SUPPORTING STATEMENT
U.S. Department of Commerce
National Oceanic & Atmospheric Administration
Marine Recreational Information Program, Access-Point Angler Intercept Survey
OMB Control No. 0648-0659

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.

1.1. MRIP Access-Point Angler Intercept Survey

The MRIP Access-Point Angler Intercept Survey (APAIS) is a bi-monthly (wave), in-person survey designed to estimate the catch rates, by species, catch category (harvested or released alive), and mode (Charter Boat, Party Boat, Private or Rental Boat, Shore fishing), of anglers participating in marine recreational fishing in the study states. The APAIS will be conducted for six, two-month waves in 17 states bordering the Atlantic Coast and Gulf of Mexico, with the exception of Texas and Louisiana, as well as in Puerto Rico and Hawaii. The universe for the APAIS is the Fishing Effort Survey (FES) and For-Hire Survey (FHS) estimated 14.6-45.5 million (median:34.1 million) marine recreational fishing trips that are taken during each wave. From this universe, we sample approximately 6,000 - 35,000 completed fishing trips, resulting in 5,000 – 29,000 completed interviews per wave.

Table 1. Marine Recreational Angler-Trip Intercept Sampling

Universe Size	35,000,000 angler-trips per wave[1]	
Complete Surveys	wave 1: 5,000	wave 4: 29,000
	wave 2: 11,000	wave 5: 17,000
	wave 3: 27,000	wave 6: 11,000

Table 2. APAIS Annual Response Rates, 2019-2021 (complete year sampled, new design)

Regions	Non-Response (%)	Response (%)
Atlantic, Gulf of Mexico, Hawaii, Puerto Rico	17.9	82.1

Response rates for the APAIS will be maintained at the high levels achieved to date with the current version of the intercept survey, through intensive interviewer training and monitoring, and stakeholder outreach efforts. Additional training will be developed to address conversion of the initial refusals, which have increased in recent years.

Table 3: Summary of Estimated APAIS Sample Sizes By Wave

[1] The size of the sample universe for each wave varies throughout the year from 14.6 million fishing trips to more than 45.5 million fishing trips; annual totals are approximately 192 million angler trips in the marine recreational fishery.

Wave	Months	Estimate of Recreational Saltwater Fishing Trips	Estimate of Intercepted APAIS Eligible Saltwater Anglers (b)	Estimate of Completed APAIS Interviews (c) = (b x 0.821)
1	January/February	14,612,871	6,090	5,000
2	March/April	35,872,949	13,398	11,000
3	May/June	38,859,568	32,887	27,000
4	July/August	45,500,502	35,323	29,000
5	September/October	32,372,497	20,706	17,000
6	November/ December	24,317,753	13,398	11,000
	Median	***34,122,723***	***17,052***	***14,000***
	Total	**191,536,140**	**121,803**	**100,000**[2]

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.

The APAIS is based upon a stratified, multi-stage cluster design. Samples are selected from a comprehensive, spatio-temporal list of site-days, constructed by crossing a list of publicly-accessible fishing sites/landing sites with a list of available sampling days within a two-month wave.

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. 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, where the size measure for a given PSU is a prediction of the mean number of angler fishing trips that an assigned interviewer would encounter. Each prediction is determined by our State Agency partners. State agencies base their predictions on historical productivity and knowledge of local fishing activity. The number of stages of sampling in the APAIS is dependent on the type of fishing activity. Sampling of boat fishing activity occurs in three stages in which the secondary sampling unit (SSU) is boat trips within the selected site-day (PSU) and the tertiary sampling unit (TSU) is angler trips within the intercepted boat trip (SSU). Sampling of shore fishing activities occurs in two stages in which the SSU is angler trip within the selected site-day (PSU).

For each wave, sampling of PSU's is stratified by state, month, kind of day (weekend or weekday), six-hour time interval and fishing mode. Stratum variables were selected to maximize sampling efficiency

[2] Annual total angler-intercepts obtained is approximately 100,000 (2013-2021).

while ensuring adequate sampling coverage and sample size among geographic regions, seasons and time intervals.

