

## **SUPPLEMENTAL SUPPORTING STATEMENT Part A**

### **Agricultural Resource Management and Chemical Use Surveys**

#### **Substantive Change**

**OMB No. 0535-0218**

This substantive change is being submitted as a supplemental supporting statement for including the 2022 Agricultural Resource Management Surveys (ARMS) 2 and 2022 Vegetable Chemical Use Survey.

The most significant update from the 2017 Wheat PPCR is there will be only one combined wheat version instead of three different wheat versions (winter, Durum, and other spring wheat).

#### **A. JUSTIFICATION**

##### **1. Circumstances making collection of information necessary.**

NASS is requesting a substantive change to the ARMS and Chemical Use Survey docket (0535-0218) to accommodate the addition of the 2022 ARMS 2, and 2022 Vegetable Chemical Use questionnaires.

NASS conducts the ARMS program as a part of a cooperative agreement with the USDA Economic Research Service (ERS). The Costs and Returns (Phase 3) surveys collect both whole farm data and commodity specific data. The whole farm data can be linked to the cropping practices and chemical use data collected in the ARMS 2 phase. The majority of the questions that are asked in the Phase 3 surveys are a part of the ARMS core program and rarely have any changes made to them. The cooperative agreement allows ERS to ask additional research questions each year to address changes in the farming industry.

Historically, the majority of the surveys that are conducted under this OMB approval have been conducted by personal interviews. During the pandemic, NASS made changes to our data collection efforts to accommodate social distancing. If the current situation of the pandemic allows, NASS will resume personal interviewing using the National Association of State Department of Agriculture (NASDA) enumerators to collect the data. The surveys have been changed to allow for data collection by computer assisted web interviews (CAWI) and computer assisted telephone interviews (CATI). At this time, NASDA approved limited face to face enumeration by first phoning operators to schedule interviews and obtaining approval from the operator to engage in-person.

The substantive change request approved May 31, 2022 documents the plan for the 2022 ARMS and Chemical Use Survey Cycle

Crop Year	Survey	Target Commodity	Reference Year	Year Survey is Conducted
2022	ARMS Phase 1	Intigrated Screening (ARMS and Chem Use)	2022	2022
	ARMS Phase 2 (PPCR)	Wheat	2022	2022
	ARMS Phase 2 (PPR)	Potatoes	2022	2022
	Chemical Use	Vegetables	2022	2022
	ARMS Phase 3	CRR/Census, Wheat	2022	2023

**2. How, by whom, and for what purpose information is to be used.**

There are no changes from the original approval for the purposes of the information collected.

**3. Use of improved information technology.**

Due to the COVID-19 pandemic and the need for social distancing, NASS added a Computer Assisted Telephone Interview (CATI) instrument with this particular group of surveys. In addition, NASS will be offering the ARMS 2 and ARMS 3 surveys as a Computer Assisted Web Interview (CAWI). NASS has also been developing a Computer Assisted Personal Interview (CAPI) instrument that will be available for use if it is safe to interview farmers in person.

**4. Efforts to identify duplication.**

There are no changes from the original approval related to duplication reduction.

**5. Methods to minimize burden of small businesses.**

With the use of the CATI, CAPI, and CAWI instruments, the incorporated screening questions and skip patterns should help minimize burden as much as possible.

**6. Consequence if information collection were less frequent.**

There are no changes to the frequency of these surveys than was originally approved.

**7. Special circumstances.**

No special circumstances are associated with this information collection.

**8. Federal register notice and consultation with outside persons.**

Not applicable.

**9. Payments or gifts to respondents.**

No payments or gifts will be given to respondents.

**10. Confidentiality provided to respondents.**

Confidentiality will be provided to respondents 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. All confidentiality protections that are applied to all products released from these surveys will remain the same as originally approved.

**11. Questions of a sensitive nature.**

No questions of sensitive nature will be asked.

**12. Hour burden and annualized costs to respondents.**

This substantive change request results in an increase of 21,060 responses and 2,892 hours of burden. The new total is 291,060 responses and 109,277 hours.

