

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 production practice and chemical use data. Previous submissions included an economic component that is being separated to better accommodate changes requested by data users and policy makers.

TERMS OF CLEARANCE

The agency agrees to continue to implement and report upon improvements to the ARMS study, as indicated by the NAS report, and as resources permit.

NASS RESPONSE:

NASS has altered it's training of Field Staff (and subsequently Field Enumerators) and data collection strategies in response to the COVID-19 pandemic. The other improvements are included in the ARMS 3 Economic Surveys request separate from this one.

A. JUSTIFICATION

This docket is being submitted to renew the authority to conduct the following survey programs for a three-year period:

- Agricultural Resources Management Survey (ARMS) Phase 1 / Integrated Screening Survey (ISS),
- ARMS Phase 2 conducting field crop production practice and chemical use,
- The Vegetable Chemical Use, as well as
- The Fruit Chemical Use.

ARMS Phase 1/ISS 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 2 Chemical Use Survey is normally conducted every year and it consists of two versions; the 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 2-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 3 (under a separate information collection request) 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 data from these three phases are combined to give a complete representation of whole farm data. If full funding is provided each year, NASS plans to follow the rotation schedule found in items 12 and 16 below.

The Fruit and Vegetable Chemical Use Surveys are conducted on a rotational basis. Projected funding for the next three years has allowed for the reinstatement of the annual rotation.

- 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 help 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.

Without these data, decision makers cannot analyze and report on the financial status of farms, the economic circumstances of farm households, 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).

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 and Vegetable Chemical Use Surveys are also mandated by Title 7 USC 136i-2. These data are important to have a measure of chemicals applied by crop so pesticide certification and other programs have data to drive decisions and policies. A current accounting of farm chemical use, including details on application methods, is essential for other Federal and State agencies to evaluate the economic and environmental impacts, benefits, and practices farm chemical usage.

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 phase 1 (screening) and phase 2 (chemical use)); and (2) Vegetable and Fruit Chemical Use Surveys. The following text provides descriptions of these 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.

NASS continually seeks input from data users at various interested group, data user, and trade association meetings, often setting up forums at those meetings to discuss surveys relevant to the stakeholder group. Recent examples include National Academies of Science about fungicide resistance and Chesapeake Bay Committee.

Stakeholders can provide feedback or request special tabulations of NASS data through the following website:

https://www.nass.usda.gov/Data_and_Statistics/Special_Tabulations/Request_a_Tabulation/index.php.

If NASS is able to generate the requested data tables and there aren't any confidentiality issues the tables will be made available to the public.

The ARMS briefing room on the ERS Web site:

<https://www.ers.usda.gov/data-products/arms-farm-financial-and-crop-production-practices/> provides an opportunity for stakeholder feedback regarding data characteristics, use of the information for statistical purposes, and questionnaire content. In 2021, ERS received 64 inquiries from this utility; results from these inquiries can be found at <https://www.ers.usda.gov/data-products/arms-farm-financial-and-crop-production-practices/contact-us/>.

The uses of the information collected from ARMS are many:

- Dramatic changes in crude oil prices can have a huge impact on farmers. In addition to the prices for diesel and gasoline, farmers must make decisions on which crops to produce, based heavily on the availability and affordability of fertilizers and pesticides that are petroleum based. Farming practices can also be altered due to the 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. in years when oil prices are trending upward, while using more conventional farming techniques in years when prices are trending downward. The ARMS surveys are crucial in measuring annual changes in doing business (financially, farming practices, and types of inputs used by farmers).

- 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 recent years have made a huge impact on farmers and the way they conduct 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 types 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.
- The ARMS surveys are critical for measuring the annual changes to the American farmer. With the increase in bioenergy dependency, farmers are changing their farming practices to accommodate the increased demand for crops that can be converted into ethanol or biodiesel. This is causing some farmers to change from growing crops for food and feed grains to crops that could produce a larger quantity of biofuels than traditional crops.
- Data collected about agricultural fertilizer and pesticide use for major field crops (corn, soybeans, wheat, oats, potatoes, etc.) and selected fruits and vegetables 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 (type of chemical applied, rate of application, timing and location of application, associated cropping practices, frequency of application, etc.). 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 Agricultural Marketing Service (AMS), the Agricultural Research Service (ARS) and Economic Research Service (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, crop rotation data 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. The ARMS Phase 2 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.
- In order to minimize respondent burden while maintaining a comprehensive data set 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 5 or 10 years; while other crops that change on a more frequent basis may be surveyed every 2 to 3 years.
- 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.
- 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.

- (2) **Fruit and Vegetable Chemical Use Surveys.** The fruit and vegetable chemical use surveys alternate (fruit in odd numbered years; and vegetable in even numbered years) 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.

The Vegetable Chemical Use Surveys are preceded by a screening survey integrated with the ARMS Phase 1 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 Integrated Screening Survey (ISS) is conducted from May to early July of the years the Vegetable Chemical Use Survey is conducted. 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 phase 2 surveys, NASS will be able to measure changes in rates and types of chemicals used. Changes will be due in part to the changes in costs of crude oil, restrictions on water usage, and the availability of inputs.

