TESTIMONY OF

MIKE ADAMS

Pecan Federal Marketing Order Hearing

Docket No. AMS-FV-15-0023; FV15-986-1

Western Region – Las Cruces, New Mexico – July 20, 21 and 22, 2015

I. Introduction

My name is Mike Adams. It is spelled M-I-K-E A-D-A-M-S.

Your honor, distinguished guests and everyone present today who has worked so diligently and for so long to promulgate a federal marketing order for pecans, I am honored to be here today as President of the American Pecan Board, The Proponent Organization, as President of the Texas Pecan Board, and as a proud pecan farmer.

I have been authorized by my boards to testify both in my capacity as President of the American Pecan Board and as President of the Texas Pecan Board. I also appear in my capacity as owner of Royalty Pecan Farms in Caldwell, Texas.

I live in Henderson, Texas. I have bachelor degrees in mathematics and education from Texas Christian University and a master's degree in agricultural economics from Texas A&M University. By training, I am an educator, mathematician and economist. I have had a diverse professional career which has included many happy years as a college football coach, an executive in the oil

industry and as a cattleman. But by far, the most intellectually and physically fulfilling work I have done has been in the pecan business. I tender Exhibit 1, a copy of my current curriculum vitae.

Your honor, I plan to attend and participate in all three administrative law hearings on the Pecan Proposal in the coming days. We have a very full agenda today and tomorrow and we have several witnesses scheduled to testify here in Las Cruces who have made extraordinary efforts to be here but are only available during these two days. In order that everyone with a more restricted schedule can be heard, with the Court's permission, this morning I would like to give an overview of the pecan industry and the reasons why the industry needs the federal marketing order. I will address the specific structure of the proposed Pecan Council, nomination of its members and other topics at our hearings in Texas and Georgia. Other members of the Pecan Board, the proponent organization, will testify about other parts of the Proposed Order and we will give you advanced notice of that testimony.

II. Industry History and Background

Your honor, I would now like to provide you with a brief history of the pecan industry:

1. History

The Pecan is the only commercially sold tree nut indigenous to America. Early recorded history chronicles Spanish and French explorers to the New World encountering a "hard shell walnut" favored by the native inhabitants. In the fall and winter months, Native Americans followed the bounty of the trees bearing "the nut with hard shell" along the rivers of the Southeast and Southwest. It was valued not only as a nutritious, staple food but also as a barter commodity. Some authorities even believe that the fact that pecan trees tend to produce large crops only every other year (the so-called "alternate year bearing" phenomenon), heavily influenced the migration patterns of the Native Americans for thousands of years. James McWilliams, The Pecan.

The scientific name for pecan trees, Carya illinoensis, in honor of Illinois where the scientific community found the first native tree. Pecan trees are hardy and long producing. There are many active pecan farms that have producing trees that are over ninety years old. [Exhibit 8] This native pecan tree in Oklahoma is several hundred years old, is over 48 feet in diameter, and still produced 985 pounds of nuts in 2013. There was even a grand pecan tree planted by George Washington overlooking the Potomac on the grounds of Mount Vernon which was removed only recently in March 2015 due to wind damage.

Pecans have a great story to tell. The pecan is healthful, nutritious, taste preferred, diverse as a food ingredient, and American. Tremendous market potential exists in the United States. Pecan stakeholders recognize that their industry is rapidly changing from realities within and market forces without. Pecan stakeholders want to play a proactive role in their future through strategic marketing, accurate data collection, research and development, and uniform and greater organization of the industry. Through conversations and meetings with all stakeholders many proposals were considered, however, the industry has concluded that a federal marketing order is the most appropriate vehicle to assist the industry in effecting positive and measurable change.

The overreaching purpose of the Agricultural Marketing Agreement Act of 1937 is to stabilize a market. The Federal Marketing Order for pecans we are proposing will certainly further and effectuate that purpose and, thereby, assist the pecan industry reach its full potential.

