

**WATER USE SURVEYS**

OMB No. 0535-0262

**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 universe is agricultural operations that likely use between 10,000 to 999,999 gallons of water in any one day for agricultural purposes in North Carolina. The universe includes crop and livestock operations. The universe is determined by previous data from the North Carolina Department of Agricultural and Consumer Services (NCDACS) and available list frame data. Complete enumeration will be attempted due to the desire to publish reported water use by hydrologic unit code and county. Phone follow-up contacts for non-respondents will be done to ensure a high level of coverage for each hydrologic unit code and county.

An 79% response rate was attained for the 2020 survey using mail, phone, or electronically via the web or email. The electronically via the web response rate was 6% for 2020 survey.

- 2. Describe the procedures for the collection of information including:**
  - statistical methodology for stratification and sample selection,**
  - estimation procedure,**
  - degree of accuracy needed for the purpose described in the justification,**
  - unusual problems requiring specialized sampling procedures**

Overview – As with all NASS surveys, the goal is to collect data from at least 80% of the records sampled and more importantly, achieve a weighted unit response rate of at least 70% of the production data or production area. We utilize mail, Computer Aided Web Interviewing (CAWI), and phone interviews to collect data. In our ongoing effort to collect quality data in a timely and economic manner, NASS utilizes mail as the first method of data collection (with a CAWI

option) with phone interview follow up for non-response. With limited funds for extensive data collection, phone enumeration is targeted for non-response.

Sampling – The target population for this survey is agricultural operations that likely use between 10,000 to 999,999 gallons of water in any one day for agricultural purposes in North Carolina. The list frame includes all known agricultural establishments. A profile, known as control data, of each establishment is maintained on the list frame to allow NASS to define list frame sampling populations for specific surveys and to employ efficient sampling designs. A census will be conducted of the operations in the target population.

**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.**

Regional Office staff routinely contact producers and industry organizations to promote the programs and importance of cooperating. NASS maintains a presence at National industry meetings, often setting up promotional booths at trade shows. Occasionally, letters of endorsement are obtained from industry leaders. Most States conduct a full non-response follow up.

NASS relies on multiple modes for collecting data. The questionnaires are mailed to the respondents who can either return them by postage paid envelope, email, fax, Computer Aided Web Interviewing, or telephone. If we have not received a response within the allotted time, phone enumerators will be used to contact the respondents.

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

Data will be analyzed after each survey to determine if any changes and/or cognitive testing are needed prior to the next survey. Any cognitive testing will be submitted in a separate request.

**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.**

Population and sample sizes for each State are reviewed by the Agency's Sampling, Editing and Imputation Methodology Branch, Methods Division; Branch Chief is Andrew Dau (202) 690-8141.

The NASS survey administration, data collection, estimation, and publication are carried out by NASS Regional Field Offices; Eastern Field Operation's Director is Jody McDaniel, (202) 720-3638. The survey administrators are responsible for coordination of sampling, questionnaires, documentation, training, data processing.

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