Supporting Statement - Part B

FIELD CROPS PRODUCTION

OMB No. 0535-0002

B. COLLECTION OF INFORMATION EMPLOYING STATISTICAL METHODS

1. Describe (including a numerical estimate) the potential respondent universe and any sampling or other respondent selection method to be used. Data on the number of entities (e.g., establishments, State and local government units, households, or persons) in the universe covered by the collection and in the corresponding sample are to be provided in tabular form for the universe as a whole and for each of the strata in the proposed sample. Indicate expected response rates for the collection as a whole. If the collection has been conducted previously, include the actual response rate achieved during the last collection.

The agency's data collection goal is to obtain a complete response from each of the operations in the sample, staying on time and within budget. Telephone follow-up is conducted across the board. Data collection and follow-up are continued as long as possible given the publication date and the necessary post-data collection processing activities (summarization, analysis, preparing the publication, etc.).

The potential respondent universe is all 2.2 million farmers in the United States, excluding those who have already been selected for the national agricultural probability survey programs included in OMB No. 0535-0213. Each Field Office maintains a list of farmers known to grow crops of interest and to represent all crop growing areas within a State. Sample sizes are determined for each crop or survey as shown in Item A-12 (table). Telephone follow-up is conducted for any survey which does not reach at least an 80 percent response rate, subject to available funds, to ensure reliable indications. These follow-on surveys are required to cover small or specialty crops that are not adequately represented in our probability surveys.

Cooperative Extension Service agents are the primary respondents for the weekly Crop Progress and Condition Inquiry. Other sources include farmers, FSA county officials, and farm loan representatives of banks serving agricultural areas.

The Cash Rent survey will be targeting operations that historically rent land for cash. The sample will be supplemented with operations reporting acres rented (cash and non-cash) on the 2012 Census of Agriculture, once the data is available. The cash rental questions have been placed on a standalone

questionnaire targeting operations who rented non-irrigated cropland, irrigated crop land, or permanent pasture land.

For the County Agriculture Production Surveys (CAPS) only, a new adaptive design process was implemented for 2011. For the final 5 of the 13 weeks of telephone follow-up for Row Crops CAPS, telephone follow-up was prioritized to counties that needed further complete reports in order meet publication standards. Completed reports were still desired from all operations, and all records available for telephone follow-up were attempted multiple times throughout the data collection time period.

The response rates that are reported in Supporting Statement B match up with the surveys that were approved for the previous 3 year period (Supporting Statement A – 2009). The surveys that are identified in the current Supporting Statement A are for the next three years. Due to several program changes and population changes the surveys identified in the current supporting statement cannot be matched up with the previous response rates. The rates that are in the Supporting Statement B for 2011 are the most current counts we have.

Field Crop Production Response Rates for 2011					
Survey 1/	Sample Size	Freq.	Total Contacts	Total Responses	Respon Rate
Commodidty Specific Surveys					
Alfalfa/Other Grass Seed	15	1	15	6	40
Dry Beans					
Dry Bean Cleaner Survey	94	2	188	148	78
Dry Bean Inquiry	5,722	3	17,166	12,465	72
Dry Bean Seed Inquiry	28	3	84	81	96
Mint					
Mint Grower	232	1	232	163	70
Mint Dealer	8	1	8	7	87
Oilseeds, special	820	1	820	624	76
Sunflower, non-oil	2	3	6	6	100
Potatoes					
Acreage, Production and/or Marketings	1,795	3	5,385	3,774	70
Acreage and Disposition	2,105	3	6,315	4,539	71
Sweetpotatoes	1,082	1	1,082	846	78
Sugarbeets, June	5	4	20	20	100
Sugarbeets, Shuttle	5	4	20	20	100
Sugarcane	11	3	33	33	100
Tobacco	925	6	5,550	5,010	90
Variety Surveys					
Wheat and Barley	26,286	1	26,286	15,371	58
County Estimates					
County Agricultural Production Survey (CAPS) Small Grains	102,547	1	102,547	70,450	68
County Agricultural Production Survey (CAPS) Row Crops	194,649	1	194,649	123,213	63
Crop Progress and Condition Report (Crop Weather)	3,877	36	139,572	99,654	71
Cash Rent Survey	239,960	1	239,960	182,850	76

1/ NASS has been working to standardize many of the specialized surveys in this package. The breakouts for response rates for 2011 may not match the breakouts for 2012 – 2014 as displayed in Supporting Statement A, Item 12. In the past we used more State or regional surveys, now we are moving more towards a standardized master questionnaire that can be used at our National Operations Center (NOC) located in St. Louis, MO. The NOC began collecting data in late 2011 for many of our larger, nationwide surveys.

