SUPPORTING STATEMENT<br>U.S. Department of Commerce<br>National Oceanic \& Atmospheric Administration<br>Southeast Logbook Family of Forms<br>OMB Control No. 0648-0016

## SUPPORTING STATEMENT PART B

Agencies are instructed to complete Supporting Statement Part B if they are using statistical methods, such as sampling, imputation, or other statistical estimation techniques; most research collections or program evaluations should also complete Part B. If an agency is planning to conduct a sample survey as part of its information collection, Part B of the ICR supporting statement must be completed, and an agency should also complete relevant portions of Part B when conducting a census survey (collections that are sent to the entire universe or population under study). For example, an agency doing a census of a small, well-defined population may not need to describe sampling procedures requested in Part B, but it should address what pretesting has taken place, what its data collection procedures are, how it will maximize response rates, and how it will deal with missing unit and item data.

Agencies conducting qualitative research studies or program evaluations, including case studies or focus groups, should also complete the relevant sections of Part B to provide a more complete description of the use of the information and the methods for collecting the information.

## B. Collections 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 had been conducted previously, include the actual response rate achieved during the last collection.

The Southeast For-Hire Intercept Survey (intercept survey) would be conducted in Gulf of Mexico (Gulf) coastal counties. Port samplers would conduct an in-person interview of the captain or first mate on a federally-permitted charter vessels in the Gulf reef fish or Gulf coastal migratory pelagic recreational fisheries. The intercept survey would obtain trip information after a fishing trip has occurred.

As of late 2020, there are 1,368 Gulf federally permitted vessels estimated to be directly affected by the Gulf For-hire Electronic Reporting Program. An analysis of recent charter vessel data estimated that 1,150 interviews are needed per year for the intercept survey to have a large enough sample size to generate statistically valid results. This total of 1,150 is for the entire Gulf and some states would need more interviews than other states. This is because some states have more federal for-hire activity and catch rate variability than other states.

State and federal port samplers would be sent to for-hire landings locations following a stratified random sampling design to conduct one interview per vessel. Response rates for the intercept survey will be maintained at the high levels through intensive interviewer training and monitoring, and stakeholder outreach efforts. Additionally, as a condition of the federal permit, captains are required to make the applicable fish or parts available for inspection and to answer the intercept survey questions. The actual response rate of this intercept survey is expected to be greater than 95 percent.

Three other data collections within OMB Control No. 0648-0016 use statistical sampling methods: (1) the collection of cost and earnings data as an add-on to the coastal fisheries logbook; (2) the annual fixed cost survey; and (3) the collection of discard data as a supplement to the coastal logbook. The three data collection activities use the same potential respondent universe and two different sampling methods for sample selection. The two economic collections use the same sample, as the annual fixed cost survey complements the trip-level cost and earnings add-on.

The population of vessels to be sampled is determined from logbook reports submitted to NMFS on an annual basis. Commercial fishermen are required to submit a trip report (logbook) within seven days after the completion of each trip in Gulf reef fish, South Atlantic snapper-grouper, mackerel, shark, and Atlantic dolphin and wahoo fisheries. Fishermen who did not participate in these fisheries during a given month are required to submit a no-fishing report at the end of the month.

Annually approximately 3,500 permitted vessels make at least one fishing trip in one or more of these fisheries. Approximately 2,500 distinct vessels report fishing activity, i.e., one or more trips, during a typical year. To reduce the reporting burden on the fishermen, two 20-percent samples of the vessels with a federal permit for Gulf reef fish, South Atlantic snapper-grouper, king mackerel, Spanish mackerel, or shark are selected to report economic information and discard information. To ensure that the samples are representative of the total universe of vessels with federal permits, stratified random samples are selected from the universe of all vessels with the above types of federal permits. For the economic collections, the population is stratified by vessel activity during the last two years. The three strata are 1) inactive or new vessels, 2) active vessels with up to 20 days at sea per year, and 3 ) active vessels with more than 20 days at sea. The active vessel strata are oversampled, while the (large) inactive stratum is under-sampled, for a total of approximately 700 respondents annually. For discard reporting, a 20 percent sample is selected randomly from vessels who fished during the previous calendar year, for a total of approximately 500 respondents annually.

