/deliverables: 1) organic production budgets; 2) specialty crop production budgets; and 3) livestock and livestock products. RMA seeks to obtain information and data to develop representative cost of production budgets for both conventional and organic specialty crops.

The cost of production budgets are needed to determine the value of crops at different stages of production/marketing. RMA hopes to utilize harvest/post-harvest cost information in order to adjust published price data (e.g., from AMS that is reported at a high value-added level (e.g., shipping point or terminal level price data). Where paired conventional and organic crop production budgets are constructed, RMA hopes to assess relative costs between the two practices in order to derive organic price elections from existing conventional price elections. For example, if the paired budgets indicate pre-harvest costs for organic production are 50 percent greater than for conventional production, RMA might be able to establish an organic

practice price election equal to 150 percent of the already-established conventional practice price election.

NASS Organic Survey for 2014: RMA will again contract with NASS to collect organic acreage, production and sales data from certified organic growers. For the 2014 survey, NASS will survey all producers who identified themselves as producing some amount of organic production in the 2012 Census of Agriculture, making the survey the most complete form of data collection RMA is able to obtain. Due to the nature of these surveys (farm-gate level season average production-weighted prices, and comprehensive survey coverage), they provide great insight into the organic markets, as well as a valuable tool to evaluate other sources of organic price data.

The cost of the survey will be \$1.4 million. The survey will be conducted for the 2014 crop year and the results released in fall 2015. RMA has worked with NASS to improve the survey methods. For example, NASS will now collect data for specific crop types and varieties not listed in previous surveys. Since price elections are established a year in advance of the year of insurance coverage, RMA will utilize the data from the 2014 survey beginning in the fall of 2016. The NASS data from this survey, combined with data from the earlier surveys, will provide three non-sequential years of organic price data during a seven year span. For a limited number of crops, the three data points might provide minimal information that is sufficient to derive organic price elections, but as noted previously in this report, price elections from no less than five consecutive years of data is preferred to maintain actuarially sound insurance products.

Data Preference - Optimal Scenario: Going forward, the most beneficial scenario is one in which an organic NASS survey is conducted on an annual basis. RMA will continue work with NASS to improve future surveys as needed, provided funding is made available for additional surveys. However, even with annual NASS organic surveys, there is still no guarantee that data gathered by these surveys will meet RMA data requirements.

In addition to NASS surveys, increased AMS organic price reporting could also be beneficial. AMS price quotes typically do not include sales volumes and are obtained at shipping point or terminal locations, rather than at the pre-harvest/farm-gate price level utilized by RMA. Nonetheless, RMA currently utilizes organic and conventional price quotes from AMS to derive approximate organic/conventional price factors, which are applied to conventional price elections to derive organic price elections. Expanded AMS organic reporting for additional crops on a sustained basis could assist RMA in developing organic price elections. Ideally, AMS price quotes would reflect pre-harvest/farm gate values, and be accompanied by sales volumes.

Proposal and timeframe to develop organic price elections for all RMA-insured crops

In the Agricultural Act of 2014, Congress states, "As soon as possible, but not later than the 2015 reinsurance year, the Corporation shall offer producers of organic crops price elections for all organic crops produced in compliance with standards issued by the Department of Agriculture under the National Organic Program (NOP) established under the Organic Foods Production Act of 1990 (7 U.S.C. 6501 et seq.) that reflect the actual retail or wholesale prices, as appropriate, received by producers for organic crops, as determined by the Secretary using all relevant sources of information."

This language is similar to that from the Food, Conservation, and Energy Act of 2008. RMA has made great strides to comply with this language and will continue to pursue compliance with this language subject to the following constraints:

- Section 508(a) of the Federal Crop Insurance Act states, "<u>If sufficient actuarial data are available (as determined by the Corporation)</u>, the Corporation may insure, or provide reinsurance for insurers of, producers of agricultural commodities grown in the United States under 1 or more plans of insurance determined by the Corporation to be adapted to the agricultural commodity concerned," (underline added for emphasis). Therefore, if sufficient data are available to determine organic price elections, RMA will provide such price elections for insurance. Otherwise, RMA is restricted by Section 508(a) from providing organic price elections when insufficient data are available to meet the actuarial soundness requirement.
- Price elections will be derived at a pre-harvest/farm gate level, as discussed previously
 (see section on Appropriate Pricing Level), and not at a retail or wholesale price level.
 The latter do not provide an actuarially sound basis since the price election would not
 reflect just the value of the actual crop, but also post-harvest/marketing activity that is not
 incurred on a failed crop and occurs after the end of the insurance period. Such excessive
 price election amounts could potentially induce moral hazard behavior amongst insured
 producers.
- RMA will strive to offer organic price elections for those crops for which we offer conventional coverage. We do not currently provide conventional coverage for all crops contained under the NOP because of a lack of data or interest. In some instances, growers of certain crops are not interested in the development of a crop insurance program. This can be attributed to various reasons: the crop is grown in a region with few natural perils; the total crop value is too minor for the average producer to make insurance attractive; and

stakeholders fear a crop insurance program might draw additional acreage to the crop and disrupt markets.