2.0.2. Estimation/Weighting

The base weight for each PSU is equal to the inverse of its selection probability. Where a census is achieved at the 2nd and/or 3rd stage of sampling, the final weights for each intercepted trip are equal to the PSU weight. When a census is not possible, sample weights are adjusted by 2nd/3rd stage selection probabilities. Estimates of catch-per-trip, by species, are calculated as weighted means of counts of fish reported per intercepted trip using the final sampling weights.

2.1. Data Collection Procedures

The Intercept Survey will be conducted in the Atlantic states (ME - GA) and the Gulf states (FL - MS) by two-month sample waves. Not all states and modes are sampled in each wave. Atlantic Coast sampling will be conducted in NC in Jan/Feb, MA – GA in Mar/Apr, ME -GA in May/Jun, Jul/Aug, and Sep/Oct waves, and in MA to GA in Nov/Dec. In Jan/Feb only Shore, Private or Rental Boat, and Charter Boat angling will be surveyed in North Carolina. All survey modes will be sampled in wave 2 in MA to GA, and all modes in all Atlantic states will be sampled in waves 3 – 5. In wave 6, all modes will be surveyed in NY – GA, and shore, private/rental boat, and charter boat modes will be sampled from MA, RI, and CT. The survey is not conducted in wave 6 in ME and NH. All modes and all waves are sampled in the Gulf States (MS, AL, FL). Although FL is considered a Gulf State, both coasts are sampled by the APAIS. These specific sampling periods by state or region encompass the majority of the recreational fishery seasons. Prior surveys indicated recreational fishing outside these periods was rare, contributed a very small percentage of annual landings of managed fishes, and would be disproportionately expensive to estimate precisely.

The two main data collection tasks of the APAIS are counts of completed angler fishing trips and angler-intercept interviews. Only saltwater recreational fishing trips are included in the APAIS. The 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 interval) visited rather than the number of interviews attained. The angler interviews are obtained by intercepting marine recreational anglers at shore (SH), private/rental boat (PR), and charter boat (CH) access points. Sampling in the party (or head) boat (HB) mode will include riding on the boats during fishing days (no overnight fishing trips will be sampled). The interviews will ask anglers about their fishing day and obtain some demographic data about the angler. To ensure only eligible anglers are interviewed several screening questions are asked of potential respondents: did they fish in saltwater, fish for primarily recreation, complete fishing in the sampled mode for the day, and only fish for finfish, or incidentally catch finfish.

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 pre-determined 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[3] 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/month/mode) such that all sites within the cluster are required to have some level of fishing pressure in that strata; and
- In addition to county/month/mode, 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 mode-specific 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 for Catch Rates and Proportions in APAIS

Stratification. Stratify population into $h = 1,\ldots, H$ strata. Each stratum is defined by Mode, State, Year, Wave, Region, Month, KOD, and Interval.
Modes are Beach-Bank (BB), Man-Made Structures (MM), Charter Boat (CH), and Private/rental boat (PR).
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, 11AM-5PM) within a 24-hr day.

Stage I weight. Cluster-days are sampled within stratum via ppswor 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

$$Pr\left(s=a_i\right)=\frac{z\left(a_i\right)}{\sum_{i=1}^{N_h} z\left(a_i\right)} \quad (1)$$

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 cluster-day (or assignment) is $\pi_{I,hi}$.

$$\pi_{I,hi}=\sum_{i=1}^{N_h}\frac{z\left(a_i\right)}{\sum_{i=1}^{N_h} z\left(a_i\right)} I\left(a_i \in s\right) \quad (2)$$

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

$$w_{I,hi}=\pi_{I,hi}^{-1}. \quad (3)$$

[3] Expected activity per site is coded using 'pressure' categories. These numeric codes represent a range of anglers expected to complete fishing in a specific mode during the sample period and are non-uniform. '0'=1-4 anglers; '1'=5-8 anglers; '2'=9-12 anglers; '3'=13-19 anglers; '4'=20-29 anglers; '5'=30-49 anglers; '6'=50-79 anglers; '7'=80 and greater anglers; '9'=fishing mode not present.