Regulations require respondents to respond to information collections, and therefore, the expected and actual response rates are very high.

| Information Collection | Population | Expected | Actual |
| :---: | :---: | :---: | :---: |


|  | or Potential Respondents Universe | Number of Respondent s | Sample Response Rate (percent) |
| :---: | :---: | :---: | :---: |
| Intercept Survey (to validate Gulf For-hire Pgrm) * | 1,368 | 1,150 | n/a |
| Headboat Logbook | 142 | 142 | > 95 |
| Headboat Logbook - No fishing report | 142 | 142 | > 95 |
| Annual Cost Survey for Snapper-Grouper, Reef Fish, Mackerel, and Dolphin-Wahoo Permit Holders | 693 | 693 | > 95 |
| Economic Trip Cost Logbook for SE Coastal Fisheries | 693 | 693 | > 95 |
| Coastal Logbook - Vessel Trip Report | 3,466 | 3,466 | > 95 |
| Coastal Logbook - No fishing report | 3,466 | 3,466 | > 95 |
| Discard report for Snapper-Grouper, Reef Fish, Mackerel and Dolphin-Wahoo Permit Holders | 474 | 474 | > 95 |
| Golden Crab Logbook | 12 | 12 | > 95 |
| Golden Crab Logbook No fishing report | 12 | 12 | > 95 |
| Wreckfish Trip Report Logbook | 6 | 6 | > 95 |
| Wreckfish Logbook - No fishing report | 6 | 6 | > 95 |


| South Atlantic For-hire <br> Elec Reporting Prgm * <br> Fishing report (charter <br> vessels) | 2,119 | 2,119 | n/a |
| :--- | ---: | ---: | ---: |
| No-fishing report (charter <br> vessels) | 2,119 | 2,119 | n/a |
| Gulf For-hire Electronic <br> Reporting Program * <br> Installation of cellular or <br> satellite VMS unit | 325 | (charter <br> only) | n/a |
| Landing location request | 1,368 | 1,368 (all) | n/a |
| Trip declaration | 1,368 | 1,368 (all) | $\mathrm{n} / \mathrm{a}$ |
| Fishing report (per trip) | 1,368 | 1,368 (all) | $\mathrm{n} / \mathrm{a}$ |
| Power-down exemption <br> request | 1,368 | 1,368 (all) | $\mathrm{n} / \mathrm{a}$ |

Note: the asterisk notates new programs in 2021.

## 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, and
- Any use of periodic (less frequent than annual) data collection cycles to reduce burden.


## Intercept Survey

The intercept survey is a stratified random sampling design to collect effort and catch data from captains at fishing access sites. The permit requires that all permitted vessels must land at verified landing locations. Samples are selected from a comprehensive, spatio-temporal list of site-days, constructed by crossing a list of landing locations with a list of available sampling days within a month where the different strata are state, county, landing site, calendar day, and 6-hour time interval. The port samplers for the intercept survey will be assigned a specific 6-hour time interval (such as 11 am to 5 pm ) at a specific site on a specific day based on the stratification results.

### 2.0.1. Sample Design

The primary sampling unit (PSU) is a site-day that comprises a combination of a selected fishing site with a selected day. For each month, sampling of PSUs is stratified by state, county, landings site, calendar day, and six-hour time interval. Within strata, a sample of site-days is selected from a frame consisting of all possible combinations of site-days by a probability proportional to
size without replacement sampling scheme. Stratum variables were selected to maximize sampling efficiency while ensuring adequate sampling coverage and sample size among geographic regions, seasons and time intervals.

### 2.0.2. Estimation or Weighting

The base weight for each PSU is equal to the inverse of its selection probability. The weights for each intercepted trip are equal to the PSU weight. When a census is not possible, sample weights are adjusted by selection probabilities.

