

Appendix A

Similarities and differences between the National Ocean Recreation Expenditures Survey (NORES) and the National Marine Recreational Fishing Expenditure Survey (NMRFES)

Below is a discussion of relevant similarities and differences between the National Marine Recreational Fishing Expenditure Survey (NMRFES) and the National Ocean Recreation Expenditures Survey (NORES).

Survey content

The NMRFES survey is collecting participation, effort, expenditure, and demographic information from known marine recreational anglers in coastal counties. That is, the sample frame consists of marine recreational fishermen who have been intercepted at coastal locations nationwide and who have agreed to participate in a follow-up mail survey. Participation information includes whether the angler fished in saltwater in the last 2 and 12 months. Effort information includes the number of days spent saltwater fishing in the last 2 and 12 months. Information collected related to expenditures includes those of durable goods (e.g., boats, vehicles, and second homes), semi-durable goods (e.g., fishing tackle and gear), and recent trip expenses (e.g., transportation, food, lodging, bait, and ice), related to their saltwater angling activities. Demographic information that is collected includes gender, age, education, employment level, race, and ethnicity. Other, more detailed information specific to fishing activities, e.g., which fish species were targeted and how old the angler was when he/she learned to fish, is also collected. Geographic information such as zip code of residence and location (city/state) of the angler's most recent saltwater fishing trip is also collected.

The NORES survey is collecting participation, effort, and expenditure information related to eight categories of ocean recreation activities from a stratified (by region), random sample of Knowledge Networks' (KN's) research panel. All 50 states and the District of Columbia will be sampled. Participation information includes whether the individual engaged in ocean recreation in the last 2 and 12 months. Effort information includes the number of days an individual spent participating in these activities in the last 2 and 12 months. Expenditure information for durable goods (related to ocean recreation activities), semi-durable goods (specific to their most recent ocean recreation activity) and recent trip expenses (also specific to their most recent ocean recreation activity) will also be collected. Demographic information is not collected by the survey. This information will be made available to NMFS researchers as it has already been collected by KN when their research panel members agree to participate on their research panel. Geographic information related to the individual's residence is not collected as this too is collected by Knowledge Networks. However, location (city/state or county/state) of the individual's most recent ocean activity will be collected by the survey. In addition, information related to whether changes in air temperature (+/- 5, 10, 15 degrees) from what was experienced on their most recent trip, might affect their participation in their most recent ocean activity.

Table [JA](#) summarizes the similarities and differences in survey content.

| | NMRFES | NORES |
|---|---|---|
| <i>Activities of interest</i> | Marine fishing; combines both finfishing and shellfishing | 8 ocean recreation categories; includes one category for marine finfishing and another category for marine shellfishing |
| <i>Participation</i> | Whether the angler fished in saltwater in the last 2 and 12 months | Whether the individual engaged in ocean recreation in the last 2 and 12 months. Information about which activities were engaged in will be collected. |
| <i>Effort</i> | Number of days spent saltwater fishing in the last 2 and 12 months | Number of days engaged in ocean recreation in the last 2 and 12 months. |
| <i>Expenditures</i> | Durable, semi-durable, and recent trip expenses related | Durable, semi-durable, and recent trip expenses |
| <i>Durable expenditures</i> | Expenses on boats, vehicles, and second homes in the last 12 months related to saltwater fishing | Expenses on boats, vehicles, and second homes in the last 12 months related to ocean recreation |
| <i>Semi-durable expenditures</i> | Expenses on fishing tackle and gear, and other semi-durable items in the last 12 months used for saltwater fishing | Expenses on ocean activity-related semi-durable items in the last 2 months |
| <i>Recent trip expenditures</i> | Expenses on transportation, food, lodging, and other items during their most recent saltwater fishing trip | Expenses on transportation, food, lodging, and other activity-related items during their most recent ocean recreation activity |
| <i>Demographic information</i> | Gender, age, education, employment level, race, ethnicity, income | Not collected in the survey. This information has already been collected by Knowledge Networks and will be available to the NMFS. Characteristics include gender, age, education, employment level, race, ethnicity, income |
| <i>Geographic information</i> | Residence information (zip code) and location of recent ocean recreation activity (city/state) is collected by the survey | Residence information (zip code) is available from Knowledge Networks; location of recent ocean recreation activity (city/state) is collected by the survey |
| <i>Other information</i> | Age when first started fishing, who taught them to fish, why they go fishing, other fishing-related information | Likelihood of engaging in their most recent ocean activity if the air temperature was higher or lower |

Timing

The NMRFES is currently collecting information for 2011. Wave 1 was implemented in March 2011 to capture marine recreational fishing activities for January and February. There are a total of six, two-month waves to collect information throughout 2011. The final wave, Wave 6, will be implemented in January 2012 to collect information for November and December 2011.

