1Supporting Statement - Part B

## AQUACULTURE SURVEYS

OMB No. 0535-0150

## 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.

Trout and Catfish Growers: NASS's Regional and State Field Offices maintain a list of all known trout and catfish producers. An attempt is made to obtain a response from every operation on the list during each survey period. The list frame is updated as we learn of new operations, including those from the Census of Agriculture. Other list sources are State Fish and Wildlife Departments, Natural Resource Conservation Service, State producer organizations, universities, Departments of Natural Resources, and industry publications.

Trout Growers: The Trout Growers survey is conducted each January in 25 States (Arkansas, California, Colorado, Connecticut, Georgia, Idaho, Massachusetts, Michigan, Missouri, Nebraska, Nevada, New Hampshire, New Jersey, New Mexico, New York, North Carolina, Oregon, Pennsylvania, Tennessee, Utah, Virginia, Washington, West Virginia, Wisconsin, and Wyoming) to collect previous year trout sales from farmers and distributed fish totals primarily from State and federal hatcheries. It is mailed to all trout operations.

Catfish Growers: A Catfish Growers survey is conducted each January in 9 States (Alabama, Arkansas, California, Georgia, Louisiana, Mississippi, Missouri, North Carolina, and Texas) to collect inventory, water area, previous year sales, and losses. It is mailed to all catfish operations. The three major catfish producing States (Alabama, Arkansas, and Mississippi) also conduct a survey in July of each year to collect mid-year inventory.

Catfish Processors: The monthly Catfish Processors survey is a complete enumeration of all U.S. catfish processing plants with the capacity to process 2,000
or more pounds live weight in an 8-hour shift. Data collected includes amount of fish processed, prices paid, inventory, amount of fish sold, and prices received.

Catfish Feed Deliveries. The monthly Catfish Feed Delivery survey is a complete enumeration of all U.S. Catfish Feed Mill plants. Data collected includes feed deliveries to Catfish producers of fingerling and food size fish.

Annual Aquaculture Survey - Hawaii: The annual survey is conducted for producers of both fresh water and salt water commodities. They collect data for aquatic foods (fish, mollusks, crustaceans, etc.) and aquatic ornamental items (aquarium plants, koi, sea horses, algae, etc.). Data collected includes size category of items sold, quantity of items sold, and total value of sales for each item.

Annual Aquaculture Census - Pennsylvania: This annual survey is conducted through a cooperative agreement with the State of Pennsylvania. A complete listing of names is obtained from the Pennsylvania Department of Agriculture. Operations that are licensed to produce aquaculture products by artificial propagation or who sell aquatic animals are required by Pennsylvania State Law No 1998-94 Subchapter B to respond to this survey annually. Data is collected for the following categories: food fish, baitfish, ornamental/aquarium fish, sport/game fish, mollusks, crustaceans, and other aquaculture.

Florida Aquaculture Survey: This survey is conducted every other year. It is a complete census of all operations that produce any of the following items: freshwater ornamental fish; marine ornamental fish; fresh water ornamental invertebrates; marine ornamental invertebrates freshwater or marine food and bait fish, mollusks, shrimps, prawns and crayfish; reptiles; or aquatic plants.

Aquaculture Loss Survey: This questionnaire was created in 2011 in anticipation of future needs. In the event of a natural disaster, such as a hurricane or drought or a manmade disaster such as an oil or chemical spill; NASS felt this survey should be included as a part of our agencies Continuing Operations Program or COOP. This way in the event of some sort of disaster (natural or manmade) we could implement the survey very quickly.

| Response Rates for 2013 Aquaculture Surveys |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Survey | Eligible Sample Size | Freq | Total Contacts | Total Responses | Response Rates |
| Trout Production Survey | 345 | 1 | 345 | 305 | 88.4\% |
| Catfish Production Survey - January | 689 | 1 | 689 | 593 | 86.1\% |
| Catfish Production Survey - July | 329 | 1 | 329 | 303 | 92.1\% |
| Aquaculture Survey Annual - Florida | 905 | 1 | 905 | 778 | 86.0\% |
| Aquaculture Survey Annual - Hawaii | 99 | 1 | 99 | 84 | 84.8\% |
| Aquaculture Survey Annual - Pennsylvania | 158 | 1 | 158 | 96 | 60.8\% |
| Cattish Feed Deliveries Report * | 17 | 12 | 204 | 204 | 100.0\% |
| Catfish Processing Report* | 15 | 12 | 180 | 180 | 100.0\% |
| Aquaculture Loss Survey | 0 | 0 | 0 | 0 | 0 |
|  |  |  |  |  |  |
| Total | 2,557 |  | 2,909 | 2,543 | 87.4\% |

* Data for these two surveys is from 2012


## 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

All of the aquaculture surveys are a complete census of the aquatic producers in each of the target states. The target population is stratified based on historic value of sales. All operations will be contacted by mail prior to data collection. Each respondent will be given the opportunity to respond by mail or by internet if they choose. Anyone not responding by mail or internet will be contacted by phone or personal interview. In the event of non-response, data will be imputed for the missing reports from operations in that state, which is of similar size (based on strata codes).

Detailed descriptions of the methodology and quality metrics used for the catfish and trout surveys are included in two separate documents attached to this renewal submission.

Aquaculture Loss Survey. We are assuming that if this survey needs to be conducted to quantify the amount of loss or damage to the aquaculture industry, that it will be limited to a couple of States or small region of the United States to recontact. Whatever region is selected to re-contact, we plan to follow the same sampling as the original survey used, which generally involves a complete Census of the targeted area.
3. Describe methods to maximize response rates and to deal with issues of nonresponse. 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.

Prior to the beginning of data collection, the survey coordinators in each of the State or Regional Offices will review their samples. Any operator who has given us instructions on when, where, or how they would like to be contacted for future surveys will be handled accordingly. Comments we received on previous data collections are captured on our List Frame and are available to the survey coordinators on subsequent surveys. This helps to keep respondent burden at a minimum while keeping response rates high.

State and Regional Directors keep in touch with grower's associations and attend their annual meetings. This interactive approach has allowed us to keep a very high level of response to our surveys. When conducting phone or personal followup interviews, we concentrate our efforts on the larger operations and keep our follow-up visits to the smaller operations at a minimum.

Since the summarized data that is generated from the grower surveys is very important to producers in making informed business decisions they are generally very cooperative in completing our surveys.

Survey data are subject to non-sampling errors such as omissions and mistakes in reporting and in processing the data. While these errors cannot be measured directly, they are minimized by carefully reviewing all reported data for consistency and reasonableness. The estimation manual helps in maintaining consistency across surveys and field offices.
4. Describe any tests of procedures or methods to be undertaken.

There has been no recent questionnaire testing.
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), or other person(s) who will actually collect and/or analyze the information for the agency.

Specifications and survey design were developed by Summary, Estimation, and Disclosure Branch, Methodology Division; Section Head is Mark Apodaca (202) 720-2857.

The sampling plan was developed by the Sampling and Frame Development Section of the Sampling, Editing, and Imputation Methodology Branch, Methodology Division; Section Head is Eric Porter, (202)720-5269.

Data collection is carried out by NASS Regional 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.

The NASS aquaculture commodity statistician in Headquarters is responsible for coordination of sampling, questionnaires, data collection, data processing, the Estimation Manual, and other Regional and State Field Office support. The statistician is also responsible for national summaries, analysis, presentations to the Agricultural Statistics Board for final estimates, and publication. The Section Head for the Poultry and Specialty Commodities Section of the Livestock Branch, Statistics Division is Bruce Boess (202) 720-4447.