### 2.1. Data Collection Procedures

This intercept survey will be conducted in the Gulf of Mexico states (TX - west FL) each month. The data collection task is to interview the captain or first mate on a for-hire fishing trips on federally permitted vessels to validate the electronic reported for-hire catch for that trip. Only captains operating Gulf of Mexico federally permitted for-hire vessels that are not in the Southeast Region Headboat Survey (SRHS) are included in this intercept survey. Vessels operating with federal for-hire permits can be distinguished from non-federal for-hire vessels because the federal vessels are required to display a decal on the port side of the vessel's hull. Additionally, port samplers would have access to a NOAA website that lists all current federally permitted vessels.

This intercept survey's sample size is defined as the total number of assignments completed or primary sampling units (PSUs, defined as the combinations of cluster-calendar day-time intervals) visited rather than the number of interviews attained. The captain interviews are obtained at the approved landing location sites. The interviews will ask captains about their fishing day and obtain federal for-hire permit data about the angler. To ensure only eligible federal permitted captains are interviewed screening questions are asked of potential respondents: was this a for-hire trip, does this vessel have a federal for-hire permit, and does the vessel participate in the SRHS program. NMFS is working closely with Louisiana state staff and, following their request, interviews conducted in Louisiana would ask if respondents have a Louisiana Charter Boat Fishing Guide License. This is a Louisiana state permit required for captains of for-hire vessels and would allow integration of the intercept survey with the Louisiana survey. This question would be asked only for interviews conducted in Louisiana.

The clustering of sites allows for more efficient sampling of a larger number of sites and removes sampler discretion, therefore minimizing individual site-selection bias. The predetermined maximum number of sites in a given cluster is two. To remove sampler discretion, all sites within the cluster will be visited in the order specified during the assignment draw process. For two-site clusters samplers will spend three hours at the first site and sample the second site from time of arrival until the time interval ends. At a single site cluster, the sampler will remain at the site for the entire 6-hour time interval.

The following criteria are used for clustering:

- Sites with a pressure code of " 3 " or greater ${ }^{1}$ would not be clustered with other sites (i.e., single site cluster);
- Sites with a pressure code of " 2 " or less could be clustered with one additional site;
- Driving time between any two sites within a single cluster must be less than 60 minutes;
- Total driving time for the entire cluster should be minimized;
- Clusters will contain sites only within the same county;
- Sites will be clustered by strata (county or month) such that all sites within the cluster are required to have some level of fishing pressure in that strata; and
- In addition to county or month, clusters should be time interval specific since individual site pressures will vary across intervals (e.g., a high pressure site may be a single site cluster from 2:00PM-8:00PM but clustered with other sites from 8:00PM-2:00AM; some sites will not have any fishing activity in one or more time intervals).

Although more time consuming, clustering by time interval was necessary to avoid scenarios where two or more very low pressure sites are clustered during daytime intervals but only one of the sites has nighttime activity. Clustering by time interval guarantees that all sites within the cluster will have some associated fishing pressure.

### 2.2. Estimation Methods

Stratification. Stratify population into $h=1, H$ strata. Each stratum is defined by State, Year, Wave, Region, Month, kind-of-day (weekday or weekend) (KOD), and Interval. Efficient sampling of the coastal counties of a state may require sub-state regions. These regions will be defined by state, but most states will be sampled as a single geographic region.
KOD is kind of day or day type, that is, weekday (WD) and weekend (WE). Interval is any of 6-hr blocks (2AM-8AM, 8AM-2PM, 2PM-8PM, 8PM-2AM, 11AM5PM) within a $24-$ hr day.
Stage I weight. Cluster-days are sampled within stratum and assigned to samplers as an assignment. Let $s=\left\{a_{i} \vee i=1, \ldots, n_{h}\right\}$ denote the set of samples. Probability of drawing one assignment is

$$
\begin{equation*}
\operatorname{Pr} \operatorname{Pr}\left(s=a_{i}\right)=\frac{z\left(a_{i}\right)}{\sum_{i=1}^{N_{h}} \square z\left(a_{i}\right)} \tag{1}
\end{equation*}
$$

where $z\left(a_{i}\right)$ is the pressure of the $i$ th assignment (i.e., cluster-day) and $N_{h}$ is total number of cluster-days in the $h$ th stratum. The inclusion probability of the $i$ th clusterday (or assignment) is $\pi_{I, h i}$.

