

Supporting Statement – Part A

AGRICULTURAL RESOURCE MANAGEMENT, CHEMICAL USE, AND POST-HARVEST CHEMICAL USE SURVEYS

OMB No. 0535-0218

This supporting statement requests a three year renewal of a long running data collection series that collects environmental and economic data.

A. JUSTIFICATION

This docket is being submitted to renew the authority to conduct three types of surveys:

- * The Agricultural Resource Management Survey (ARMS) which consists of three phases (screening, production practices, and cost/returns),
- * The Fruit and Vegetable Chemical Use Surveys, and
- * The Postharvest Chemical Use Survey.

ARMS Phase I is used as a screening phase for the other surveys. This has proved to be very cost effective way to draw accurate samples for the other surveys included in this docket. It also helps to reduce respondent burden.

The ARMS Phase II Chemical Use Survey is normally conducted every year and it consists of two versions; Production Practices and Costs Report (PPCR), and the Production Practices Report (PPR). The PPR component is conducted with NASS-only funding to gather field crop chemical use data. The PPCR is co-funded by cooperative agreement with the USDA Economic Research Service (ERS). The PPCR component efficiently collects costs associated with the various production practices to complete the cost of production estimates for ARMS targeted crop commodities. The ARMS Phase II-PPCR efficiently collects detailed cropping practice and cost data by focusing on field-level and expanding to whole farm, thus greatly reducing respondent burden while maintaining accuracy of reported data. NASS will continue to reuse these data enabling NASS to produce some chemical use estimates at appropriate geographic level(s) based on extent of coverage.

ARMS Phase III is the economic phase, in which we collect data related to the costs and returns for both the whole farm and for specific commodities raised on each farm. The Phase III is also co-funded by ERS and NASS. The data from these three phases is combined to give a complete representation of whole farm data.

The Fruit and Vegetable Chemical Use Surveys are conducted in alternating years. The fruit survey is conducted in odd numbered years; the vegetable survey in even numbered years.

The Post Harvest Chemical Use survey is conducted annually, if funding is available. The commodities that are selected for this survey, corresponds with the ARMS Phase II surveys. The combined data from these two surveys allows analysts to see the total amount of chemicals that were applied to a given commodity during the target year.

- 1. Explain the circumstances that make the collection of information necessary. Identify any legal or administrative requirements that necessitate the collection. Attach a copy of the appropriate section of each statute and regulation mandating or authorizing the collection of information.**

The primary functions of the National Agricultural Statistics Service (NASS) are to prepare and issue State and national estimates of crop and livestock production, disposition, and prices and to collect information on related environmental and economic factors. Detailed economic and environmental data for various crops and livestock helps to maintain a stable economic atmosphere and reduce the risks for production, marketing, and distribution operations. Modern agriculture increasingly calls upon NASS to supply reliable, timely, and detailed information in its commodity estimation programs.

The Agricultural Resource Management Survey (ARMS) is the primary source of information for the U.S. Department of Agriculture on a broad range of issues related to agricultural resource use, costs of production, and farm sector financial conditions. ARMS is the only annual source of whole farm information available for objective evaluation of many critical issues related to agriculture and the rural economy, such as: whole farm finance data, marketing information, input usage, production practices, and crop substitution possibilities. This detailed information can be used to set operation level estimates of: types of operations, loan commodities, operator's household income, credit/debt levels, and other economic farm/ranch data.

Without these data, decision makers cannot analyze and report on the financial status of farms, the economic circumstances of farm households, the credit position of farmers, the structure and organization of farms, or the input and production alternatives available to farmers when pesticide regulatory actions are being considered. Since producers typically face numerous daily decisions in their farm management practices, information from these surveys will be used to construct producer behavioral models that more realistically reflect the production choices facing producers.

Data from ARMS are used to produce estimates of net farm income by type of commercial producer as required in 7 U.S.C. 7998 and estimates of enterprise production costs as required in 7 U.S.C. 1441(a). Data from ARMS are also used as weights in the development of the Prices Paid Index, a component of the Parity Index referred to in the Agricultural Adjustment Act of 1938 and as amended by the Agricultural Acts of 1948, 1949, 1954, and 1956. These indexes are used to calculate the annual federal grazing fee rates as described in the Public Rangelands Improvement Act of 1996 and Executive Order 12,548 and as promulgated in regulations found in Title 36 CFR 222.51.

Since 2003, when funding was first provided for the development of State-level income estimates for the 15 largest agricultural producing States, NASS has been producing these estimates.

In addition, ARMS is used to produce estimates of sector-wide production expenditures and other components of income that are used in constructing the estimates of income and value-added that is transmitted to the U.S. Department of Commerce, Bureau of Economic Analysis, by the USDA Economic Research Service (ERS) for use in constructing economy-wide estimates of Gross Domestic Product. This transmittal of data, prepared using the ARMS, is undertaken to satisfy a 1956 agreement between the Office of Management and Budget and the Departments of Agriculture and Commerce that a single set of estimates be published on farm income.

Congress has mandated that NASS and ERS build nationally coordinated databases on agricultural chemical use and related farm practices; these databases are the primary vehicles used to produce specified environmental and economic estimates. Title 7 USC 136i-2 on collection of pesticide use information requires (a) ...“collect data of statewide or regional significance on the use of pesticides to control pests and diseases of major crops and crops of dietary significance, including fruits and vegetables.” And, (b)“collection by surveys of farmers or other sources offering statistically reliable data.” The surveys will help provide the knowledge and technical means for producers and researchers to address on-farm environmental concerns in a manner that maintains agricultural productivity.

Fruit/Nut and Vegetable Chemical Use Surveys are also mandated by Title 7 USC 136i-2. These data are important because pesticides are the focus of Federal, State, and local legislation to reduce, ban, or otherwise control farm chemical use. A current accounting of farm chemical use including details on application methods is essential for evaluating the economic and environmental consequences of farm chemical regulations.

Post-harvest Chemical Use Surveys are also mandated by Title 7 USC 136i-2. These surveys are designed to collect pesticide usage information applied to commodities after harvest (post-harvest). Beginning in FY 1997, NASS received funding for development of a chemical use estimating program for chemicals

applied post-harvest. When the Food and Drug Administration (FDA) and Agricultural Marketing Service (AMS) conducted residue tests on food at wholesale points of purchase, many of the chemical residues detected resulted from products applied post-harvest. The Environment Protection Agency (EPA), Congress, USDA, and several producer associations remain interested in obtaining accurate post-harvest chemical use information for use with product registration issues, risk and benefit assessments, and in the marketing of certain commodities. Several government agencies including the EPA and FDA have asked NASS to collect this information.