III. Overview of Current Industry

1. Geography

Currently, pecans are grown commercially in three regions. East (North Carolina, South Carolina, Georgia, Florida, Alabama); Central (Texas, Oklahoma, Louisiana, Arkansas, Mississippi, Missouri, Kansas); and West (New Mexico,

Arizona and California) comprising fifteen states from the Carolinas to California [Exhibit ___ - Display Map]. Georgia, New Mexico, and Texas are, and have historically been, the largest producing states. These fifteen states shown on this diagram represent the proposed production area to which the pecan marketing order would be applicable. The entire industry is interconnected and although a smaller production area was considered, the entire production area must be covered by the proposed order to make it truly effective.

2. Pecans – the American Health Nut

The health benefits of pecans have been researched and proven scientifically. The widely publicized tree nut study released in the November of 2013 by the New England Journal of Medicine [Exhibit 9], brought much needed publicity to the health benefits of all tree nuts, specifically including pecans. Pecans are high in anti-oxidants, healthy oils, minerals, and micronutrients. The literal translation for the Chinese word for pecans is the "American Health Nut." Unfortunately, the health benefits of pecans is better known in China than in the U.S. A coordinated marketing effort resulting from the proposed federal market order can correct this situation.

3. General Categories of Pecans

Generally, pecans are described in two categories, native/seedling pecans and improved variety pecans. Native/seedling pecans are pecan varieties that are

harvested and sold from non-grafted or naturally propagated trees. Native/seedling groves are typically found along rivers and in alluvial bottomlands [Exhibit 10 - Display Picture].

Improved pecans are pecan varieties bred or selected for superior traits of nut size, ease of shelling, production characteristics, and resistance to certain insects and diseases [Exhibit 11 - Display Picture]. Improved orchards are intentionally planted trees grafted to rootstock in rows with uniform tree spacing. In our proposed order, we have provided a list of the most popular improved varieties. We did not, however, include an exhaustive list because there are currently approximately four hundred known improved varieties and the list will continue to grow as new experimental varieties under development in nurseries, universities, and the USDA Pecan Breeding Station come on the market. Instead, we chose to define improved varieties as those that are grafted.

Both categories of pecans contribute to the overall U. S. crop. In the 1960s, native/seedling pecans averaged over 50% of the crop; today, improved pecans average approximately 82% of the crop. Because of new plantings of improved varieties, this ratio will only increase in favor of the improved pecan. Although the native/seedling nut still occupies a significant and niche position in the industry, the pecan market is much more driven today by improved variety orchards with improved varieties selling at a premium to native/seedling nuts. We have

recognized this market price difference in the proposed marketing order by providing a higher assessment for improved varieties and a lower assessment for natives/seedlings. A coordinated marketing strategy under a FMO that addresses and targets demand for both categories of pecans is not only feasible but also advisable to move the crop in a balanced approach benefitting the native/seedling growers as well as the improved growers.

Most commercial orchards grow primarily improved varieties, and new plantings are virtually all improved varieties. All three regions produce improved varieties; whereas, native/seedling groves of pecans are found mostly in the Central region (Texas, Oklahoma, Louisiana, Arkansas, Mississippi, Missouri, and Kansas). The number of individual growers and the size of each operation vary widely. The larger orchards can reach five to seven thousand acres but seldom will these operations exist in a single contiguous tract. Most commercial pecan farms range between 250 acres and 2000 acres. Native/seedling groves are a different story. They are found along rivers or bottomlands and are randomly spaced depending upon soils and topography. An improved orchard can have as many as 70 trees per acre (average is 20 to 50 trees per acre), whereas a native/seedling grove may have only one tree per acre. A pecan acre is not the most representative description of a native/seedling grove. In the proposed order we have addressed

this difference by setting grower participation thresholds in both acreage (for the benefit of improved growers) and poundage (for the benefit of native growers).