[^0]\[

$$
\begin{equation*}
\pi_{I, h i}=\sum_{i=1}^{N_{h}} \square \frac{z\left(a_{i}\right)}{\sum_{i=1}^{N_{h}} \square z\left(a_{i}\right)} I\left(a_{i} \in s\right) \tag{2}
\end{equation*}
$$

\]

where $I\left(a_{i} \in s\right)=1$ if $a_{i} \in s$ is true and 0 otherwise. The Stage I weight is

$$
\begin{equation*}
w_{I, h i}=\pi_{I, h i}^{-1} . \tag{3}
\end{equation*}
$$

Stage II weight. A cluster includes up to three sites $\left(j=1, J_{i}\right.$ where $\left.J_{i} \leq 3\right)$. All sites within a sampled cluster must be visited at least once within the 6-hr interval, $\Delta\left(T_{1}, T_{2}\right)$, where $T_{1}$ and $T_{2}$ respectively are the lower and upper boundaries of each 6-hr interval (see Stratification). Site visiting is divided into several disjoint time-windows. Each window has specialized activities of the sites: intercepts, counts, intercepts-andcounts (both), and travel.
An example of assignment $i$ that consists of two sites (Sites A and B) in an assignment is given below. In the $6-\mathrm{hr}$ interval, sampler's activity is specified by $k=1, \ldots, 6$ windows as shown in the table. Site A is visited in two different windows, $t_{1}-t_{3}$ and $t_{6}-t_{7}$. The first visit of Site A has two different activities, intercepts in window $t_{1}-t_{2}$ and counts in window $t_{2}-t_{3}$. During the second visit of Site A (window $t_{6}-t_{7}$ ), as well as Site B (window $t_{4}-t_{5}$ ), the sampler conducts intercepts-and-counts (both).

| Time-window <br> (k) | $(1)$ $t_{1}-t_{2}$ $0800-0930$ | $(2)$ $t_{2}-t_{3}$ $0930-1000$ | $\begin{aligned} & \hline(3) \\ & t_{3}-t_{4} \end{aligned}$ | $(4)$ $t_{4}-t_{5}$ $1000-1200$ | $\begin{aligned} & \text { (5) } \\ & t_{5}-t_{6} \end{aligned}$ | $(6)$ $t_{6}-t_{7}$ $1230-0200$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Time spent | $\Delta\left(t_{1}, t_{2}\right)=1.5$ | $\begin{aligned} & \Delta\left(t_{2}, t_{3}\right)=0 . \\ & 5 \end{aligned}$ | $\begin{aligned} & \Delta\left(t_{3}, t_{4}\right. \\ & )^{2} \end{aligned}$ | $\Delta\left(t_{4}, t_{5}\right)=2$ | $\begin{aligned} & \Delta\left(t_{5}, t_{6}\right. \\ & ) \end{aligned}$ | $\Delta\left(t_{6}, t_{7}\right)=1.5$ |
| activity | Site A intercepts | Site A counts | Travel | Site B both | Travel | Site A both |
| Angler intercepts | $\begin{aligned} & I_{A}(1)= \\ & I_{A}\left(t_{1}, t_{2}\right)=8 \end{aligned}$ | 0 |  | $\begin{aligned} & I_{B}(4)= \\ & I_{B}\left(t_{4}, t_{5}\right)=5 \end{aligned}$ |  | $\begin{aligned} & I_{A}(6)= \\ & I_{A}\left(t_{6}, t_{7}\right)=6 \end{aligned}$ |
| Obs. departures | 0 | $\begin{aligned} & D_{A}\left(t_{2}, t_{3}\right)= \\ & 10 \end{aligned}$ |  | $D_{B}\left(t_{4}, t_{5}\right)=7$ |  | $D_{A}\left(t_{6}, t_{7}\right)=10$ |