Table 1

Respondent Burden for ARMS and Chemical Use Surveys for 2020 - 2022 1/												
Survey Year	Survey	Sample Size 5/	Waves of Data Collection	Responses				Non-response				Total Burden Hours
				Resp. Count	Waves X Count	Min./ Resp.	Burden Hours	Nonresp Count	Waves X Count	Min./ Nonr.	Burden Hours	
<b>Agricultural Resource Management Surveys (ARMS) Phases I, II, &amp; III</b>												
2020	Integrated Screening Survey (Phase 1) (Mail) 1/	110,000	1	22,000	22,000	15	5,500	88,000	88,000	2	2,933	8,433
	Integrated Screening Survey (Phase 1) (Enumeration) 6/	88,000	1	66,000	66,000	15	16,500	22,000	22,000	2	733	17,233
	Production Practices Report (Phase 2) 2/	4,000	1	3,200	3,200	50	2,667	800	800	2	27	2,694
	Production Practices & Costs Report (Phase 2) 2/	-	1	-	-	75	-	-	-	2	-	-
	Costs & Returns Report (Phase 3) (Mail) 3/ CRR Version	32,000	1	8,000	8,000	110	14,667	24,000	24,000	2	800	15,467
	Costs & Returns Report (Phase 3) (Enumeration) 3/	24,000	1	17,760	17,760	110	32,560	6,240	6,240	2	208	32,768
	Costs & Returns Report (Phase 3) (Mail) 3/ Hogs	2,200	1	550	550	115	1,054	1,650	1,650	2	55	1,109
	Costs & Returns Report (Phase 3) (Enumeration) 3/	1,650	1	1,221	1,221	115	2,340	429	429	2	14	2,354
<b>2020 Total</b>	<b>110,000</b>		<b>88,000</b>	<b>118,731</b>		<b>75,288</b>	<b>29,469</b>	<b>143,119</b>		<b>4,770</b>	<b>80,058</b>	
2021	ARMS Screening Survey (Phase 1) (Mail)1/ 4/	100,000	1	20,000	20,000	15	5,000	80,000	80,000	2	2,667	7,667
	ARMS Screening Survey (Phase 1) (Enumeration) 6/	80,000	1	60,000	60,000	15	15,000	20,000	20,000	2	667	15,667
	Production Practices Report (Phase 2) 2/	1,850	1	1,480	1,480	50	1,233	370	370	2	12	1,245
	Production Practices & Costs Report (Phase 2) 2/	4,900	1	3,920	3,920	65	4,247	980	980	2	33	4,280
	Costs & Returns Report (Phase 3) (Mail) 3/	35,000	1	7,000	7,000	100	11,667	28,000	28,000	2	933	12,600
	Costs & Returns Report (Phase 3) (Enumeration) 3/	30,000	1	22,500	22,500	100	37,500	7,500	7,500	2	250	37,750
<b>2021 Total</b>	<b>100,000</b>		<b>80,000</b>	<b>114,900</b>		<b>74,647</b>	<b>27,500</b>	<b>136,850</b>		<b>4,562</b>	<b>79,209</b>	
2022	Integrated Screening Survey (Phase 1) (Mail)1/ 4/	100,000	1	20,000	20,000	15	5,000	80,000	80,000	2	2,667	7,667
	Integrated Screening Survey (Phase 1) (Enumeration) 6/	80,000	1	60,000	60,000	15	15,000	20,000	20,000	2	667	15,667
	Production Practices Report (Phase 2) Presurvey Mailing	1,850	1	1,480	1,480	5	123	370	370	2	12	135
	Production Practices Report (Phase 2) Initial Mailing	1,850	1	370	370	35	216	1,480	1,480	2	49	265
	Production Practices Report (Phase 2) 2/	1,850	1	1,480	1,480	35	863	370	370	2	12	875
	Production Practices & Costs Report (Phase 2) Presurvey Mailing	4,900	1	3,920	3,920	5	327	980	980	2	33	360
	Production Practices & Costs Report (Phase 2) Initial Mailing	4,900	1	980	980	65	1,062	3,920	3,920	2	131	1,193
	Production Practices & Costs Report (Phase 2) 2/	4,900	1	3,920	3,920	65	4,247	980	980	2	33	4,280
	Costs & Returns Report (Phase 3) (Mail) 3/ 7/	43,000	1	8,600	8,600	100	14,333	34,400	34,400	2	1,147	15,480
	Costs & Returns Report (Phase 3) (Enumeration) 3/ 7/	34,400	1	25,800	25,800	100	43,000	8,600	8,600	2	287	43,287
<b>2022 Total</b>	<b>100,000</b>		<b>80,000</b>	<b>126,550</b>		<b>84,171</b>	<b>28,600</b>	<b>151,100</b>		<b>5,038</b>	<b>89,209</b>	
<b>Cognitive Testing</b>												
3 years	Testing approximately 50 ARMS and/or Chemical Use questionnaires per year	50	1	50	50	90	75	-	-		-	75

1/ ARMS and Chemical Use surveys are conducted on a cyclical basis that does not follow a calendar year, but instead follows the crop production year. The ARMS phase 1 is conducted in the Spring and early Summer for that crop year. The ARMS 2 and Chemical Use Surveys are conducted in the Autumn for the current production cycle. The ARMS 3 is conducted the following year for the previous years expenses and income for both whole farm and commodity specific data.

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

3/ All Phase 3 questionnaires will be attempted by mail and internet first with phone and field enumeration for non-respondents.

4/ In 2020 and 2022 the ARMS Phase 1 Screener will also be used to pre-screen for the Vegetable Chemical Use Survey and is named Integrated Screening Survey.

5/ The ARMS Phases 2 & 3 are both subsampled from the Phase I Screening Survey.

6/ Phase 1 is available by internet, mail, phone and face to face enumeration. The questionnaires are mailed out with pre-survey letter and internet instructions. Historically we have received approximately a 20% response rate by mail and CASI/CAWI combined. This is followed by phone and personal enumeration for non-respondents.

