**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.

**TERMS OF CLEARANCE**

Terms of clearance have been addressed in either the supporting statements, or in the supplementary attachments.

**A. JUSTIFICATION**

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

\* The Agricultural Resource Management Survey (ARMS) consists of three phases (screening, production practices, and cost/returns) and a supplemental contractor expense survey, and

\* The Vegetable Chemical Use Surveys.

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 a 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 target commodities are on a rotational basis. This rotation allows NASS and ERS to provide detailed data on all the major commodities while minimizing respondent burden. The data from these three phases are combined to give a complete representation of whole farm data.

The contractor expense survey is a supplemental ARMS survey used to impute costs that a farmer may incur but not be able to report with any detail(s).

In 2008, the Committee on National Statistics (CNSTAT) of the National Research Council released the findings and recommendations of an independent review of USDA’s Agricultural Resource Management Survey (ARMS) in *Understanding American Agriculture*. The recommendations and responses to this review panel are attached to this OMB submission.

The Fruit and Vegetable Chemical Use Surveys are conducted on a rotational basis. During this three year approval request we will be conducting the vegetable chemical use survey in 2013. The fruit survey is not scheduled to be conducted until the next three year approval. Historically, NASS conducted these surveys in alternating years; with the budget cuts the surveys are moved back to one every 5 years.

The Post Harvest Chemical Use surveys will not be conducted during this three year approval process, due to funding cuts. The commodities that are normally selected for these surveys would correspond with the ARMS Phase II surveys. The combined data from these two surveys would allow analysts to see the total amount of chemicals that were applied to a given commodity during the target year(s).

**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 Surveys (ARMS) are 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.

**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.

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 two major survey program areas: (1) Agricultural Resource Management Surveys (ARMS); and (2) Vegetable Chemical Use Surveys. Following are descriptions of the two 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.

An ARMS data users’ conference was held in conjunction with the February 2009 Ag Outlook Forum. A webinar was conducted in spring 2009 and a data user’s forum was held at the Agricultural and Applied Economics Association (AAEA) in August 2009. The NASS Long-Range Planning Team requested input from data users in the agricultural community during 2009. Stakeholders provided significant input, both before and after the chemical use component of ARMS was reinstated in the summer of 2009. NASS continually seeks input from data users at various trade association meetings, often setting up forums at those meetings to discuss surveys relevant to the stakeholder group.

The ARMS briefing room on the ERS Web site provides an opportunity for stakeholder feedback regarding data characteristics, use of the information for statistical purposes, and questionnaire content. ERS receives 40 to 60 inquires annually from this facility.

In 2011, an external panel of experts in farm financial analysis was assembled to conduct a comprehensive review of the ARMS process for constructing financial statements and to provide recommendations regarding possible changes to questionnaire content, variable summarization methods, and data collection procedures. The external panels received briefings on the ARMS process, asked questions of the process, and then met to discuss possible recommendations. An AAEA symposium was held to further vet recommendations. A special issue of the *Agricultural Finance Review* is in progress to publish the outcome of the review and panel recommendations.

ERS staff contacts academic animal scientists and economists, extension staff, other government agencies, and commodity groups during the development of community of practice livestock versions, and solicits their advice on pressing issues and specific question formulations. The efforts have been expanded and systematized since the ARMS review.

**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.

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 2012 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 (EPA) 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 (BEA) 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 (BEA) 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)** **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 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 vegetable crops.

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 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 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.

The Vegetable Chemical Use survey has historically been conducted in the following 18 States: 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 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 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 vegetable production is essential for evaluating the economic, environmental, and public health consequences of farm chemical regulations. The Chemical Use Surveys include all vegetables with production estimates which are significant and critical to the nation’s food supply.

**Chemical Applications Consent Form:** The Chemical Applications Consent Form is a supplemental questionnaire for the Vegetable Chemical Use Survey. Approximately half of the vegetable growers use commercial applicators to treat their vegetable crops. If the farm operator is not able to provide the detailed information required on the chemical use questionnaire, we will ask the respondent for permission to contact the commercial operation who applied the chemical(s) and collect the data from them, if we are given the operator’s permission.

**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.**

The ARMS Phase I (screening) is conducted initially as a mail and internet survey. Operators who do not respond by a certain time will be attempted by either a phone or field enumerator. The phone enumerators will be using a Computer Assisted Telephone Interview (CATI) system which incorporates a BLAISE interactive survey. The field enumerators are being equipped with Apple iPads and will conduct a Computer Assisted Personal Interview (CAPI). As of mid-2012 field offices in 18 states have been equipped with iPads.

The ARMS Phases II and III, along with the Vegetable 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 Vegetable 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 Interviews (CAPI) using the Apple Ipad, the ARMS survey instruments will be deployed as a CAPI survey program as the system 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.

**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. 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.

Periodically, NASS reviews record keeping systems used by respondents to record and report chemical use data to State EPA’s, or financial records they keep to be used when filling out their State and Federal Income Tax forms. When possible, NASS will make changes to our questionnaires to emulate these other documents, to help reduce respondent burden and reduce potential reporting errors.