The data values for this table can be obtained from Assignment Summary Form (ASF),
Angler Intercepts $(k)=$ ints $(k)+$ other3 $(k)+$ other4 $(k)+$ other5 $(k)$
Obs. Departures $(k)=\operatorname{Confirmed}(k)+\operatorname{Unconfirmed}(k)$ for $D_{A}\left(t_{2}, t_{3}\right)$
Obs. Departures $(k)=$ Confirmed $(k)+\operatorname{Unconfirmed}(k)+$ Angler Intercepts $(k)$ for $D_{A}\left(t_{6}, t_{7}\right)$ and $D_{B}\left(t_{4}, t_{5}\right)$
where $k$ is the time window that sampler involves in counts, intercepts, or both.
The Site B is visited only once and the site weight computed by

$$
\begin{equation*}
w_{B, k \vee i}=w_{B, 4 \vee i}=\frac{D_{B}\left(t_{4}, t_{5}\right)}{I_{B}\left(t_{4}, t_{5}\right)} \frac{\Delta\left(T_{1}, T_{2}\right)}{\Delta\left(t_{4}, t_{5}\right)}=\frac{7}{5} \frac{6}{2}=4.2 \tag{4}
\end{equation*}
$$

The first visit to Site A has two activities in two disjoint windows: intercepts in $t_{1}-t_{2}$ and counts in $t_{2}-t_{3}$. It is necessary to use $D_{A}\left(t_{2}, t_{3}\right)$ for estimating $D_{A}\left(t_{1}, t_{2}\right)$ assuming that observed departures are uniformly distributed over ( $\mathrm{T}_{1}, \mathrm{~T}_{2}$ ) interval:

$$
\begin{equation*}
\widehat{D}_{A}^{\prime}\left(t_{1}, t_{2}\right)=\frac{\Delta\left(t_{1}, t_{2}\right)}{\Delta\left(t_{2}, t_{3}\right)} D_{A}\left(t_{2}, t_{3}\right)=\frac{1.5}{0.5} \times 10=30 \tag{5}
\end{equation*}
$$

If $\widehat{D}_{A}^{\prime}\left(t_{1}, t_{2}\right)<I_{A}\left(t_{1}, t_{2}\right)$, set $\widehat{D}_{A}^{\prime}\left(t_{1}, t_{2}\right)=I_{A}\left(t_{1}, t_{2}\right)$. The estimate of total departures in $t_{1}-t_{2}$ window is $\widehat{D}_{A}\left(t_{1}, t_{2}\right)=I_{A}\left(t_{1}, t_{2}\right)+\widehat{D}_{A}^{\prime}\left(t_{1}, t_{2}\right)=8+30=38$. Once the total departures in $t_{1}-t_{2}$ ( $k=1$ ) is estimated, the weight of the first visited Site A is

$$
\begin{equation*}
w_{A, 1 \vee i}=\frac{\widehat{D}_{A}\left(t_{1}, t_{2}\right)}{I_{A}\left(t_{1}, t_{2}\right)} \frac{\Delta\left(T_{1}, T_{2}\right)}{\Delta\left(t_{1}, t_{2}\right)}=\frac{38}{8} \frac{6}{1.5}=19 \tag{6}
\end{equation*}
$$

For the second visit of Site $A$ in $t_{6}-t_{7}$ window $(k=6)$, the weight is

$$
\begin{equation*}
w_{A, 6 \mathrm{~V} i}^{\square}=\frac{D_{A}\left(t_{6}, t_{7}\right)}{I_{A}\left(t_{6}, t_{7}\right)} \frac{\Delta\left(T_{1}, T_{2}\right)}{\Delta\left(t_{6}, t_{7}\right)}=\frac{16}{6} \frac{6}{1.5}=10.67 \tag{7}
\end{equation*}
$$