Horticultural practices as they apply to improved orchards compared to native/seedling groves are also quite different. The improved trees require a much higher level of management and input cost. Management of a native/seedling grove varies widely, from none to regular fertilization and pest management programs. Irrigation is rarely found in a native/seedling grove.

Addressing the pecan tree's natural propensity to alternate bear, is an ongoing management consideration, particularly in improved orchards. Commercial pecan farmers struggle to mitigate the wide swings in production with site specific cultural practices including: crop thinning in "on years", hedging (pruning) programs, selection of varieties which do not alternate bear, and precise water management. Since availability and timing of water is a critical input, virtually all improved orchards are irrigated. As compared to irrigated row crops, however, irrigated pecan farms are much more efficient in using water.

Despite the differences in the geography, cost structure and agriculture practices in the production of native and improved varieties, both improved and native/seedling pecan farmers need this proposed order. As Dr. Palma will explain in more detail, the proposed order will help both the growers of native/seedling and improved pecans.

4. Estimated Annual Crop Size and Pricing and Need for Accurate Data

Although there is relatively little comprehensive data on industry production or participation, a 2012 Census of Agriculture by the U.S. Department of Agriculture, National Agricultural Statistics Service indicates that the total acres of all pecans in the U.S. are 543,486 acres. Industry grower organizations estimate approximately 2,500 commercial growers, where "commercial" is defined by a minimum of thirty acres or an average of 50,000 pounds of product harvested over the past four (4) years for the business to be commercially viable. Therefore, the estimate of commercial growers does not include backyard production ("yard trees") or "part-time farmers".

Exhibit 12 indicates the crop size fluctuation over the past 50 years. Even a 2-year moving average, normally a smoothing effect, shows significant variability. It also indicates relatively stagnant growth, with a crop in 1963 larger than any crop in the last eight years. This reality is not positive for pecan handlers attempting to maintain and/or add new customers and consistently supply a market.

As I mentioned earlier, most, but not all pecan trees are alternate year bearing plants, therefore, the size of the annual crop can vary greatly from year to year. Thus, analysis of pecan production is best viewed as an annual average over a number of years rather than any single year. U. S. pecan production when analyzed as a continuum has been relatively flat since the 1960s. Interestingly, the

U. S. pecan crop in 1963, over 50 years ago, was 100 million pounds more than the crop in 2014. The average annual crop size domestically is, plus or minus, 300 million pounds. Only one year, in 1999, did the U.S. crop exceed 400 million pounds.

Pecan prices in the last fifty years have also seen little increase when adjusted for inflation. Nevertheless, production costs for growers have gone up. The one constant from year to year has been the wide swings in crop sizes and prices, with prices to growers falling as much as 35% in a single year. Price instability is currently a given in the pecan industry, and other witnesses will explain later this price instability has caused havoc in the industry.

[Exhibit 13] The farm value (average price X crop size) of the U. S. pecan crop has also remained relatively stagnant. The farm value of pecans peaked in 2010 and 2011 at just above $600 million but has declined since then, in spite of shorter crops. The farm value in 2014 was $506 million. The U. S. Farm Value of the Pecan Crop Chart indicates an up-trending value; however, the picture is much less favorable when adjusted for inflation.

Exhibit 14 shows the Pecan Farm Value chart in a stark comparison to almonds. Almonds, with a well-funded marketing campaign, have increased supply and price during the same period when pecan supply and price are relatively flat. The Farm Value of Pecan and Almond Crops chart superimposes

the almond data over the pecan data on the same scale. In 1960 the U.S. pecan farm value was larger than the U.S. almond farm value; the impact of marketing is dramatically evident. A FMO for pecans can enable the pecan industry to more strategically market its product domestically.

The industry is also hobbled by incomplete and inaccurate data within the industry. The estimates I have provided have been collected in good faith but they are just estimates. There simply is no reliable source of accurate information on annual crop size, number of growers or handlers to assist buyers and sellers arrive at a reasonable price for the product. The proposed FMO will facilitate the gathering, compilation, and publication of reliable data that will be a much-needed benefit to the industry.