General authority for these data collection activities is granted under U.S. Code Title 7, Section 2204 which specifies that "The Secretary of Agriculture shall procure and preserve all information concerning agriculture which he can obtain ... by the collection of statistics ... and shall distribute them among agriculturists."

2. Indicate how, by whom, and for what purpose the information is to be used. Except for a new collection, indicate the actual use the agency has made of the information received from the current collection.

This docket consists of four major survey program areas: (1) Agricultural Resource Management Surveys (ARMS); (2) Fruit and Vegetable Chemical Use Surveys; (3) Post-harvest Chemical Use Surveys; and (4) Contractor Expense Surveys. Following are descriptions of the four types of survey programs.

(1) Agricultural Resource Management Surveys. Farm organizations, banks, commodity groups, agribusinesses, Congress, and the USDA use information from ARMS to evaluate the financial performance of farm and ranch businesses and households and to make policy decisions affecting agriculture. The ARMS provides a robust database of information to address varied needs of policy makers. The uses of the information collected from ARMS are many:

- Dramatic increases in crude oil prices will have a huge impact on farmers in the coming years. In addition to the high prices for diesel and gasoline, farmers will be faced to make tough decisions on which crops to produce based heavily on the availability and affordability of fertilizers and pesticides that are petroleum based. Farming practices will also be altered due to the high prices of fuels. Farmers may have to investigate practices such as no till or minimum till crops, crop rotations, selecting more disease and pest tolerant crops, etc. to help combat the rising costs of doing business. The ARMS surveys are crucial in measuring annual changes in doing business (financially, farming practices, and types of inputs used by farmers).

- The ARMS data are used to measure energy use in agriculture. Financial data (expenses for diesel, gas, propane, etc.) are converted to BTU's for analysis regarding agricultural energy use and greenhouse gas emissions. The Office of the Chief Economist compiles these data from the ARMS for Staff Analysis and Congressional Testimony.
- Severe weather conditions in any given year can cause measurable changes in both farm expenditures/receipts as well as numerous farming practices. For example: drought and flooding conditions felt in different regions of the US in 2011 had a huge impact on farmers and the way they conducted business. In some areas of the country there were restrictions placed on water used for irrigation and farmers had to investigate what kinds of conservation practices they could adopt. In other areas of the country where flooding occurred, farmers had to contend with chemical run off, that impacted the type(s) of crops they could re-plant in flooded fields once they dried. The ARMS surveys help to measure the impact and changes that occurred both financially and in farming practices.
- With the increase in bio-energy dependency, farmers are changing their farming practices to accommodate the increased demand for crops that can be converted into ethanol or bio-diesel. This is causing some farmers to change their crops from food and feed grains to crops that could produce a larger quantity of bio-fuels than traditional crops. The ARMS surveys are critical for measuring the annual changes to the American farmer.
- Data collected about agricultural fertilizer and pesticide use for major field crops and selected fruits have been used in building a database for the USDA Pesticide Data Program (PDP), used by USDA to evaluate the safety of the Nation's food supply.
- In 1996, the implementation of the Food Quality Protection Act (FQPA) increased the need for actual, reliable chemical use data. FQPA requires the Environmental Protection Agency to conduct an accelerated review of tolerance levels for re-registration of pesticide products. Part of the EPA review includes using actual chemical usage data that only the grower can provide. If these data are not available, EPA could assume maximum label rates are being applied on all crop acreage which would likely over count the true amount of pesticides being used to produce field crops. The result could be cancellation of the product's registrations for chemicals on which farmers rely.

Other USDA agencies closely involved with NASS in the PDP, addressing the requirements of FQPA, are AMS, the Agricultural Research Service (ARS) and ERS. These agencies collect and analyze agricultural chemical use and residue data to estimate potential human exposure to pesticide residues in the U.S. food supply. The results of their analysis will be used to help make decisions concerning product registration issues, risk assessments, benefit assessments, and for commodities marketing at the State, national, and international level. Growers have a vested interest in the risk analysis because many pesticides they rely on are classified as minor use. Growers often have no alternatives to these chemicals. If re-registration is not allowed on products used on specialty crops, such as mint and hops, there could be serious consequences for both farmers and consumers and the ability to produce and provide the commodity.

- To guide policy makers in the decision-making process, it is necessary to have reliable information about production practices used and the relationship of the practices to changes in water quality and changes in the rate of erosion. Decisions affecting agricultural policy and producers will be made with or without data; it is much better to have factual information to guide the decision process. Farm production covers a major share of the natural resources of the country and, as policy about how to manage production is formed; a better understanding of the production process can prevent uninformed choices. The agricultural community is currently faced with many complex issues concerning the environment, such as the transport of nutrients and pesticides to ground or surface water sources, soil erosion, and the impact of environmental policies on agricultural production. ARMS data are useful in addressing these concerns; for example, fertilizer and pesticide data that are used to study water quality and production practices data such as machinery use and crop rotation to help identify tillage systems and crop residue levels affecting soil erosion.
- The ARMS and Chemical Use survey data are combined to measure changes made within the farming community to help determine if the changes were economically sound. With the development of new hybrid seeds, farmers are able to use different types of pesticides that are more cost effective and less harmful to the environment. The ARMS and Chemical Use surveys can be used to help document these changes.
- The ARMS gathers information about relationships among agricultural production, resources, and the environment. ARMS

data provides the necessary background information to support evaluations of these relationships. The data are used to understand the relevant factors in producing high quality food and fiber products while maintaining the long term viability of the natural resource base.