The final weight of Site A is a linear combination of $w_{A, 1 v i}^{\square}$ and $w_{A, 6 \mathrm{~V} \text { i }}^{\square}$, in proportion to the length of time spent on two visits of Site A:

$$
\begin{gathered}
w_{A, \cdot v i}=\frac{\Delta\left(t_{1}, t_{2}\right)}{\Delta\left(t_{1}, t_{2}\right)+\Delta\left(t_{6}, t_{7}\right)} w_{A, 1 \vee i}^{\square}+\frac{\Delta\left(t_{6}, t_{7}\right)}{\Delta\left(t_{1}, t_{2}\right)+\Delta\left(t_{6}, t_{7}\right)} w_{A, 6 \vee i}^{\square} \\
\quad i \frac{1.5}{1.5+1.5} 19+\frac{1.5}{1.5+1.5} 10.67=14.84(8)
\end{gathered}
$$

where • indicates the combination of Site $A$ in two time windows. Intuitively,

$$
\begin{equation*}
w_{B, \cdot v i}=w_{B, 4 \vee i} . \tag{9}
\end{equation*}
$$

In cases where angler intercepts $=0$ but observed departure $\neq 0$, replace angler intercepts $=1$ in the calculation of site weights. This replacement is artificially and only for the estimation of total effort. For the estimation of catch rate, this replacement should not be used. Other cases of revisits and design changes can follow the approaches given in this example.

## Information Collections for Current Programs

For the remaining information collections, the data collection method is comparable to a mail survey, as forms are filled out by respondents. The two samples, economic and bycatch, are selected by stratified random sampling. Many permits are on vessels that are not active commercial fishing vessels and hence they generate no useful data. At the other end of the activity spectrum, a few very active vessels are often responsible for the bulk of landings in any one fishery or gear segment. The intent of both sampling designs is to under-sample inactive vessels and oversample active and highly active vessels. The economic sampling design breaks the population into three activity strata (inactive, less than or equal to 20 days at sea, and greater than 20 days at sea) without further reference to region or gear. The discard sampling design breaks the population into multiple region-gear strata. A random sample will be selected from each stratum, and these vessel owners will be notified of their selection with the mailing of the following year's logbook. It is necessary for those selected to report bycatch or economic data to report all discards and interaction data of all cost and earnings data, respectively, for every trip where they occur. Annual reporting will result in poorer quality data because fishermen will not be able to remember their fishing activity for that length of time.

## Use of the Data

Data will be used for descriptive and analytical purposes. Descriptive uses include the estimation of average harvesting costs per boat per trip and average discard or interactions per boat trip in the sampling universe. Data collected from sampled boats will be expanded to all boats in the sampling universe based on equations available in statistical texts by Cochran and Thompson. Analytical uses include evaluations of regulatory proposals.

For the annual fixed cost survey, a separate form to collect information about annual fixed costs will be mailed early in a given year to the fishermen selected to report trip-level costs the previous year, with the timing established to take advantage of the availability of information about annual expenditures as recently compiled for end-of-year federal income tax purposes. Trip reports about routine harvesting costs and annual reports about fixed costs will be submitted to the NMFS SEFSC logbook program in Miami, Florida.

The burden on the respondents will be minimized by only collecting the minimum data to meet the analytical needs of NMFS. Only data to validate the catch and effort will be collected by the intercept survey.
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.

Since the intercept survey program is a new survey it is difficult to estimate the non-response rate. Since the Gulf For-hire Electronic Reporting Program requires permit holders to respond to any request for information approved under OMB Control No. 0648-0016, NMFS anticipates a greater than 95 percent response rate. Based on lessons learned from the MRIP survey for improving response rates, the field interviewer training will include a section on initial refusals. All data collection supervisors will be advised of non-response and refusal rates following each data collection wave. Outreach materials include pamphlets and information cards (business card size with URL for more information online) to be distributed to permit holders. Directed informative presentations (websites, podcasts, webinars, and in-person briefings and listening sessions) have been produced and hosted by SERO staff. These efforts will continue for the Gulf For-hire Electronic Reporting Program throughout 2021 and beyond.

The data collected by the intercept survey will be used by NMFS to estimate final landings in conjunction with the electronic logbooks submitted by the permit holders. The intercept survey and electronic logbook data will be combined in a capture/recapture method described in Liu et al. (2017) ${ }^{2}$. The data will be used to support fishery stock assessments and management. An ongoing intercept survey is required to monitor differences from the reported electronic logbooks

[^1]submitted by permit holders and the intercept survey results. In addition, a continuous time series of data is scientifically essential to assess the quality of the for-hire reporting data.