5. Recent Market Development and Increased Planting

In the last decade an interesting thing happened to pecans, the heretofore regional, seasonal, laid-back commodity. The world discovered the good taste and healthfulness of the pecan with China leading the way. The initial impact on prices was positive indicated by historically high pecan prices in 2010 and 2011. Pecan prices were not sustained at those levels and have fluctuated widely since then, caused in large part by a dramatic drop in domestic consumption which offset the increase in foreign sales. As I will discuss later, one obvious, and potential

disruptive, long term effect of two years of high prices was a substantial increase in new tree plantings.

6. Competitive Nuts

In addition to these internal challenges, the pecan faces competition from sister tree nuts, namely almonds, walnuts, and pistachios, which enjoy a much more favorable marketing environment. For instance, the almond industry in the U. S. has grown their crop size from 162 million pounds in 1960 to over 2 billion pounds in recent years. Even more noteworthy is the fact that the almond farm price more than quadrupled during that same period of time. The simple economic conclusion is that supply and demand for almonds has increased. Pistachios and walnuts can tout a similar story of both dramatic increased supply and increased price. Why the marked difference compared to the pecan story? One word – marketing. The almond and walnut industries are each conducting well-funded, comprehensive, sustainable marketing campaigns assisted, in part, by federal marketing orders and the Texas state check off for pecans has run a state marketing campaigns similar to the one we now seek.

7. Geographic Differences in Production Practices

A general description of the farm differences in each region is as follows:

- East Region – large and small improved variety orchards (trees per acre mostly in range of 20 to 40), native/seedling groves present but not predominant, sizable number of non-commercial plantings including "yard" trees that can contribute 10 to 20 percent to the annual supply

- Central Region – large and small improved variety orchards (trees per acre in eastern Central in 20 to 40 range; trees per acre in western Central in 30 to 50 range), many native/seedling groves in eastern Central, "yard" trees contribute approximately 20 percent to the supply
- West Region – mostly improved orchards (trees per acre in 30 to 50 range, some higher), some small improved orchards, no native/seedling groves, no "yard" trees

Horticultural practices differ from east to west. Generally, in the East and eastern Central regions, insect and fungicide management are factors and irrigation water is supplemental. In the West and western Central regions, pest management is a factor but less of one, fungicide management is not yet necessary. Irrigation water is essential to make a crop but many orchards use "flood irrigation" by diverting nearby rivers or streams. Again, despite these differences, Dr. Palma and Dr. Wells estimates that all sections of the industry will benefit from the proposed order.

8. Sales and Marketing of Pecans

The entrance of pecans into the stream of commerce takes place in one of two ways, either as inshell nuts or as pecan meats (kernels). Domestic consumers purchase some inshell nuts mostly during the winter holiday season to be cracked and eaten as snacks. The vast majority of the domestic market, however, is out of shell pecan meat. Handlers (buyers, accumulators, shellers, and exporters) purchase the nuts from growers. There is estimated to be 250 handlers in the U.S. Shellers, a sub-category of handlers who as the name infers remove the

pecan shells and sell the meat, handle the majority of product sold into the domestic market. The meats/kernels enter the stream of commerce to retail meat/kernel distributors, ingredient users, food outlets like restaurants and bakeries, and value added users such as ice cream makers and snack packagers.

Over the years, terms have been developed to describe particular types and quality of pecan meats. Descriptive names such as "halves" or "pieces" are self-evident. Graduation within these broad categories, however, do not have uniform meaning in all areas of the market. One important goal of the Proposed Marketing Order is to empower the pecan industry to set uniform standards which will better inform buyers, sellers and consumers of the quality of the product being sold.