The timing of the NORES' six, two-month waves are similar to the NMRFES but is planned for 2012. A pre-test is planned prior to full survey implementation. Tentatively, this pre-test is planned for November to collect information for September and October (Wave 5) or for January to collect information for November and December (Wave 6). The pre-test is planned for a region of the U.S. where weather is still conducive for ocean recreation activities, such as the Pacific or South Atlantic Regions. However, it may be possible to expand the pre-test to include other regions to compare relative participation rates between these regions, and compare participation rates with the NSRE's estimates. Expanding the pre-test will be dependent on funding availability. The full survey is planned to begin in March 2012 (Wave 1) to capture ocean recreation activities for January and February. The period between the pre-test and March 2012 will allow time for changes to the survey and sampling design, as needed.

Table [KB](#) summarizes the similarities and differences in timing of these surveys.

| | NMRFES | NORES |
|---|---|---|
| <i>Period of data collection</i> | 2011; all 12 months | 2012; all 12 months |
| <i>Pre-test</i> | Unknown | Planned for 2011; either W5 or W6 |
| <i>Number of waves</i> | 6 | 6 |
| <i>Timing between waves</i> | 2 months | 2 months |
| <i>Description of waves (W)</i> | W1: March 2011; information for January and February | W1: March 2012; information for January and February |
| | W2: May 2011; information for March and April | W2: May 2011; information for March and April |
| | W3: July; information for May and June | W3: July; information for May and June |
| | W4: September; information for July and August | W4: September; information for July and August |
| | W5: November; information for September and October | W5: November; information for September and October |
| | W6: January 2012; information for November and December | W6: January 2013; information for November and December |

Survey administration

The NMRFES is a mail-based survey implemented by various contracted entities nationwide, including private survey administration firms and regional Fisheries Commissions, depending on the region. Primary coordination responsibility is lead by the NMFS, Office of Science & Technology (ST) in Silver Spring, MD. The sample frame used consists of saltwater anglers who

have been intercepted while fishing at various coastal locations nationwide, and who have agreed to participate in a follow-up mail survey. The data collection is currently being implemented and will collect information for all 12 months in 2011. The survey instrument may vary by region, depending on the fish or shellfish species that are targeted, as well as other factors. In Wave 1, New England and the Mid-Atlantic were not sampled due to historically low rates of fishing effort during this time of the year (i.e., January and February) and due to funding constraints. In Wave 6, some states in New England such as Maine are not sampled for these same reasons. Data analysis will likely be conducted by the NMFS.

The NORES is planned as a web-based survey to be implemented by KN. Primary coordination responsibility is lead by NMFS economists in the Southwest Fisheries Science Center (SEFSC) in Santa Cruz, CA and in the Northeast Fisheries Science Center (NEFSC) in Woods Hole, MA. The survey instrument will not vary by region. KN's web-enabled research panel is planned as the sample frame to be used. A stratified (by region), random sample of the general population in this research panel is planned. All 50 states and the District of Columbia will be sampled. The proposed data collection will collect information for all 12-months in 2012. Data analysis will be conducted by NMFS economists at the SWFSC and NEFSC.

Table [LE](#) summarizes the similarities and differences in survey administration.

| | NMRFES | NORES |
|--|---|---|
| <i>Coordination responsibility</i> | NMFS, Office of Science & Technology | NMFS, Southwest and Northeast Fisheries Science Centers |
| <i>Mode of data collection</i> | Mail-based | Web-based |
| <i>Period of data collection</i> | 2011; all 12 months | 2012 (proposed); all 12 months |
| <i>Implementation</i> | Various private survey firms and regional Fisheries Commissions | Knowledge Networks |
| <i>Sample frame</i> | Anglers intercepted in coastal locations nationwide | Knowledge Networks' web-enabled research panel |
| <i>States sampled</i> | States of residence of anglers intercepted in coastal locations | 50 states and District of Columbia |
| <i>Region or state not sampled, by wave</i> | W1: New England and Mid-Atlantic Regions not sampled; W6: Maine not sampled | All regions sampled in each wave |
| <i>Data analysis</i> | Likely NMFS economists | NMFS economists |