- The ARMS determines what it costs to produce various crop and livestock commodities and the relative importance of various production expense items. ARMS Phase II Production Practices and Costs Report efficiently collects detailed cropping practice and cost data by focusing on field-level and expanding to whole farm, thus greatly reducing respondent burden while maintaining accuracy of reported data.
- The ARMS helps determine net farm income and provides data on the financial situation of farm and ranch businesses, including the amount of debt. ARMS data provide the only national perspective on the annual changes in the financial conditions of production agriculture. Net farm income information is now available for the 15 largest agricultural States.
- In order to minimize respondent burden, while maintaining a comprehensive data base for all major commodities; the crops being surveyed rotate on a regular basis. Some commodities that have little change in production costs or techniques may only be surveyed once every 10 years; while other crops that change on a more frequent basis may be surveyed every 2 to 3 years.
- The ARMS provides the farm sector portion of the gross domestic product for the nation. If ARMS data were not available, the Bureau of Economic Analysis would have to conduct their own survey of farm operators to collect these data.
- The ARMS helps determine the characteristics and financial situation of agricultural producers and their households, including information on management strategies and off-farm income.
- Collecting farm/ranch production and expense data to develop an estimate of net farm income each year is necessary because both receipts and production expenses change as production and prices change and as farmers and ranchers use more or less of inputs such as fertilizers or other chemicals. Since farmers and ranchers buy most of their inputs, data must be collected every year to obtain accurate estimates of annual expenses.

- Numerous requests to ERS and NASS are made from Congress throughout the year to characterize the financial position of various groups of farmers. ARMS data are the only means of answering many of these questions.
- The USDA links receipts and expenses associated with the production and sale of agricultural commodities to measure profit or loss over a calendar year. Three measures of net farm income are developed. First, a net cash income measure shows the difference between the cash earnings and expenses of the operation. Second, the estimate of net cash income is adjusted to show how depreciation and changes in the operation's crop and livestock inventory affect earnings. Components of gross income, such as net rent received and custom or machine work also change annually as cash and share rents adjust in response to market conditions or government programs. Custom work and machine hire are directly affected by weather and other natural events which are unpredictable. These income items are measured through the ARMS. The third income measure is net value added, which reflects production agriculture's addition to the national economic product and represents the sum of the economic returns to all the providers of factors of production: farm employees, lenders, landlords, and farm operators. ERS value-added estimates are used by the Bureau of Economic Analysis in the development of the National Income Accounts and for Gross Domestic Products and by the Organization for Economic Cooperation and Development in their international agricultural accounts.
- Congressional mandates exist for the development of annual estimates of the cost of producing wheat, feed grains, cotton, tobacco, and dairy commodities. To ensure accurate and reliable estimates, a comprehensive survey is needed to obtain data on production practices and the amounts of inputs used. Estimates of crop and livestock costs and returns provide a basis for understanding changes in the relative efficiency of crop and livestock production and the break-even prices needed to cover all costs. The ARMS provides the data needed to develop "enterprise" budgets showing costs and input use by size and type of farm in different regions of the country. An "enterprise" is the portion of an operation's resources devoted to producing a specific commodity.
- Responses to ARMS questions about farm assets and debts are used to develop a balance sheet for the farm as well as to provide a variety of financial ratios for measuring financial performance. Changes in the level of income earned affect rates of return and net worth. Purchases and sales of assets such as buildings,

machinery, and land; changes in their value; and any associated debt are very sensitive to changes in farm earnings and economic performance as well as to changes in the general economy. The balance sheet can change rapidly from one year to the next and can be adequately monitored only through data collected on an on-going basis. Balance sheet analysis helps identify areas of poor financial performance and pockets of potential financial stress. The ARMS provides the data necessary to develop annual estimates of the farm operation's assets, debts, equity, capital gains, capital flows, and the rates of return to agricultural resources and also identifies how these items (and farm household finances) change from one year to the next.

- Annual information from the ARMS on receipts, expenses, debts, and assets is needed to evaluate the financial condition of farm businesses. The Office of the Secretary of Agriculture, Congress, agricultural groups, the banking industry, and the public look to NASS and ERS for reliable, up-to-date information on the financial performance of farms and ranches by size, type and region. Financial condition analyses involve the ability of an operation to pay bills as they come due. The ability of a farm business to meet financial obligations depends on the amount of debt owed by the farm and the amount of cash receipts and other income available to meet mortgage, interest, and other obligations of the farm. The ability to pay operating costs and the interest and principal due on debts can change very rapidly because of drought, flood, or other circumstances. With ARMS data, the extent and seriousness of financial problems facing farmers are assessed, including the likely consequences of recurring financial stress.
- Farm operators and their households are of special interest for policy purposes because they incur nearly all of the risks of farming and are directly impacted by the government's agricultural policies. Most farms in the U.S. are organized along the traditional lines of one family, or one extended family, operating the farm. However, the largest producing farms are often operated by several partners or shareholders, each of whom receives a share of the profit (or loss) of the business. In addition, the majority of farms, are small and, on average, lose money. Households operating small farms rely heavily on off-farm income. Thus, it is necessary to understand the complex relationships between the farm business and the farm household and between farm work and off-farm work to accurately describe U.S. agriculture today.
- ARMS information on farm expenses describes the relative importance of production inputs used by farmers. These data are

used to update the prices paid index for commodities, services, interest, taxes, and wage rates, known as the parity index. This index helps determine the parity price for over 100 agricultural commodities. Parity prices have been a part of farm legislation since 1938, when the Agricultural Adjustment Act established that parity prices be computed for agricultural commodities.

- The 'parity index' as of any date, shall be the ratio of (i) the general level of prices of articles and services that farmers buy, wages paid hired farm labor, interest on farm indebtedness secured by farm real estate and taxes on farm real estate, for the calendar month ending last before such date to (ii) the general level of such prices, wages, rates, and taxes during the period January 1910 to December 1914, inclusive.

(2) Fruit/Nut and Vegetable Chemical Use Surveys. This information will be used by NASS, EPA, ERS, and other parties to assess the environmental and economic implications of various programs and policies and the impact on agricultural producers and consumers. The basic chemical use and farm practices information will also be used to produce a national chemical use database. This database is an integral source of data for the Water Quality Initiative, USDA's Pesticide Data Program, and the Food Quality Protection Act. These surveys of fruit and vegetable growers provide detailed, comprehensive information on actual chemical use rates, application practices, production practices, and integrated pest management (IPM) practices for a list of targeted fruit and vegetable crops.

Historically, the surveys alternate each year between fruits and vegetables; fruits were targeted in odd-numbered years and vegetables in even-numbered years. The vegetable chemical use survey is preceded by a screening survey integrated with the ARMS Phase I and consists of screening the classified population for the commodities being targeted; only operations with the targeted vegetable commodity are eligible for sampling for the following phases. The screening is conducted from May to early July. The fruit chemical use survey does not require screening to identify operations with targeted commodities, thus there is only one data collection phase. The main data collection is in the fall and involves contacting the selected respondents and collecting information on chemical use for targeted commodities on the entire operation.