There are an estimated 50 commercially viable shellers – with production of over 1 million pounds of inshell pecans -- currently operating. Of these, 14 meet the Small Business Administration's definition for large business entity (that is equal to or more than $7,500,000 in annual revenue from pecans). Thus, the vast majority are small business entities using that same definition. We are not aware of any commercial sheller currently operating which shells less than 1 million pounds of inshell pecans a year.

The majority of pecans sold in the export market are inshell. In recent years, the export market for pecans has burgeoned to approximately one-third of the annual crop, with the largest customer being China. Most of the export sales are

made through brokers or by direct sales to customers in those markets. The American Pecan Council, which will be created by the proposed federal marketing order, will focus little of its efforts on promoting the export market for pecans.

As diverse as the uses of pecans are, much research is needed for product development and packaging in the domestic market. The presentation of pecans by retailers today is rather mundane – usually clear cellophane bags in sizes from one to ten pounds. Pecans are rarely found in individual package sizes to compete with almonds, pistachio, walnuts, or peanut snacks on the retail shelf. A FMO that funds product development, presentation innovation, and upscale, preservative packaging is direly needed.

9. Pending Future Over Supply

Compared to most other agricultural commodities, a pecan tree is an unusual plant in that it takes 5 to 7 years to bear a crop after planting and up to 10 to 15 years to cover capital and variable costs and make a profit. After pecan prices in 2010 and 2011 reached historically high levels, many pecan farmers began planting more pecan trees in anticipation of increasing demand and higher pecan prices. For example, in Georgia, where we have the most accurate data, from 2010 to 2014 over 360,000 new trees were planted. This is a significant increase in the number of trees under management in Georgia, our largest pecan growing state. Other states do not have accurate estimates, however, anecdotal evidence shows

similar new plantings. Safe to say, thousands of new trees are now "in the ground," and will be coming into production within the next few years. Some prognosticators have projected that the U. S. crop will nearly double in the next ten years.

Increased supply is a good thing to assure availability. If nothing is done to increase demand, however, competitive market fundamentals will emerge, and pecan prices could collapse. This can lead to a death spiral for the industry as farmers are unable to cover the cost of fixed expenses, convert field to other crops or, as occurred during the housing bubble, convert to residential real estate.

IV. Need for a Marketing Order

Next your honor, I would like to address the pressing need for a federal marketing order for Pecans:

To stabilize the market, reduce volatility, and address the disruption of the looming increase in supply, industry wide commitment to a domestic marketing plan is essential. A FMO for pecans gives the industry its best chance to accomplish this objective. The desired results are consistently profitable prices for growers, attractive sustainable margins for handlers, and an assured supply of quality, healthful pecans for consumers.

1. Need for Unified Industry Efforts

Dr. Palma is also going to address in economic terms the "public good" which can flow from a unified marketing effort. As a pecan farmer, however, I can also testify that there is little incentive for an individual grower or handler to increase demand for pecans since others, who do not contribute to the cost of such efforts, will merely be "free riders." A funding mechanism that will apply fairly to everyone in the industry will eliminate the "free rider" problem and provide adequate funding for increased marketing and research.

There has developed over the years a number of organizations which represent various segments or geographic portions of the pecan industry. For example, there are national pecan growers associations, national pecan sheller organizations, regional organizations and even single state organizations. There is not, however, one organization which can coordinate marketing and research efforts for the entire industry. In the coming days, you will hear testimony from representatives of many of the existing organizations in favor of the coordinated the marketing and research efforts envisioned by this federal marketing order. These organizations believe, correctly, that a federal marketing order will not duplicate or frustrate their efforts but will instead complement their efforts.

2. Organization of the American Pecan Board

The industry, led by the American Pecan Board, has awakened to the fact that the status quo could lead to disaster for both pecan stakeholders and pecan consumers. A summary of the challenges currently facing the pecan industry outlined above includes: a lack of organized representation of industry-wide interests in a single organization; lack of accurate data to assist the industry in its analysis of production, demand and prices; a lack of uniform sizes and quality standards; a lack of coordinated domestic promotion or research; and a dramatic increase in production in the near future as a result of new plantings. These factors combined have resulted in the under-performance of the pecan industry vis a vis its sibling domestic tree nut industries.