Sample Size vs. Population for Field Crops (OMB 0535-0002) for 2012 - 2014

Survey	Estimated Sample Size	Estimated Population Size	Percentage Surveyed	Type of Survey
Commodity Specific Surveys				
Alfalfa/Other Grass Seed	25	25	100%	Census
Dry Beans, Dry Peas & Lentils				
Dry Bean Cleaner Survey	100	100	100%	Census
Dry Bean Dealer Inquiry	25	25	100%	Census
Commercial Bean Seed Survey	25	25	100%	Census
Dry Bean Planting Intentions	500	500	100%	Census
Dry Bean Inquiry (mid-season)	6,000	7,195	83%	Probability
Dry Bean Inquiry (end-of-season)	6,000	7,195	83%	Probability
Dry Peas and Lentils	400	4,034	10%	Coverage Survey
Mint				
Mint Grower	300	350	86%	Coverage Survey
Mint Dealer	10	10	100%	Census
Oilseeds, special	1,000	1,000	100%	Census
Sunflower, non-oil	10	10	100%	Census
Potatoes				
Spring Season Production Forecast	500	1,081	46%	Probability
Summer Season Production Forecast	800	1,830	44%	Probability
November Production Forecast	4,500	6,542	69%	Probability
Disposition	5,100	9,453	54%	Probability
Sweet Potato Disposition	1,150	1,150	100%	Census
Sweet Potatoes Buyers	100	100	100%	Census
Tobacco				
Tobacco Forecast (March/June)	150	150	100%	Census
Tobacco Inquiry (Other)	150	150	100%	Census
Tobacco Price Inquiry	3,000	28,094	11%	Probability
Tobacco Buyer Survey	15	15	100%	Census
Variety Surveys				
Wheat and Barley	30,000	44,000	68%	Stratified Coverage Survey
Malting Barley Survey	2,000	2,900	69%	Stratified Coverage Survey
County Estimates				
County Agricultural Production Survey (CAPS) Small Grains *	110,000	1,721,946	6%	Stratified Coverage Survey
County Agricultural Production Survey (CAPS) Row Crops *	200,000	1,721,946	12%	Stratified Coverage Survey
Alaska Acreage & Production Survey	300	680	44%	Probability
Alaska Spring Acreage Survey	300	680	44%	Probability
Crop Progress and Condition Report (Crop Weather)	4,000	NA	NA	Coverage Survey

2. Describe the procedures for the collection of information.

The specialty surveys listed in the first part of the table above, target commodities that cannot be covered adequately in general purpose surveys. Most are grower surveys using a mail phase with telephone nonresponse followup until a prescribed cutoff date. The sample sizes cited often represent over 50 percent of the sampling population and contain a large number of matched reports from survey to survey. These surveys are coordinated with other collections to avoid duplicate contacts. The Dry Bean Cleaner Survey, the Mint Dealer Survey, the Sunflower, non-oil Survey, the Sugarbeet and Sugarcane surveys are all censuses of all processors using a mail phase with phone followup.

The Wheat and Barley Variety surveys and the County Agricultural Production Surveys (CAPS) obtain the information needed to estimate proportions and averages only. No direct indications or estimates are derived from these data. Official State and U.S. estimates are set from the quarterly Crops/Stocks survey (OMB No. 0535-0213), a national probability survey with full followup. The results of the Variety and CAPS surveys are used to allocate the official estimate into classes (variety) or to geographic sub domains (district and county). These surveys employ a mail phase with phone followup until a prescribed time deadline. Nonreponse followup is directed to achieve sufficient coverage and full followup is not required. Operations selected for the Crops/Stocks probability surveys are excluded from the CAPS (to avoid duplicate contacts); however data collected are pooled when computing the proportions and averages. The Crops/Stocks surveys and the 5-year Census of Agriculture (OMB No. 0535-0226) are used to evaluate potential bias.

The Crop Progress surveys are a weekly panel of respondents made up largely of government employees, USDA Extension Agents and USDA Farm Service Agency personnel. It is a quick turnaround (same day) survey using a Web-based instrument. Data are collected by noon and estimates are published by 4:00 pm Eastern Time. No followup is done for these surveys.

Modes of data collection used for this group of surveys, includes original mailing of questionnaires, follow-up mailing of questionnaires to non-respondents, post card reminders, phone follow-up, and limited face to face enumeration in certain situations. The amount of time allotted to collect the data as well as amount of funds available for data collection will be considered when determining the modes to be used on each of the surveys. Each State is responsible for utilizing the resources available to them to maximize the response rates while minimizing the respondent burden and out of pocket expenses.

Telephone follow-up is the most common mode of nonresponse follow-up for each state and for each survey in this docket. States have some latitude to employ face-to-face interviews based on knowledge of the respondent and his or

her response history, but survey timing and data collection budgets are also considered in this decision. The agency's data collection goal is to obtain a complete response from each of the operations in the sample, staying on time and within budget. Data collection and follow-up ends at a certain time period for each survey, which is determined based on the publication date and the necessary post-data collection processing activities (summarization, analysis, preparing the publication, etc.).

Questionnaires are mailed to the entire sample or universe. They are returned to either the State Field Offices (FOs) or the National Operations Center (NOC) and reviewed for reasonableness prior to keying into data processing media for summarization. Questionnaires are summarized by crop reporting districts and the indications weighted for the State based on the relative importance of the commodity in the district.

3. Describe methods to maximize response rates and to deal with issues of non-response. The accuracy and reliability of information collected must be shown to be adequate for intended uses. For collections based on sampling. a special justification must be provided for any collection that will not yield "reliable" data that can be generalized to the universe studied.