With the use of the Fruit and Vegetable Chemical Use Surveys as with the ARMS surveys, NASS will be able to measure changes in rates and types of chemicals used. Changes will be due in part to the increased costs of crude oil, restrictions on water usage, and the availability of inputs.

If funding is available, the 12 States conducting the Fruit Chemical Use Survey will be: North Carolina, California, Oregon, Florida, Pennsylvania, Georgia, South Carolina, Texas, Michigan, Washington, New Jersey, and New York. Commodities of interest are: apples, apricots, avocados, blackberries, blueberries, cherries-sweet, cherries-tart, dates, figs, grapefruit, grapes-all, kiwi fruit, lemons, nectarines, olives, oranges-temple, peaches, pears, plums, prunes, raspberries, tangelos, and tangerines.

If funding is available to conduct the Vegetable Chemical Use survey the 18 States that have been historically involved in collecting this data were: Arizona, California, Florida, Georgia, Illinois, Michigan, Minnesota, New Jersey, New York, North Carolina, Ohio, Oregon, Pennsylvania, South Carolina, Tennessee, Texas, Washington, and Wisconsin. The commodities of interest have been: asparagus, for fresh market and processing; snap beans, fresh; broccoli; cabbage, fresh; cantaloupe; carrots, fresh and processing; cauliflower; celery; sweet corn, fresh and processing; cucumbers, fresh and processing; garlic; honeydew; head and other lettuce; dry onions; green peas, processing; bell peppers; pumpkins; spinach, fresh; squash; tomatoes, fresh and processing; and watermelon. If production trends change, the mix of states and commodities included in the program may be refined.

These data are important because pesticides and fertilizers are the primary sources of ground and surface water contamination in agricultural areas. Farm chemicals are also the primary source of pesticide residues found on fresh fruit and vegetables. They are, therefore, primary targets of Federal, State or local legislation to reduce, ban, or otherwise control farm chemical use. Pesticide use, particularly on fruits and vegetables that are a large part of children's diets, is of particular interest to those charged with implementing Food Quality Protection Act. A current accounting of farm chemical use in States producing over 85 percent of the nation's fruit, nut, and vegetable production is essential for evaluating the economic, environmental, and public health consequences of farm chemical regulations. The Chemical Use Surveys include all fruits and vegetables with production estimates which are significant and critical to the nation's food supply.

- (3) **Post-harvest Chemical Use Survey.** The post-harvest chemical use statistics are used by the EPA to develop Food Quality Protection Act risk assessments. AMS conducts pesticide residue testing for use in risk assessments done by EPA for chemical re-registrations. Some chemical residues that have been detected were applied post-harvest. To make sound regulatory decisions, good information concerning post-harvest chemical use is needed. Post-harvest chemical statistics were not available prior to 1997 but, since then, NASS has been working

cooperatively with AMS to target commodities that are of interest to EPA to assess chemical use after harvest. To address FQPA requirements, the data collected in the Post-harvest Chemical Use Survey targets major commodities consumed in the U.S. Commodities surveyed to date are apples, corn, oats, potatoes, soybeans, wheat, peanuts, rice, and pears. Corn and soybean post-harvest work began in the summer of 2003. NASS is working closely with AMS and EPA to select commodities for study in future years.

- (4) Contractor Expense Surveys.** The Contractor Expense Surveys are supplemental surveys to the ARMS Phase III survey. The purpose is to obtain the contractor's portion of the operating expenses for the whole farm. In previous surveys we have found that most contractees cannot report total expenses incurred by the contractor, since the contractor supplies many of the inputs to the farm operator.

3. Describe whether, and to what extent, the collection of information involves the use of automated, electronic, mechanical, or other technological collection techniques or other forms of information technology, e.g., permitting electronic submission of responses, and the basis for the decision for adopting this means of collection. Also describe any consideration of using information technology to reduce burden.

There is no technology currently available that can reduce or eliminate the need for the questions proposed to be asked of respondents and still meet the needs of NASS, ERS, and other parties to evaluate and analyze farm chemical use, production practices, cost of production information, and detailed cost and income statistics.

The ARMS Phase I (screening) is conducted initially as a mail and internet survey. Phone and face to face enumeration will be used to increase response rates. The ARMS Phases II and III, along with the Vegetable and Fruit Chemical Use surveys are conducted as subsamples of the Phase I screening.

There are currently no plans to develop a Web-based instrument for ARMS Phase II or for the Fruit, Vegetable, and Post-harvest Chemical Use Surveys since much of the data collected requires the identification of a specific farm field that is planted to a specific commodity and this field identification cannot be made on the Web. Also, the detailed chemical application data are often copied from farm records by the enumerator during the interview. A Web-based instrument is available for the ARMS economic phase (Phase III) Core questionnaire which was first used to mail to respondents in 2004. At present the majority of the data are collected through face-to-face interviews. Although in-person information collection continues to be the most commonly used mode of collection for ARMS, we have plans in place to transition what had been primarily

a pencil and paper information collection to in-person electronic information capture. This method is planned to reduce interview length by automating skip patterns, utilizing pre-fills where possible, improve fidelity to questionnaire items and explanatory text, reduce errors associated with the interview process and errors associated with internal instrument response inconsistencies, and reduce key punch and other data file preparation time and costs. As NASS moves towards Computer Assisted Personal Interview (CAPI) using the Apple Ipad, the ARMS survey instruments will be deployed as the CAPI survey program matures over the next couple of years. This state of the art mode for collecting survey data will provide numerous benefits and efficiency gains. As of this moment, deployment has been slowed by reduced budgets, equipment acquisition restrictions, training requirements, special instrument development and survey program requirements. NASS is addressing each of these challenges and expects to have CAPI implemented by the end of calendar year 2012. Initially, surveys which are repeated and less complex will use CAPI as a means to test and further develop this data collection method. Plans are to prepare the ARMS survey instrument for the prescreening phase within the next year.

4. Describe efforts to identify duplication. Show specifically why any similar information already available cannot be used or modified for use for the purposes described in Item 2 above.