The Vegetable Chemical Use survey was previously conducted in 2020 in the following 18 States: Arizona, California, Florida, Georgia, Indiana, Illinois, Michigan, Minnesota, New Jersey, New York, North Carolina, Ohio, Oregon, Pennsylvania, South Carolina, Texas, Washington, and Wisconsin.

The commodities of interest have been: Asparagus, snap beans, broccoli, cabbage, cantaloupe, carrots, cauliflower, celery, sweet corn, cucumbers, garlic, honeydew, head and other lettuce, dry onions, green peas, bell peppers, pumpkins, spinach, squash, strawberries, tomatoes, and watermelon. If production trends change, the mix of states and commodities included in the program may be refined.

In 2021, the twelve States conducting the Fruit Chemical Use Survey were California, Florida, Georgia, Michigan, New Jersey, New York, North Carolina, Oregon, Pennsylvania, South Carolina, Texas, and Washington. Commodities of interest were: apples, apricots, avocados, blueberries, cherries (sweet & tart), dates, grapefruit, grapes, kiwifruit, lemons, nectarines, olives, oranges, peaches, pears, plums & prunes, raspberries, strawberries, and tangerines/tangelos. If production trends change, the mix of states and commodities included in the program may be refined.

These data are important in decisions about agricultural 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 enforcing the Food Quality Protection Act. A current accounting of farm chemical use in States producing over 85 percent of the nation's fruit and vegetable production is essential for evaluating the economic, environmental, and public health consequences of farm chemical regulations. The Chemical Use Surveys include all fruit and 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 1 (screening) is conducted initially as a mail and internet (Computer-Aided Self-Administered Interview) 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).

In the wake of the COVID-19 pandemic, NASS developed a CAPI instrument used for data collection. NASDA enumerators use this CAPI instrument to collect data while speaking with the respondent via phone. The ARMS Phase 2 survey is normally collected face-to-face, so the survey team adopted this approach given the inability to conduct the interviews face-to-face due to social distancing measures. There are currently no plans to develop a Web-based instrument for ARMS Phase 2 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.

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, Economic Research Service (ERS), Agricultural Marketing Service (AMS), Agricultural Research Service (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 the Environmental Protection Administration (EPA). Other government agencies such as the Food and Drug Administration (FDA) and the U.S. Geological Survey (USGS) 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.

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 continued use 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 are coordinated with other surveys to minimize contacts with respondents.

Sampling techniques are applied to minimize burden to individual operations that 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 agencies, 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 and administrative data (from other USDA agencies) 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.

Current and projected budgets have allowed for the continuation of the Fruit and Vegetable Chemical Use Surveys to be conducted in alternating years. 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 under a change request.

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 December 22, 2022 (Volume 87, Number 245), on pages 78637 - 78638. One comment in support of the ARMS program was received by Dennis Fixler, Chief Economist of U.S. Department of Commerce's Bureau of Economic Analysis (BEA).

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.

Specific individuals NASS solicited input from, but received none are:

Kimberly Nesci
USDA - Office of the Chief Economist/Office of Pest Management Policy
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202-993-3804

Laura Dodson
USDA - Economic Research Service
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202-694-5505

Mark Suarez
EPA - Office of Chemical Safety and Pollution Prevention - Office of Pesticide Programs / Senior Scientist
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202-566-1276

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.

Included in this renewal request, NASS is asking for approval to conduct up to 50 cognitive interviews each year for testing purposes. These field tests are primarily for the commodity versions and focus mainly on the research questions that ERS is wanting to add each year to reflect changes within the farming industry for these commodities. The testing is mainly for adding new terminology or questions to the commodity specific versions. NASS and ERS continue the monthly ARMS steering committee meetings per the recommendation from the NAS 2007 report. 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 three 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 data users.

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.

Questionnaires include a statement that individual reports are confidential. U.S. Code Title 18, Section 1905; U.S. Code Title 7, Section 2276; and the Confidential Information Protection and Statistical Efficiency Act of 2018, Title III of Pub. L. No. 115-435, codified in 44 U.S.C. Ch. 35 and other applicable Federal laws. 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.

The following confidentiality pledge statement will appear on all NASS questionnaires.

The information you provide will be used for statistical purposes only. Your response will be kept confidential and any person who willfully discloses ANY identifiable information about you or your operation is subject to a jail term, a fine, or both. This survey is conducted in accordance with the Confidential Information Protection and Statistical Efficiency Act of 2018, Title III of Pub. L. No. 115-435, codified in 44 U.S.C. Ch. 35 and other applicable Federal laws. For more information on how we protect your information please visit: <https://www.nass.usda.gov/confidentiality>.

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. Cost to the public for completing the questionnaire is assumed to be comparable to the hourly rate of those requesting the data. Average annual reporting time of 51,222 hours is multiplied by \$37.94 per hour for a total annual cost to the public of \$1,943,362.68.