Response to surveys is voluntary. Some producers refuse to participate in the survey. Others cannot be located during the data collection period and some submit incomplete reports. These nonrespondents must be accounted for if accurate estimates are to be made. Nonresponse can be at the unit or the item level (i.e., partial survey response). Nonresponse adjustments due to reporting units being inaccessible, refusing to participate or providing edit failing information are made through reweighting, automated imputation or manual imputation. Reweighting is the process of expanding the values from usable responses to account for missing responses. That is, sample weights are adjusted upward for the usable responses to account for the nonrespondents. The adjustment occurs by stratum as the bounded strata represent homogeneous groupings of similar sized farms. Machine imputation is the process of using an algorithm to supply select data. Algorithms may be based on all data or groups of data where respondents with nonresponse items are known to have the survey commodity of interest or may or may not have the survey commodity of interest. The largest stratum is unbounded and is made up of large and, often unique, farms. Nonrespondents in this stratum must be manually imputed by Field Office statisticians and their weights are not adjusted. With a partial survey response, missing or unusable items are adjusted through machine or manual imputation.

Operations, which at the State or national level have a considerable influence on agricultural production or other characteristics, may have special handling arrangements, including personal interviews and selected time periods of reporting to reduce respondent burden. Operations which have a considerable influence on the survey item(s) of interest are referred to as extreme operators

(EOs) for that survey. The survey item(s) of interest vary from survey to survey; hence, an EO for one survey may or may not be an EO for another survey. Data from EOs represent only the operation surveyed and no expansion of their response may be made to represent other EOs, because these operations are unique and influential to the overall estimates. EO's are sampled with a probability of one. Nonresponse for extreme operators in unbounded stratum is always handled through manual imputation. In these instances, previously reported data, data from other contacts with the EO, trends in similar sized operations, or other reliable outside information are taken into consideration when manually imputing their data.

Since we are relying on the mail for a great deal of data collection for these surveys, it is very important for the respondents to know who NASS is and how we will be using the data that they provide. This is accomplished both by including publicity materials with the questionnaires and making the survey results available to the respondents once the summaries are published. Respondents and data users can obtain printed copies of the survey results at no cost to them or they can access the data on the internet. Statisticians from the Field Offices also attend growers meetings, trade shows, State Fairs, etc., to meet with farmers and answer any questions they have about NASS or the data that is collected.

With the heavy dependence on a mail phase for these surveys, Field Offices are directed to perform sufficient non-response followup to reduce the possible impact of a self-selecting sample. All samples and estimators are designed to provide unbiased point estimates of the items of interest. Surveys that do not require full followup can only provide approximations of measures of precision. Estimates of proportions and averages have very narrow ranges and standard errors tend to be small given the large sample sizes.

NASS Field Offices constantly monitor responses, particularly for the CAPS, to ensure adequate coverage for all counties requiring estimation. Targeted non-response follow-up occurs regularly when coverage deficiencies are identified. This involves extensive telephone follow-up in addition to personal enumeration when resources allow.

The county-level Cash Rents Survey will be designed and administered as a "stand-alone" probability based survey. A targeted probability sample will be selected based primarily on operations that have historically reported cash rented non-irrigated cropland, irrigated cropland, and/or pasture. Samples for the Cash Rents Survey are drawn with a county-level stratified design to produce state, district, and county level estimates. Large operations in each county are stratified into the census strata, where all are included in the sample.

Contacts for selected samples will be coordinated with other surveys to manage multiple contacts and minimize respondent burden. Non-response follow-up will

be performed to achieve sufficient coverage. Screening questions, designed to identify operations that cash rent, will remain on the CAPS questionnaires to further develop the sampling universe for the three items of interest.

The Cash Rents surveys utilize direct expansions and/or ratio expansions for all survey indications. Direct expansions are calculated by applying sampling weights and non-response adjustments to reported data and summing these values. Similarly, ratios are calculated by applying sampling weights and non-response adjustments to data when both the numerator and denominator are reported. For the Cash Rent Survey, ratio estimates are used to set the district and county level cash rental rates, while direct expansions are used to set acreage estimates used to weight the rental rates within a state.

Additional statistical methodology and contact information for commodity statisticians can be found in the back of the publications attached to this renewal package.

4. Describe any tests of procedures or methods to be undertaken.

No testing is done.

5. Provide the name and telephone number of individuals consulted on statistical aspects of the design and the name of the agency unit, contractor(s), grantee(s), or other person(s) who will actually collect and/or analyze the information for the agency.

Sample size for each State is determined by the Sampling Branch, Census and Survey Division; Branch Chief is William Iwig, (202)720-3895. Summary programs are prepared by the Agency's Statistical Methods Branch; Branch Chief is Dave Aune, (202)720-4008.

Data collection is carried out by NASS Field Offices; Eastern Field Operation's Director is Norman Bennett, (202) 720-3638 and the Western Field Operation's Director is Kevin Barnes (202) 720-8220. Survey data are also reviewed and summarized by the State Field Offices. Publications are released from the State Offices and Headquarters.

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