Table 2

2020	Vegetable Chem Use	4,200	1	3,360	3,360	60	3,360	840	840	2	28	3,388
2021	Fruit Chem Use	6,700	1	5,360	5,360	45	4,020	1,340	1,340	2	45	4,065
2022	VCUS - Presurvey Mailing	4,200	1	3,360	3,360	5	280	840	840	2	28	308
2022	VCUS - Initial Mailing	4,200	1	840	840	60	840	3,360	3,360	2	112	952
2022	Vegetable Chem Use	3,360	1	2,688	2,688	60	2,688	672	672	2	22	2,710
<b>Total</b>		22,660		15,608	15,608		11,188	7,052	7,052		235	11,423
<b>Microbial Food Safety Practices -- Packer Survey</b>												
<b>Discontinued</b>	Microbial Food Safety Practices -- Packer Survey	-	1	-	-	30	-	-	-	2	-	-
<b>Total</b>		-		-	-		-	-	-		-	-
<b>Publicity Materials for ALL surveys 2/</b>												
2020	All materials for all versions	114,200	1	91,360	122,171	5	10,181	22,840	143,979	2	4,799	14,980
2021	All materials for all versions	106,700	1	85,360	120,340	5	10,028	21,340	138,210	2	4,607	14,635
2022	All materials for all versions	103,360	1	82,688	129,318	5	10,777	20,672	151,792	2	5,060	15,837
<b>Total</b>		324,260		259,408	371,829		30,986	64,852	433,981		14,466	45,452
<b>Quality Control Survey (Telephone Only) - Recontact operators to verify quality of NASDA enumerators. 4/</b>												
2020	Quality Control Worksheet (phone only)	1,500	1	1,500	1,500	5	125	-	-		-	125
2021	Quality Control Worksheet (phone only)	1,500	1	1,500	1,500	5	125	-	-		-	125
2022	Quality Control Worksheet (phone only)	1,500	1	1,500	1,500	5	125	-	-		-	125
<b>Total</b>		4,500		4,500	4,500		375				-	375
<b>Annual Totals 2/</b>												
2020	Annual Totals	115,850	1	92,680	123,721		89,089	23,170	143,979		9,598	98,687
2021	Annual Totals	108,350	1	86,690	121,890		88,955	21,660	138,210		9,215	98,170
2022	Annual Totals	105,010	1	84,008	135,068		99,016	21,002	155,992		10,261	109,277
<b>Annual Averages</b>		109,737		87,793	126,893		92,353	21,944	146,060		9,691	102,045
Average Burden per Respondent per Year		0.92990492			1.44537129		0.7278048		6.65605		0.06635	

1/ ARMS and Chemical Use surveys are conducted on a cyclical basis that does not follow a calendar year, but instead follows the crop production year. The ARMS phase 1 is conducted in the Spring and early Summer for that crop year. The ARMS II and Chemical Use Surveys are conducted in the Autumn for the current production cycle. The ARMS III is conducted the following year for the previous years expenses and income for both whole farm and commodity specific data.

2/ For annual totals the sample size does not include the counts from the publicity materials, since it is the same operators. However, the burden counts do include the burden associated with the publicity materials. The surveys that are attempted by mail will have the publicity materials included with the initial mailing. No publicity materials are sent out with the Contractor Expense Surveys.

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

4/ Publicity materials are not sent out to sampled operations that were contacted for a quality control survey.

Cost to the public for completing the questionnaire is assumed to be comparable to the hourly rate of those requesting the data. Using a fully-loaded wage of \$36.97 per hour, the adjusted overall cost to the public for the 109,277 hours is estimated at \$4,039,970.70.

NASS uses the Bureau of Labor Statistics' [Occupational Employment Statistics](#) (most recently published on March 31, 2021 for the previous May) to estimate an hourly wage for the burden cost. The May 2020 mean wage for bookkeepers was \$21.20. The mean wage for farm managers was \$36.93. The mean wage for farm supervisors was \$25.25. The mean wage of the three is \$27.79. To calculate the fully loaded wage rate (includes allowances for Social Security, insurance, etc.) NASS will add 33% for a total of \$36.97 per hour.

**13. Total annual cost burden to respondents.**

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

**14. Annualized costs to federal government.**

There are no changes to the total annual cost of \$18,500,000 documented in the change request approved May 31, 2022 for the Agricultural Resource Management Surveys and the Chemical Use programs.

**15. Reasons for changes in burden.**

The removal of questions from the Production Practices Report (Potatoes) that were previously requested by the USDA Office of Pest Management Policy (OPMP) resulted in a decrease of 370 hours of burden with no change in number of responses. The removal of questions reduced the average time per respondent from 50 to 35 minutes.

The addition of presurvey and initial survey mailing for the Vegetable Chemical Use and ARMS 2 wheat and potato versions resulted in an increase of 21,060 responses and 3,262 hours.

**16. Tabulation, analysis, and publication plans.**

The changes to the questionnaires will be incorporated in the publications that are listed in the original approval docket.

**17. Request for approval of non-display of expiration date.**

No request is being made for approval of non-display of the expiration date.

**18. Exceptions to certification statement.**

No exceptions to the certification statement are requested.

July 2022a