The American Pecan Board was formed to represent all segments of the industry, from producers to processors – large and small. The American Pecan Board has representatives from small and large growers and small and large shellers. The Board has representatives from all three producing regions.

The pecan industry is also remarkably diverse demographically. There are Hispanic pecan growers; Native American pecan growers; African American pecan growers, and, of course, male and female pecan growers. The American Pecan Board is committed to representation of all segments of this wonderfully diverse industry.

The Board of Directors of the American Pecan Board consists of the following industry representatives [Exhibit 15, chart]:

- Dan York, York Pecan Company. Foreman, Arkansas (sheller)
- Helen Watts, Young Pecan Company. Florence, South Carolina (sheller)
- Boyd Bulger, Retired from Tyson Farms, currently resides in Florida (food industry expert)
- Bruce Caris, Green Valley Pecan Company. Sahuarita, AZ (grower/sheller)
- Homer Henson, Louisville Pecan Co., Louisville, Alabama (sheller)
- Dr. Randy Hudson, Hudson Pecan Company. Oscilla, Georgia (grower and sheller)
- Scott Landgraf, Landgraf Farms, Madill, Oklahoma (grower/sheller)
- Louis Salopek, Tom Salopek Farms, Las Cruces, NM (grower)
- Larry Willson, Sunnyland Farms, Albany, Georgia (grower/sheller)

You will hear testimony from most, if not all, of these board members in the coming days in support of the proposed FMO.

3. Grassroots Effort to Listen, Learn, and Customize the Order

At the outset, American Pecan Board was convinced that a FMO for pecans had to be designed by input from pecan people, those who had a stake in its

outcome. Therefore, the American Pecan Board has spent the past 26 months reaching out to pecan stakeholders to listen and hear their ideas of how to customize a federal marketing order to the pecan industry. Since May 2013, American Pecan Board members have made 40 presentations to pecan grower and sheller conferences, pecan boards (grower and sheller), state conventions, pecan field days, and local pecan meetings. Hundreds of individual conversations have taken place at these meetings and outside of these meetings as the American Pecan Board listened to all segments of the pecan industry. The most recent meetings were with small groups of growers in Alexandria, Louisiana; San Saba, Texas; New Roads, Louisiana; Ardmore, Oklahoma and Natchez, Mississippi. Three regional information sessions were held in 2014 with pecan stakeholders and USDA personnel attending. USDA/AMS staff attended and spoken at pecan industry programs at Southeastern Pecan Growers Association, National Pecan Shellers Association, Western Pecan Growers Association, Georgia Pecan Growers Association, and Texas Pecan Growers Association. The purpose of these efforts was to compose a marketing order designed by pecan people for the benefit of pecan people.

Moreover, the ten-member board and board counsel have volunteered their time and contributed their out-of-pocket expenses amounting to over $600,000.00. A show of financial support from grower associations, sheller association,

accumulators, vendors, and individuals has amounted to cash contributions of almost $170,000, to be spent by the board on necessary expenses during the process.

The most significant contribution by members of the American Pecan Board, including its attorneys, has been the unselfish commitment of time. For some members of the board, the 40 presentations since May 2013 involved over 90 work days of travel, meetings, and speaking and over 120 hours of preparation time in addition. Multiply those numbers by 10 board members and two board attorneys working pro bono, and the time and equivalent dollar contributions are well into the thousands of hours and hundreds of thousands of dollars.

V. Conclusion

This will conclude my remarks today. I plan to address more specific elements of the proposed order – particularly the nomination, selection, and functioning of the American Pecan Council -- in my presentation in Dallas, Texas and I will conclude with remarks in Tifton, Georgia.

I would be glad to answer any questions on my remarks at this time.