For the remaining information collections, the project staff obtained input on the data collection program from commercial fishermen throughout the jurisdiction of the South Atlantic and Gulf of Mexico Fishery Management Councils. Input included fishermen’s opinions about the types of information that they can provide with minimum burden and the format for collecting data. Their input was used in the development of survey instruments so that they will be easier to complete, with questions revised for clarity and to obtain more accurate data. For example, what is the clearest way for the questions to be understood by the fishermen to ensure NMFS receives accurate data, such as trip date, number of fishers, gear, and catch. One of the reasons a sampling procedure for the information collections is utilized is to provide additional report monitoring by SEFSC logbook staff. Consequently, the response rate and quality should be maximized by close interactions with fishermen. Renewal of permits is contingent on timely reporting to ensure compliance.
4. Describe any tests of procedures or methods to be undertaken. Testing is encouraged as an effective means of refining collections of information to minimize burden and improve utility. Tests must be approved if they call for answers to identical questions from $\mathbf{1 0}$ or more respondents. A proposed test or set of tests may be submitted for approval separately or in combination with the main collection of information.

No additional testing is planned for the proposed intercept survey.
For the remaining information collections, because of the large universe and the anticipated variation, it is not feasible to do a test with fewer than 10. However, interaction with and feedback from the fishermen that are using the forms will provide sufficient information about the forms and collection procedures to make whatever adjustments are needed. The SEFSC evaluates the data collection programs internally every year and makes minor adjustments to the reporting forms, instructions, database design, scanning and processing procedures, and the quality control procedures Furthermore, analyses of the data will provide information about the variations in the data to determine whether the strata and sample sizes are appropriate.
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.

Statistical support for the proposed intercept survey was provided by the following:
Dr. Lynne Stokes, Southern Methodist University, 214-768-7650
Dr. Thomas Sminkey, Statistician (biology), NMFS, Office of Science and Technology, 301-427-8177.

John Foster, Statistician (biology), NMFS, Office of Science and Technology, 301-427-8130.

Dr. Richard Cody, Statistician (biology), NMFS, Office of Science and Technology, 301-4278142.

Dr. Michael Larkin, Fisheries Biologist, NMFS, Southeast Regional Office, 727-824-5373 is the point-of-contact for the intercept survey.

Dr. Jessica Stephen, Fisheries Biologist, NMFS, Southeast Regional Office, 727-209-5964.
The following staff support or have been consulted on the statistical aspects of the remaining information collections:

Dr. Christopher Liese, NMFS industry economist, identified the sampling universe to be studied and prepared the sampling design. Data is collected in conjunction with the existing logbook data collection program, which is conducted from the SEFSC in Miami, Florida. Data is used primarily in analyses of proposed regulations by NMFS, the South Atlantic Fishery Management Council, and the Gulf of Mexico Fishery Management Council.

Dr. David Gloeckner, Division Chief of the Data Management and Fisheries Statistics Division, is responsible for some of these data collection activities: (305) 361-4257.

Dr. Matthew McPherson, Branch Chief of the Social Science Research Group, is responsible for some of these data collection activities: (305) 365-4112.


[^0]:    1 Expected activity per site is coded using 'pressure' categories. These numeric codes represent a range of captains expected to complete fishing during the sample period and are non-uniform. ' 0 ' $=1-4$ captains; ' 1 ' $=5-8$ captains; ' 2 ' $=9-12$ captains; ' 3 ’ $=13-19$ captains; ‘ 4 ' $=20-29$ captains; ${ }^{\prime} 5$ ’ $=30-49$ captains; ‘ 6 ’ $=50-79$ captains; ‘ 7 ’ $=80$ and greater captains; ' 9 ' =no captains present.

[^1]:    2 Liu, B., Stokes, L., Topping, T., and Stunz, G. 2017. Estimation of a Total from a Population of Unknown Size and Application to Estimating Recreational Red Snapper Catch in Texas. Journal of Survey Statistics and Methodology, 5(3), 350-317.