Stage II weight. A cluster includes up to three sites ($j = 1,\ldots,J_i$ where $J_i \le 3$). All sites within a sampled cluster must be visited at least once within the 6-hr interval, $\Delta(T_1,T_2)$, 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-and-counts (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-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 (k)	(1) t_1-t_2 0800-0930	(2) t_2-t_3 0930-1000	(3) t_3-t_4	(4) t_4-t_5 1000-1200	(5) t_5-t_6	(6) t_6-t_7 1230-0200
Time spent	$\Delta(t_1,t_2)=1.5$	$\Delta(t_2,t_3)=0.5$	$\Delta(t_3,t_4)$	$\Delta(t_4,t_5)=2$	$\Delta(t_5,t_6)$	$\Delta(t_6,t_7)=1.5$
activity	Site A intercepts	Site A counts	Travel	Site B both	Travel	Site A both
Angler intercepts	$I_A(1) = I_A(t_1,t_2) = 8$	0		$I_B(4) = I_B(t_4,t_5) = 5$		$I_A(6) = I_A(t_6,t_7) = 6$
Obs. departures	0	$D_A(t_2,t_3) = 10$		$D_B(t_4,t_5) = 7$		$D_A(t_6,t_7) = 10$

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) = Confirmed(k) + Unconfirmed (k) for $D_A(t_2,t_3)$

Obs. Departures(k) = Confirmed(k) + Unconfirmed (k) + Angler Intercepts (k) for $D_A(t_6,t_7)$ and $D_B(t_4,t_5)$

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

$$w_{B,k\vee i}=w_{B,4\vee i}=\frac{D_B(t_4,t_5)}{I_B(t_4,t_5)}\frac{\Delta(T_1,T_2)}{\Delta(t_4,t_5)}=\frac{7}{5}\frac{6}{2}=4.2 \qquad (4)$$

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 $D_A(t_2,t_3)$ for estimating $D_A(t_1,t_2)$ assuming that observed departures are uniformly distributed over (T_1, T_2) interval:

$$\widehat{D}'_A(t_1,t_2)=\frac{\Delta(t_1,t_2)}{\Delta(t_2,t_3)}D_A(t_2,t_3)=\frac{1.5}{0.5}\times 10=30 \qquad (5)$$

If $\widehat{D}'_A(t_1,t_2)<I_A(t_1,t_2)$, set $\widehat{D}'_A(t_1,t_2)=I_A(t_1,t_2)$. The estimate of total departures in t_1-t_2 window is $\widehat{D}_A(t_1,t_2)=I_A(t_1,t_2)+\widehat{D}'_A(t_1,t_2)=8+30=38$. Once the total departures in t_1-t_2 ($k = 1$) is estimated, the weight of the first visited Site A is

$$w^{\square}_{A,1\vee i}=\frac{\widehat{D}_A(t_1,t_2)}{I_A(t_1,t_2)}\frac{\Delta(T_1,T_2)}{\Delta(t_1,t_2)}=\frac{38}{8}\frac{6}{1.5}=19 \qquad (6)$$

For the second visit of Site A in t_6-t_7 window ($k = 6$), the weight is

$$w^{\square}_{A,6\vee i}=\frac{D_A(t_6,t_7)}{I_A(t_6,t_7)}\frac{\Delta(T_1,T_2)}{\Delta(t_6,t_7)}=\frac{16}{6}\frac{6}{1.5}=10.67 \qquad (7)$$

The final weight of Site A is a linear combination of $w^{\square}_{A,1\vee i}$ and $w^{\square}_{A,6\vee i}$, in proportion to the length of time spent on two visits of Site A:

$$w_{A,\cdot\vee i}=\frac{\Delta(t_1,t_2)}{\Delta(t_1,t_2)+\Delta(t_6,t_7)}w^{\square}_{A,1\vee i}+\frac{\Delta(t_6,t_7)}{\Delta(t_1,t_2)+\Delta(t_6,t_7)}w^{\square}_{A,6\vee i} \qquad (8)$$

$$¿ \frac{1.5}{1.5+1.5}19+\frac{1.5}{1.5+1.5}10.67=14.84 \quad (8)$$

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

$$w_{B,\cdot\vee i}=w_{B,4\vee i}. \quad (9)$$

Effort. Note that the effort in this section is estimated from intercept survey (Assignment Summary Files). This effort is served for stratum weights when stratum catch rates and other similar statistics are estimated. For total catches, the efforts are estimated from FES and/or FHS data.