NASS is very careful not to duplicate work planned by other Government agencies. NASS field offices are asked to document any State programs that overlap with the surveys contained in this docket. NASS is making every attempt to use existing data and only ask additional questions that are needed. For example, NASS uses administrative data from the California EPA Mandatory Pesticide Use Reporting System and a similar system in Arizona to utilize reports already available through mandatory pesticide reporting.

Also, internal committees within USDA that include NASS, ERS, AMS, ARS, Cooperative State Research Education and Extension Service, and Natural Resource and Conservation Service (NRCS) have been formed to help coordinate all the different aspects of these data collection efforts. The Integrated Pest Management questions have been aligned to meet all USDA agency needs. USDA's Office of Pesticide Management Policy provides coordination and oversight for the Department with EPA. Other government agencies such as the EPA, FDA, and U.S. Geological Survey are also consulted to avoid duplicating survey projects. The Advisory Committee on Agricultural Statistics, appointed by the Secretary of Agriculture, also provided advice on these program areas; this committee is composed of a diverse representation of agricultural sector expertise.

When State projects are identified, NASS makes every effort to incorporate the data needs from these projects with the NASS surveys. Currently, no such State projects are underway.

5. If the collection of information impacts small businesses or other small entities (Item 5 of OMB Form 83-I), describe any methods used to minimize burden.

NASS tries to identify only those data items absolutely necessary to answer the needs of data users. Information requested on these surveys may require respondents to refer to their record books for the answers. To minimize the interview time, branching is used throughout the questionnaires to skip those sections not applicable to particular respondents. Another approach to minimize burden has been the development of the ARMS core questionnaire that provides high level aggregates to estimate income and expenses; detailed data are eliminated from this version and will be asked only on a subset of the questionnaires. Enumerators also attend State training schools for instruction and practice on using the questionnaires. Data collection for these surveys is coordinated with other surveys to minimize contacts with respondents.

Sampling techniques are applied to minimize burden to individual operations which could potentially be selected in multiple surveys. One such process used in the ARMS sample selection is the Perry-Burt procedure, a statistically defensible method of reducing respondent burden. List frame units selected for other current year NASS probability surveys or the previous ARMS are replaced, where possible, by similar sample units whose respondent burden is less. This design reduces the number of consecutive ARMS contacts and multiple contacts for different surveys in the same year. The goal is to avoid selecting individual operations for two consecutive ARMS cycles.

NASS continues to conduct research on potentially new sampling and data modeling strategies to reduce data requirements and respondent burden. NASS has also started looking at the feasibility of using previously reported survey data where appropriate to reduce burden.

6. Describe the consequence to Federal program or policy activities if the collection is not conducted or is conducted less frequently, as well as any technical or legal obstacles to reducing burden.

NASS and ERS are charged with the responsibility of providing the Secretary of Agriculture, the Congress, the Executive Branch, farm groups, financial institutions and the public with reliable, up-to-date information concerning the nation's farms and ranches. The ARMS program is the only source of information capable of providing this type of vital information. Collecting economic data is critical to the mission of USDA, Congress, other governmental agencies, and the private sector. It needs to be collected annually so NASS can update the Parity Index for Prices Paid and Prices Received by Farmers so ERS can accurately estimate farm income each year.

Due to budget constraints, some of the Chemical Use surveys have been suspended for several of the previous years. However, a chemical use database is needed to answer fundamental questions about the safety of our nation's water and food supplies because sound policy decisions cannot be made without good data. Thus, NASS is requesting authority to conduct chemical use surveys in this three year approval request, provided funding is made available. This would enable NASS to quickly resume the Chemical Use Surveys should future funding become available via appropriation or reimbursable process.

When funding is available to conduct the full list of surveys, the commodities for the Post-harvest; Fruit and Vegetable; and ARMS II chemical use surveys will be determined. Working closely with AMS, ERS, EPA and several other agencies NASS will identify the priority of which commodities have the greatest urgency for data collection. NASS is able to move quickly to develop these surveys. NASS meets regularly with Office of Pest Management Policy (OPMP) and EPA to evaluate annual data reporting requirements. This is important because EPA's models give more weight to current data.

Samples of questionnaires that have been used in previous data collection cycles by NASS are attached to this docket. As finalized questionnaires are approved each year the new questionnaire will be submitted to OMB as non-substantive changes.

7. Explain any special circumstances that would cause an information collection to be conducted in a manner inconsistent with the general information guidelines in 5 CFR 1320.5.

There are no special circumstances associated with this information collection.

8. Provide a copy and identify the date and page number of publication in the Federal Register of the agency's notice, required by 5 CFR 1320.8 (d), soliciting comments on the information collection prior to submission to OMB. Summarize public comments received in response to that notice and describe actions taken by the agency in response to these comments.

The Notice soliciting comments on this information collection was published in the Federal Register on August 22, 2011 (Volume 76, Number 162), on pages 52304-52305. One public comment was received for this notice.

Describe efforts to consult with persons outside the agency to obtain their views on the availability of data, frequency of collection, the clarity of instructions and record-keeping, disclosure, or reporting format (if any), and on the data elements to be recorded, disclosed, or reported.

NASS, ERS, other USDA agencies, other Federal departments, and State Departments of Agriculture are all contributing to the content of these projects

and have been consulted. An Advisory Committee on Agricultural Statistics, appointed by the Secretary of Agriculture, reviews content, methodology, and program benefits for all major survey and estimation programs. EPA's Science Advisory Committee reviews data sources and methodologies used for environmental programs.

In November 2007, the National Academies of Sciences, Committee on National Statistics (NAS-CNSTAT) completed a comprehensive review of the ARMS. Copies of the report are available via the web at:
http://books.nap.edu/openbook.php?record_id=11990&page=R1.

A cross-agency NASS and ERS senior management team has prioritized the recommendations in the NAS-CNSTAT report and provided guidance on the high priority items. The NASS Research Division will be involved in several cross-agency teams to provide further insight and to recommend appropriate methodologies for moving forward on the high priority recommendations. The high priority areas focus on: respondent burden reduction strategies, response rate improvement, and improvement of data quality. Recommended action items may impact other NASS surveys as well as the next Census of Agriculture.