Potential for Further Development of Organic Coverage: As previously stated, we have been unable to locate quality organic price data for many RMA-insured crops. In the absence of such data, the development of actuarially sound crop-specific organic price elections is not possible. As already discussed, the best potential source for future comprehensive organic price data is from ongoing NASS organic surveys, coupled with enhanced AMS organic price reporting. Price election development is already underway for the 2015 crop year, making compliance with the Congressional mandate to release organic price elections for all crops by the 2015 reinsurance year unattainable.

One method would target specific crops, which might allow us to derive organic price elections for an unknown number of additional crops. It would entail using the NASS 2011 Certified Organic Production Survey and the accompanying unpublished individual survey responses (refer to NASS Organic Survey section). RMA would conduct assessments of data from the individual survey responses on a crop-by-crop basis. Data threshold requirements would be set regarding survey response rate, number of observations, measures of price variance (exclusive of outliers), and farm concentration. Based on RMA's assessment of the data, we would advance certain crops for development of organic price elections. The standards for data assessment have not yet been determined.

For this method, RMA would derive an organic price estimate for a crop-state-type-practice combination, as appropriate, which would then be used in lieu of the published NASS price estimate. In other words, with only one occurrence of observations, the NASS survey results would serve as a starting point for certain crops that meet threshold requirements. From this starting point, the price could be reduced by some amount, to the point where RMA feels comfortable there is little risk of setting the organic price too high. The intent would be to establish a process that minimizes the likelihood organic price elections will exceed expected pre-harvest/farm gate market prices. Development of organic price elections using this method would be contingent on funding for further NASS organic surveys to avoid creating organic price elections that are not able to be updated.

Method Implications:

RMA would purposely set organic price elections conservatively (when referenced against the data available) to avoid inducing moral hazard and market distorting behavior. Consequently, the organic price elections may fall short of insured producers' coverage expectations. To do anything beyond this scope may introduce moral hazard behavior into the Federal crop insurance program. For example, a price election that substantially exceeds the actual market-determined pre-harvest/farm gate value creates a serious potential for fraud and market-distortion by

interfering with producers' decision-making processes. There becomes an incentive to produce more of that commodity since a key factor in planting decisions is a producer's assessment of the expected financial security that attaches to production of the crop, relative to alternative crops. The increased production can in turn affect supply-and-demand interaction, and ultimately, market prices.

Such behavior undermines our ability to offer actuarially sound insurance products since indemnities can accrue due to perverse financial incentives rather than to insured-peril loss events. This is not to say differences between realized season average pre-harvest/farm gate values and RMA price elections do not occur, because RMA is limited in its ability to predict future market behavior. However, RMA is able to minimize the frequency and severity of disparities between price elections and season average pre-harvest/farm gate values when we are equipped with quality price data that provide accurate depictions of what prices have actually been and allow us to assess likely market outcomes for the upcoming crop year.

Implementation Time Frame: The expected method shows the most potential beginning with certain crops for the 2016 crop year. The research, analysis, and methodology used to develop the organic price elections would be detailed in a decision memorandum, which would be provided to the Administrator of RMA.

Conclusion

Through persistent efforts, RMA has made significant progress in the development and implementation of organic price elections for our crop insurance programs. These price elections are developed whenever adequate organic price data is available that allow us to meet program mandates to be actuarially sound. We have also developed viable alternatives that increase the amount of organic coverage provided. These options include price coverage under the Contract Price Addendum, the Actual Revenue History plan of insurance, and the anticipated Whole Farm Revenue Protection plan of insurance. To gather organic price data and information, RMA has also funded research studies and organic price and production surveys.

RMA will continue to pursue opportunities for the acquisition of additional organic price data and information, as we are able given funding constraints. We will also continue to work toward developing crop-specific organic price elections consistent with our data quality requirements.