Effort is expressed by number of angler-trips. Total effort of Site-*j* in the assignment is estimated by

$$\hat{t}_{x,hij}=w_{j,\cdot\vee i}\sum_{k\in j} I_j(k\vee i) \quad (10)$$

where $k \in j$ indicates sampler work at Site-*j* in the window-*k*. Total effort of the *i*-th cluster day (PSU of the assignment) is the sum of effort of all sites in the cluster-day:

$$\hat{t}_{x,hi}=\sum_{j=1}^{J_i}\hat{t}_{x,hij} \quad (11)$$

Using the example, the effort from the two sites during the 6-hr interval is calculated by

Site (*j*)	Intercepts ($\sum_{k\in j} I_j(k\vee i)$)	$w_{j,\bullet\|i}$	Effort ($\hat{t}_{x,hij}$)
A	8 + 6 = 14	14.84	207.76
B	5	4.20	21.00
total effort of the *i*-th assignment ($\hat{t}_{x,hi}$)			228.76

Total effort in the *h*th stratum:

$$\hat{t}_{x,h}=\sum_{i}^{n_h} w_{I,hi}\hat{t}_{x,hi}$$

Catch Rates. The total A-type catch of a species for boat-based fishing is estimated by

$$\hat{t}_y^A=\sum_{h=1}^{H}\hat{t}_{y,h}$$

$\hat{t}_{y,h}$: est. total catch for startum *h*

$$¿ \sum_{h=1}^{H}\sum_{i=1}^{n_h} w_{I,hi}\hat{t}_{y,hi}$$

$\hat{t}_{y,hi}$: est. total catch for assignment *i*|*h*

$w_{I,hi}$: stage I weight
n_h: number of sites in assignment *i*|*h*

$$¿ \sum_{h=1}^{H}\sum_{i=1}^{n_h}\sum_{j=1}^{J_i} w_{I,hi}\hat{t}_{y,hij}$$

$\hat{t}_{y,hij}$: est. total catch for site *j*|*hi*: see (10)

J_i: number of sites assignment *i*|*h*

$$¿\sum_{h=1}^{H}\sum_{i=1}^{n_h}\sum_{j=1}^{J_i} w_{I,hi}\left(\hat{t}_{x,hij}\frac{\sum_{b=1}^{b_{hij}}\hat{t}_{y,hijb}}{\sum_{b=1}^{b_{hij}} t_{x,hijb}}\right)$$

$\hat{t}_{y,hijb}$: est. total catch for boat-trip $b|hij$

$t_{x,hijb}$: PARTY, number of anglers on boat-trip $b|hij$

$\frac{\sum_{b=1}^{b_{hij}}\hat{t}_{y,hijb}}{\sum_{b=1}^{b_{hij}} t_{x,hijb}} = \hat{\bar{y}}_{hij}$: est. catch per angler-trip for site $j|hi$

$\hat{t}_{x,hij}$: est. total anglers for site $j|hi$; see (11)

b_{hij}: number of sampled boat-trips for site $j|hi$

$$¿\sum_{h=1}^{H}\sum_{i=1}^{n_h}\sum_{j=1}^{J_i}\sum_{b=1}^{b_{hij}} w_{I,hi}\left(\frac{\hat{t}_{x,hij}}{\sum_{b=1}^{b_{hij}} t_{x,hijb}}\right)\hat{t}_{y,hijb}$$

$$¿\sum_{h=1}^{H}\sum_{i=1}^{n_h}\sum_{j=1}^{J_i}\sum_{b=1}^{b_{hij}} w_{I,hi}\left(\frac{\hat{t}_{x,hij}}{\sum_{b=1}^{b_{hij}} t_{x,hijb}}\right)\left(t_{x,hijb}\frac{\sum_{g=1}^{g_{hijb}} y_{hijbg}}{\sum_{g=1}^{g_{hijb}} x_{hijbg}}\right)$$