NASS uses the Bureau of Labor Statistics' [Occupational Employment Statistics](#) (most recently published on March 31, 2022 for the previous May) to estimate an hourly wage for the burden cost. The May 2021 mean wage for bookkeepers was \$21.70. The mean wage for farm managers was \$37.71. The mean wage for farm supervisors was \$26.18. The mean wage of the three is \$28.53. To calculate the fully loaded wage rate (includes allowances for Social Security, insurance, etc.) NASS will add 33% for a total of \$37.94 per hour.

All of the ARMS surveys are annual surveys, but some respondents will be contacted for more than one of the surveys. Phase 1 is the screening phase for both Phases 2 and 3. Less than 20 percent of the Phase 1 sample will be selected for the Phase 2 survey. The Phase 1 survey is also used to prescreen for the Vegetable Chemical Use Survey. Years where this occurs, the Phase 1 survey will be part of the Integrated Screening Survey. The vegetable and fruit chemical use surveys alternate, so both will never occur in the same year. Burden was calculated using the interview lengths and the targeted response rate of 80 percent. 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.

The average annual burden is significantly less than the previously reported burden because the ARMS Phase 3 and Cooperator Funded Chemical Use Surveys will have separate Information Collection Requests.

Integrated Screening Survey (Phase 1) (Reminder mail) 3/

Integrated Screening Survey (Phase 1) (Reminder E-Mail) 3/

Integrated Screening Survey (Phase 1) (Enumeration) 5/

Production Practices & Costs Report (Phase 2) Presurvey
Mailing

Response	
Survey Year	Survey

Total Respondent	
Survey Year	Survey

Targeted commodities for this approval cycle:

Chemical Use Target Com	
Year	Survey
2022	ARMS Phase 1
	ARMS Phase 2 (PPCR)

- 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 \$9.5 million for fiscal year 2023, 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 51,222 hours, a decrease of 58,055 hours below the current burden of 109,277 hours due to the ARMS Phase

3 and Contractor Expense Surveys will now have separate Information Collection Requests (most of the reduction in burden hours).

The new average number of contacts (407,398) is an increase of 116,338 from the previous number of 291,060. The decrease from the ARMS Phase 3 and Cooperator Funded Chemical Use Surveys having separate Information Collection Requests was exceeded by the increase resulting from the change in commodity mix and number of mailings being identified in the burden table.

The Table below gives a more detailed breakdown of the adjustments.

Overall Beginning Balances	291,060
Changes to ICR	
Changes to Movement to Separate ICRs	
Move ARMS 3 and Contractor Expense Surveys to 0535-NEW	(68,292)

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.

These tables are a summary of data collection, analysis, and publication dates.

2020	Agriculture Resource Management Survey <u>1/</u>
	Contractor Expense Survey
	Fruit Chemical Use Survey

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

NASS continues with the practice that was started in 2007 when 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 NASS's online Quick Stats database 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 or economic information** that you would like an expert to respond to, please e-mail Tony Dorn at tony.dorn@usda.gov or call at 202-720-5084.

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

Vegetable Highlights

<https://www.nass.usda.gov/Publications/Highlights/>

Fruit Highlights

<https://www.nass.usda.gov/Publications/Highlights/>

Agricultural Resource Management Survey (ARMS) Index page

<https://www.ers.usda.gov/data-products/arms-farm-financial-and-crop-production-practices/uses-and-publications/#uses>

Agricultural Resource Management Survey, Phase II (historical)

Agricultural Chemical Usage Field Crops Summary

<https://usda.library.cornell.edu/concern/publications/2n49t1699?locale=en>

Agricultural Resource Management Survey, Phase II (historical)

Agricultural Chemical Usage – Livestock and General Farm Use

<https://usda.library.cornell.edu/concern/publications/2514nk499?locale=en>

Chemical Use Survey, Fruit (historical)

Agricultural Chemical Usage Fruit Summary

<https://usda.library.cornell.edu/concern/publications/0r967373m?locale=en>

Chemical Use Survey, Vegetables (historical)

Agricultural Chemical Usage Vegetables Summary

<https://usda.library.cornell.edu/concern/publications/3197xm063?locale=en>

Post-harvest Chemical Use Survey (historical)

Agricultural Chemical Usage Post-harvest Applications

<https://usda.library.cornell.edu/concern/publications/z316q159m?locale=en>

In the NASS Quick Stats program, data users can have access to published data from current surveys. 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 predefined queries which will allow them to bring up various data relationships quickly for the commodities of interest.

https://www.nass.usda.gov/Data_and_Statistics/Pre-Defined_Queries/index.php

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:

https://www.nass.usda.gov/Publications/Methodology_and_Data_Quality/index.php

NASS Research Reports

https://www.nass.usda.gov/Education_and_Outreach/Reports,_Presentations_and_Conferences/Reports_by_Date/index.php

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.

April 2023