Every year, NASS and ERS conduct cognitive field tests for the commodity versions under the general testing docket. The testing is mainly for adding new terminology or question to the commodity specific versions. Additionally, based on the recommendations within the NAS 2007 report, NASS and ERS have formed an ARMS steering committee. The committee consists of the NASS and ERS ARMS leads, each of the ARMS phase experts from both agencies, and others as needed. This committee meets once a month to discuss survey management and data collection of all 3 phases of the ARMS program. The steering committee discusses integration with other programs, imputation and estimation and relevance of the ARMS program. The topics of discussion depend on issues raised from research papers, data review during the survey or discussion with our enumerators, field office staff and/or data users. Recommendations from the NAS Report are discussed and reviewed as part of the committee programs. Although currently this recurring planning meeting tends to focus on immediate and near-term field issues, we envision this meeting series will serve as a vehicle to further prioritize, schedule, assign, implement and monitor methodological improvements to the ARMS, using both the NAS 2007 report and current NASS and ERS leadership as guides.

9. Explain any decision to provide any payment or gift to respondents.

In previous years, NASS has attempted to use both financial (debit cards) and non-financial (pocket calculators, ball caps, wall clocks, etc.) incentives to increase response rates; minimal improvements in response rates were

achieved. At this time NASS does not plan to use any sort of gifts to respondents during the next three years.

10. Describe any assurance of confidentiality provided to respondents and the basis for the assurance in statute, regulation, or agency policy.

Questionnaires include a statement that individual reports are kept confidential. U.S. Code Title 18, Section 1905 and U.S. Code Title 7, Section 2276 provide for the confidentiality of reported information. All employees of NASS and all enumerators hired and supervised under a cooperative agreement with the National Association of State Departments of Agriculture (NASDA) must read the regulations and sign a statement of compliance

Additionally, NASS and NASS contractors comply with OMB Implementation Guidance, "Implementation Guidance for Title V of the E-Government Act, Confidential Information Protection and Statistical Efficiency Act of 2002 (CIPSEA), (Public Law 107-347). CIPSEA supports NASS' pledge of confidentiality to all respondents and facilitates the agency's efforts to reduce burden by supporting statistical activities of collaborative agencies through designation of NASS agents; subject to the limitations and penalties described in CIPSEA.

All individuals who may access these confidential data for research are also covered under Titles 18 and 7 and must complete a Certification and Restrictions on Use of Unpublished Data (ADM-043) agreement.

11. Provide additional justification for any questions of a sensitive nature.

There are no questions of a sensitive nature.

12. Provide estimates of the hour burden of the collection of information. The statement should indicate the number of respondents, frequency of response, annual hour burden, and an explanation of how the burden was estimated. If this request for approval covers more than one form, provide separate hour burden estimates for each form and aggregate the hour burdens in Item 13 of OMB Form 83-I. Provide estimates of annualized cost to respondents for the hour burdens for collections of information, identifying and using appropriate wage rate categories.

The following table contains the estimated burden hours for the surveys by year and the average annual burden. Totals may vary due to rounding. Allowance for burden associated with advance letters is included in response times. Average annual burden is estimated at 79,731 hours. All of these surveys are annual surveys, but some respondents will be contacted for more than one of the surveys. Phase I is the screening phase for both Phases II & III. Less than 10% of the Phase I sample will be selected for all three phases. Burden was

calculated using the interview length and the targeted response rate of 80%. Sample sizes are based on estimates of future needs. Annual burden will fluctuate based on commodity mix. However, accumulated total burden is not expected to exceed the accumulated estimated annual average.

Reporting time of 79,731 hours is multiplied by \$24 per hour, for a total cost to the public of \$1,913,544.

Survey Year	Survey	QID	Sample Size	Freq	Responses				Non-response				Total Burden Hours
					Resp. Count	Freq x Count	Min./ Resp.	Burden Hours	Nonresp Count	Freq. x Count	Min./ Nonr.	Burden Hours	
Agricultural Resource Management Surveys (ARMS) Phases I, II, & III													
2012	Integrated Screening Survey (Phase I) 1/		84,000	1	67,200	67,200	15	16,800	16,800	16,800	2	560	17,360
	Production Practices Report (Phase II) 2/		5,000	1	4,000	4,000	45	3,000	1,000	1,000	2	33	3,033
	Production Practices & Costs Report (Phase II) 2/		4,000	1	3,200	3,200	65	3,467	800	800	2	27	3,494
	Organic - Production Practices & Costs Report (Phase II) 2/		1,000	1	800	800	65	867	200	200	2	7	874
	Costs & Returns Report (Phase III) 4/		17,300	1	13,840	13,840	100	23,067	3,460	3,460	2	115	23,182
	Core Costs & Returns Report (Phase III) 3/		12,500	1	10,000	10,000	70	11,667	2,500	2,500	2	83	11,750
	Commodity Cost & Returns Report (Phase III) 4/		5,100	1	4,080	4,080	100	6,800	1,020	1,020	2	34	6,834
	Contractor Expense Survey 5/		1,000	1	800	800	45	600	200	200	2	7	607
2012 Total			129,900		103,920	103,920		66,268	25,980	25,980		866	67,266
2013	ARMS Screening Survey (Phase I) 1/		72,000	1	57,600	57,600	15	14,400	14,400	14,400	2	480	14,880
	Production Practices Report (Phase II) 2/		4,800	1	3,840	3,840	45	2,880	960	960	2	32	2,912
	Production Practices & Costs Report (Phase II) 2/		1,900	1	1,520	1,520	65	1,647	380	380	2	13	1,660
	Organic - Production Practices & Costs Report (Phase II) 2/		1,000	1	800	800	65	867	200	200	2	7	874
	Costs & Returns Report (Phase III) 4/		12,500	1	10,000	10,000	100	16,667	2,500	2,500	2	83	16,750
	Core Costs & Returns Report (Phase III) 3/		17,500	1	14,000	14,000	70	16,333	3,500	3,500	2	117	16,450
	Commodity Cost & Returns Report (Phase III) 4/		4,000	1	3,200	3,200	100	5,333	800	800	2	27	5,360
	Organic Commodity Costs & Returns Report (Phase III) 4/		1,000	1	800	800	100	1,333	200	200	2	7	1,340
Contractor Expense Survey 5/		1,000	1	800	800	45	600	200	200	2	7	607	
2013 Total			115,700		92,560	92,560		60,060	23,140	23,140		773	60,833
2014	Integrated Screening Survey (Phase I) 1/		84,000	1	67,200	67,200	15	16,800	16,800	16,800	2	560	17,360
	Production Practices Report (Phase II) 2/		9,000	1	7,200	7,200	45	5,400	1,800	1,800	2	60	5,460
	Production Practices & Costs Report (Phase II) 2/		4,500	1	3,600	3,600	65	3,900	900	900	2	30	3,930
	Organic - Production Practices & Costs Report (Phase II) 2/		2,000	1	1,600	1,600	65	1,733	400	400	2	13	1,746
	Costs & Returns Report (Phase III) 4/		12,500	1	10,000	10,000	100	16,667	2,500	2,500	2	83	16,750
	Core Costs & Returns Report (Phase III) 3/		17,500	1	14,000	14,000	70	16,333	3,500	3,500	2	117	16,450
	Commodity Cost & Returns Report (Phase III) 4/		5,500	1	4,400	4,400	100	7,333	1,100	1,100	2	37	7,370
	Contractor Expense Survey 5/		1,000	1	800	800	45	600	200	200	2	7	607
2014 Total			136,000		108,800	108,800		68,766	27,200	27,200		907	69,667