y_{hijbg}: number of fish for angler-group $g|hijb$

x_{hijbg}: contributors for angler-group $g|hijb$

$\frac{\sum_{g=1}^{g_{hijb}} y_{hijbg}}{\sum_{g=1}^{g_{hijb}} x_{hijbg}} = \hat{\bar{y}}_{hijb}$: est. catch per angler-trip for boat-trip $b|hij$

g_{hijbg}: number of sampled angler-groups for Boat-trip $b|hij$

$$¿\sum_{h=1}^{H}\sum_{i=1}^{n_h}\sum_{j=1}^{J_i}\sum_{b=1}^{b_{hij}}\sum_{g=1}^{g_{hijb}} w_{I,hi}\left(\frac{\hat{t}_{x,hij}}{\sum_{b=1}^{b_{hij}} t_{x,hijb}}\right)\left(\frac{t_{x,hijb}}{\sum_{g=1}^{g_{hijb}} x_{hijbg}}\right) y_{hijbg} \qquad (12)$$

To estimate total B-type catches of boat-based fishing, substitute $x_{hijbg}= 1$ and $\sum_{g=1}^{g_{hijb}} x_{hijbg} = g_{hijb}$ into the above equation to obtain:

$$\hat{t}_y^B = \sum_{h=1}^{H}\sum_{i=1}^{n_h}\sum_{j=1}^{J_i}\sum_{b=1}^{b_{hij}}\sum_{g=1}^{g_{hijb}} w_{I,hi}\left(\frac{\hat{t}_{x,hij}}{\sum_{b=1}^{b_{hij}} t_{x,hijb}}\right)\left(\frac{t_{x,hijb}}{g_{hijb}}\right) y_{hijbg} \qquad (13)$$

The shore-based fishing does not involve boat-trip sampling stage. Explicitly, $t_{x,hijb}$ and $\sum_{b=1}^{b_{hij}} t_{x,hijb}$ are removed out of the equations for $\hat{t}_y^A$ and $\hat{t}_y^B$. Alternatively, one can treat each individual

interview (either an angler-group for A-type catch or an angler for B-type catch) as a boat-trip. Therefore, $b_{hij}=1$ and $t_{x,hijb}=1$, and thus, $\sum_{b=1}^{b_{hij}} t_{x,hijb}=1$, which implicitly cancels out the boat-trip stage from the equations for shore-based fishing.

Proportions. Apply the equation of $\hat{t}_y^B$ for estimation of proportions. For example, if one intents to estimate proportion of angler-trips fish in area 1, one will set $y_{hijbg}=1$ if angler reports fishing in area 1 and $y_{hijbg}=0$ otherwise. Proportion of in-frame anglers follows the same approach.

Variance. The variance of PSU (= cluster-day or assignment) is the dominant component and is estimated by linear approximation.

Total efforts: Total effort is estimated from FES and/or FHS data. The raw estimates of total effort in angler-trips are adjusted by proportions of in-frame anglers (in-state resident anglers, anglers that fished from on-frame FHS vessels), and partitioned into three fishing areas (in-land, state and federal waters).

Total catches = catch rate by species × total effort in mode-state-region-year-wave-area stratum.

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.

Recent response rates for the APAIS (2019-2021) are above 80% and have been improving since transition of the survey to cooperating state agencies on the Atlantic Coast in 2016. This cooperative approach, modeled after that of the Gulf of Mexico region, along with the efforts of the MRIP Communication and Education Team to produce outreach and education materials to keep all potential respondents informed about what the survey is and its importance to fishery monitoring and management, have led to improvements in response rates along the Atlantic and Gulf Coasts. The field interviewer training now includes a section on initial refusal conversion and all data collection supervisors are advised of non-response and refusal rates following each data collection wave. Directed informative presentations (websites, podcasts, webinars, and in-person briefings and listening sessions) have been produced and hosted by MRIP staff. These efforts will continue throughout the APAIS sampling in 2022-2024.

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 10 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.

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 was provided by the following:

Dr. F. Jay Breidt, NORC, (312) 759-4000
Dr. Jean Opsomer, Westat, 301-251-1500
John Foster, NOAA Fisheries Service, Office of Science and Technology, 301-427-8130 is the point-of-contact for the Agency.

References

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