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 curtailed. The Vegetable and Fruit Chemical Use Surveys were previously conducted in alternating years. Now they will be conducted once every ten years. The vegetable survey will be conducted in 2013 and the fruit survey will be conducted in 2018. The Post Harvest Chemical Use Survey has been discontinued for the time being. NASS is responsible for maintaining a chemical use database which is essential for answering fundamental questions about the safety of our nation's water and food supplies. Sound policy decisions cannot be made without good unbiased data.

Working closely with AMS, ERS, EPA and several other agencies NASS has identified the priority of which commodities have the greatest urgency for data collection. 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 for both current and future data collection cycles by NASS are attached to this docket. As finalized questionnaires are approved each year the new questionnaire(s) 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 March 26, 2012 (Volume 77, Number 58), on pages 17404-17405. Two public comments from the same individual were received for this notice in March 2012. We reviewed the comments, but the information collections included in this docket are essential for our agency’s mission.

**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 program. Copies of the report are available via the web at: <http://books.nap.edu/openbook.php?record_id=11990&page=R1>.

During the first half of 2012, NASS and ERS have worked together to review all recommendations provided by NAS-CNSTAT. They have compiled a report responding to the concerns and recommendations raised, and have prepared a plan for items that require further follow up. These materials are attached to this renewal request in the ROCIS submission system. These materials will be updated annually or more frequently, as warranted, and available to the public on the NASS Surveys website.

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. The “Research Plan” or timeline is included in the “ARMS Progress Report”, which is attached to this submission.

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.**

There are no payments or gifts to respondents.

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

Survey materials (questionnaires, respondent booklets and publicity materials) 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 CIPSEA 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 70,840 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. The Phase I survey is also used to prescreen for the Vegetable Chemical Use Survey. Burden was calculated using the interview lengths 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 70,840 hours is multiplied by $24 per hour, for a total cost to the public of $1,700,160.





Targeted commodities for this approval cycle:



**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 projected total cost to the Federal government to conduct the ARMS and chemical use surveys and prepare estimates is approximately $16.7 million for fiscal year 2013, most of which is staff costs.

**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 70,840 hours. The decrease of 8,891 hours from the current burden of 79,731 hours is due to miscellaneous factors:

* Budget cuts have reduced or eliminated several surveys (Post Harvest Chemical Use, Fruit Chemical Use in 2014 and the Vegetable Chemical Use Survey in 2015).
* The ARMS Phase III for 2013 is being coordinated with the 2012 Census of Agriculture. If a respondent wishes to complete the ARMS questionnaire instead of the Census questionnaire they can and their obligation for the Census of Agriculture is met.
* The ARMS Phase III will be attempted by mail with phone and field follow up enumeration for non-respondents.
* The ARMS II Consent Form was accidentally omitted from the previous burden calculation.



**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.



1/ All survey years correspond to calendar years, except for ARMS Phase III. ARMS Phase III is mailed out the last week of December and data collection is conducted in Jan-Apr of year following the survey year. E.g.: 2012 ARMS Phase III is conducted in Jan-Apr 2013.

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](mailto: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 Tony Dorn at [tony\_dorn@nass.usda.gov](mailto:tony_dorn@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 (historical)

*Agricultural Chemical Usage Field Crops Summary*

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

Agricultural Resource Management Survey, Phase II (historical)

*Agricultural Chemical Usage – Livestock and General Farm Use*

[*http://usda.mannlib.cornell.edu/MannUsda/viewDocumentInfo.do?documentID=1569*](http://usda.mannlib.cornell.edu/MannUsda/viewDocumentInfo.do?documentID=1569)

Agricultural Resource Management Survey, Phase III (current and historical)

*Farm Production Expenditures*

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

Chemical Use Survey, Fruit (historical)

*Agricultural Chemical Usage Fruit Summary*

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

Chemical Use Survey, Vegetables (historical)

*Agricultural Chemical Usage Vegetables Summary*

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

Post-harvest Chemical Use Survey (historical)

*Agricultural Chemical Usage Post-harvest Applications*

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

In the NASS Quick Stats program, data users can have access to published data from current surveys. The Quick Stats provides an overview of the data for most of the major surveys conducted by NASS. In this website users will also have access to Pre-Defined Queries which will allow them to bring up various data relationships quickly for the commodities of interest.

<http://www.nass.usda.gov/Data_and_Statistics/Pre-Defined_Queries/>

NASS has begun to publish Methodology and Data Quality Measure reports for the public to have and use. The reports that have been completed thus far, can be found at the following link:

<http://www.nass.usda.gov/Publications/Methodology_and_Data_Quality/index.asp>

Copies of the November 2007 National Academies of Sciences, Committee on National Statistics (NAS-CNSTAT) report are available via the web at:

<http://books.nap.edu/openbook.php?record_id=11990&page=R1>.

A response to the NAS-CNSTAT report can be found at:

<http://www.nass.usda.gov/Surveys/ARMS_Progress_Report.pdf>.

**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.

June, 2012

Revised September, 2012