1/ Phase I is available by internet, mail, phone and face to face enumeration.

2/ Phase II surveys are all conducted as face to face interviews. Field enumerators can copy much of the chemical use data from the farm operator's record books. The remainder of the data can be obtained directly from the farm operator. The chemical data is related to a specific field selected of each farm sampled for this survey.

3/ Phase III Core Version is conducted initially as a mail and internet survey. Non-respondents are then attempted as either a phone or face to face enumeration.

4/ Phase III other versions are all conducted as face to face interviews, due to the complexity of each of the questionnaires.

5/ Contractor Expense Survey is conducted to collect and summarize the amount of farm input provided by contractors. This data is summarized and used to complete surveys when the farm operator cannot provide the contractor inputs for their farming operation.

Survey Year	Survey	QID	Sample Size	Freq	Responses				Non-response				Total Burden Hours
					Resp. Count	Freq x Count	Min./ Resp.	Burden Hours	Nonresp Count	Freq. x Count	Min./ Nonr.	Burden Hours	
Chemical Use Surveys - NASS Program Only													
2012	Vegetable Chemical Use Survey		5,000	1	4,000	4,000	45	3,000	1,000	1,000	2	33	3,033
2013	Fruit Chemical Use Survey		6,600	1	5,280	5,280	45	3,960	1,320	1,320	2	44	4,004
2014	Vegetable Chemical Use Survey		5,000	1	4,000	4,000	45	3,000	1,000	1,000	2	33	3,033
Total			16,600		13,280	13,280		9,960	3,320	3,320		110	10,070
Post Harvest Chemical Use Surveys-Nass Program Only 1/													
2012	Barley/Sorghum		1,500	1	1,200	1,200	30	600	300	300	2	10	610
2013	Soybeans		2,000	1	1,600	1,600	30	800	400	400	2	13	813
2014	Rice and Peanuts		450	1	360	360	30	180	90	90	2	3	183
Total			3,950		3,160	3,160		1,580	790	790		26	1,606
Publicity Materials for ALL surveys 2/													
2012	All materials for all versions		136,400	1	109,120	109,120	5	9,093	27,280	27,280	2	909	10,002
2013	All materials for all versions		124,300	1	99,440	99,440	5	8,287	24,860	24,860	2	829	9,116
2014	All materials for all versions		141,450	1	113,160	113,160	5	9,430	28,290	28,290	2	943	10,373
Total			402,150		321,720	321,720		26,810	80,430	80,430		2,681	29,491
Quality Control Survey (Telephone Only) - Recontact operators to verify quality of NASDA enumerators. 2/													
2012	Quality Control Worksheet (phone only)		1,400	1	1,400	1,400	5	117	-	-		-	117
2013	Quality Control Worksheet (phone only)		1,500	1	1,500	1,500	5	125	-	-		-	125
2014	Quality Control Worksheet (phone only)		1,700	1	1,700	1,700	5	142	-	-		-	142
Total			4,600		4,600	4,600		384				-	384
Annual Totals 3/													
2012	Annual Totals		137,800		110,520	110,520		79,078	27,280	27,280		1,818	80,896
2013	Annual Totals		125,800		100,940	100,940		73,232	24,860	24,860		1,659	74,891
2014	Annual Totals		143,150		114,860	114,860		81,518	28,290	28,290		1,886	83,404
Annual Averages			135,583		108,773	108,773		77,943	26,810	26,810		1,788	79,731

Average Burden per Respondent per Year

0.588059

0.71656043

0.066679

1/ The Post Harvest Chemical Use Survey may be discontinued in late 2011. If funding is made available in the next three years the sample sizes are included in the burden table above.

2/ Additional publicity materials were not sent out to sampled operations that were contacted for a quality control survey.

Targeted commodities for this approval cycle:

Year	Survey	Target Commodity
2012	ARMS Phase II	Wheat and Soybeans
	ARMS Phase III	Barley, Sorghum, and Broilers
	Post Harvest	Barley and Sorghum
2013	ARMS Phase II	Corn, Fall Potatoes, Rice and Pear
	ARMS Phase III	Soybeans
	Post Harvest	Soybeans
2014	ARMS Phase II	Wheat, Soybeans, Upland Cotton, Pima Cotton and Oats
	ARMS Phase III	Rice, Peanuts and Cow/Calf
	Post Harvest	Rice and Peanuts

13. Provide an estimate of the total annual cost burden to respondents or record-keepers resulting from the collection of information.

There are no capital/start-up or ongoing operation/maintenance costs associated with this information collection.

14. Provide estimates of annualized cost to the Federal government; provide a description of the method used to estimate cost which should include quantification of hours, operational expenses, and any other expense that would not have been incurred without this collection of information.

The average yearly cost to the Federal Government is approximately \$19.55 million.

Category	ARMS (I, II, & III) ^{1/}	Chemical Use		
		Fruit ^{2/}	Vegetable ^{2/}	Post-harvest
NASDA Data Collection	\$ 7,600,000	\$ 660,000	\$ 550,000	\$ 150,000
NASS Staff	8,200,000	650,000	780,000	230,000
Direct costs	750,000	260,000	260,000	130,000
Indirect Costs	500,000	150,000	160,000	50,000
Total	17,050,000	1,820,000	1,750,000	460,000

1/ In 2012 NASS will receive an additional \$800,000 to expand the ARMS III program. It will return to normal in 2013 and 2014.

2/ The Vegetable Chemical Use survey will be conducted in 2012 and 2014. The Fruit Chemical Use survey will be conducted in 2013.

Projected Annual Total Costs

Year	Total Costs
2012	\$20,060,000

2013	\$19,330,000
2014	\$19,260,000
Average	\$19,550,000

15. Explain the reasons for any program changes or adjustments reported in Items 13 or 14 of the OMB Form 83-I (reasons for changes in burden).

The new average annual burden is expected to be 79,731 hours. The increase of 18,163 hours from the current burden of 61,568 hours is due to adjustments in sample sizes and the reinstatement of some of the annual surveys that had been postponed due to previous budget cuts. The increase in sample sizes for ongoing surveys, is primarily due to the rotation of target crops being surveyed each year.

16. For collections of information whose results will be published, outline plans for tabulation and publication. Address any complex analytical techniques that will be used. Provide the time schedule for the entire project, including beginning and ending dates of the collection of information, completion of report, publication dates, and other actions.

This table is a summary of data collection, analysis, and publication dates.

Survey Schedules

Survey Year	Survey	Phase	Begin Data Collection	Conduct Analysis	Publish
2012	ARMS Screening Survey	I	May 2012	July 2012	NA
	Agriculture Resource Management Survey ^{1/}	II	Sept. 2012	Dec. 2012	May 2013
		III	Dec. 2011	Mar. - June 2012	August 2013
	Contractor Expense Survey		Dec. 2011	Mar. - June 2012	NA
	Vegetable Chemical Use Survey ^{2/}		Oct. 2012	Jan. - June 2013	July 2013
	Post-harvest Chemical Use Survey ^{2/}		July - Sept. 2012	Sept. - Dec. 2012	Feb - April 2013
2013	Integrated Screening Survey	I	May 2013	July 2013	NA
	Agriculture Resource Management Survey ^{1/}	II	Sept. 2013	Dec. 2013	May 2014
		III	Dec. 2012	Mar. - June 2013	August 2014
	Contractor Expense Survey		Dec. 2012	Mar. - June 2013	NA
	Fruit Chemical Use Survey ^{2/}		Oct. 2013	Jan. - June 2013	July 2014
	Post-harvest Chemical Use Survey ^{2/}		July - Sept. 2013	Sept. - Dec. 2013	Feb - April 2014
2014	ARMS Screening Survey	I	May 2014	July 2014	NA
	Agriculture Resource Management Survey ^{1/}	II	Sept. 2014	Dec. 2014	May 2015
		III	Dec. 2013	Mar. - June 2014	August 2015
	Contractor Expense Survey		Dec. 2013	Mar. - June 2014	NA
	Vegetable Chemical Use Survey ^{2/}		Oct. 2014	Jan. - June 2015	July 2015

1/ All survey years correspond to calendar years, except for ARMS Phase III. ARMS Phase III is mailed out in December and data collection is conducted in Jan-Apr of year following the survey year. E.g.: 2011 ARMS Phase III is conducted in Jan-Apr 2012.

2/ The Chemical Use Surveys for Fruit, Vegetables, and Postharvest may be suspended at any time during the next three years due to budget constraints. However, in case funding is received through appropriation or reimbursable process, NASS requests pre-authorization to conduct the Fruit and Postharvest Chemical Use surveys in 2012, 2013 and 2014.

Examples of the questionnaires and other documents are attached to this submission in the ROCIS system.

Starting in 2007 NASS began discontinuing the printing of complete publications for the ARMS and Chemical Use surveys. This was due mainly to the high costs of printing. In our Quick Stats we publish overviews of the data for each of our surveys. If you need more complete data tabulations you can request them from one of our data specialists.

If you have specific questions related to **environmental information** that you would like an expert to respond to, please e-mail Dale P. Hawks at dale_hawks@nass.usda.gov or call at 202-720-0684.

If you have specific questions related to **economic information** that you would like an expert to respond to, please e-mail Kevin Hintzman at kevin_hintzman@nass.usda.gov or call at 202-690-3223.

Current and historic publications for each of the surveys above can be obtained from the following sources:

Printed copies of our Quick Stats are available from NASS Publications Office by telephone (customer service at 1-800-727-9540 or 202-720-3878). Electronic access is available from the NASS Internet Web-site <http://www.nass.usda.gov>.

Specific publications can be found at the sites listed below.

Agricultural Chemical Use Program

http://www.nass.usda.gov/Surveys/Guide_to_NASS_Surveys/Chemical_Use/index.asp

Agricultural Resource Management Survey (ARMS) Index page

http://www.nass.usda.gov/Surveys/Guide_to_NASS_Surveys/Ag_Resource_Management/index.asp

Agricultural Resource Management Survey, Phase II

Agricultural Chemical Usage Field Crops Summary

<http://usda.mannlib.cornell.edu/MannUsda/viewDocumentInfo.do?documentID=1560>

Agricultural Resource Management Survey, Phase II

Agricultural Chemical Usage – Livestock and General Farm Use

<http://usda.mannlib.cornell.edu/MannUsda/viewDocumentInfo.do?documentID=1569>

Agricultural Resource Management Survey, Phase III

Farm Production Expenditures

<http://usda.mannlib.cornell.edu/MannUsda/viewDocumentInfo.do?documentID=1066>

Chemical Use Survey, Fruit

Agricultural Chemical Usage Fruit Summary

<http://usda.mannlib.cornell.edu/MannUsda/viewDocumentInfo.do?documentID=1567>

Chemical Use Survey, Vegetables

Agricultural Chemical Usage Vegetables Summary

<http://usda.mannlib.cornell.edu/MannUsda/viewDocumentInfo.do?documentID=1561>

Post-harvest Chemical Use Survey

Agricultural Chemical Usage Post-harvest Applications

<http://usda.mannlib.cornell.edu/MannUsda/viewDocumentInfo.do?documentID=1571>

17. If seeking approval to not display the expiration date for OMB approval of the information collection, explain the reasons that display would be inappropriate.

No approval is requested for non-display of the expiration date.

18. Explain each exception to the certification statement identified in Item 19, “Certification for Paperwork Reduction Act Submissions” of OMB Form 83-I.

There are no exceptions to the certification statement.

September, 2011
Revised December 2011