

**SUPPORTING STATEMENT**  
**Socioeconomic Research and Monitoring Program in Florida Keys National Marine**  
**Sanctuary: Commercial Fishing Panels and Dive Shop Logbooks**  
**OMB CONTROL No. 0648-0409**

**A. JUSTIFICATION**

**1. Explain the circumstances that make the collection of information necessary.**

The [National Marine Sanctuaries Act](#) (16 USC 1431, et seq.) authorizes the use of monitoring within National Marine Sanctuaries (NMS). The [Florida Keys National Marine Sanctuary and Protection Act](#) (Public Law 101-605, Sec 7 (5)) also authorizes monitoring. The Management Plan for the Florida Keys National Marine Sanctuary (FKNMS) established 18 Sanctuary Preservation Areas (SPAs) and one Ecological Reserve (ER) that are “no take” zones. In a separate two-year process (Tortugas 2000) a second ER was designed and approved Tortugas Ecological Reserve. All consumptive or take activities were displaced from these zones. These special zones were also created to resolve user conflicts. In creating these special zones, socioeconomic impact analyses were done as required under the [National Environmental Policy Act](#) (NEPA). In addition, a Regulatory Impact Review and an Initial and Final Regulatory Flexibility Analysis (if small businesses are potentially impacted by the no take regulations) were conducted. However, many of the benefits and costs identified in these analyses are speculative in nature and there is therefore a great deal of uncertainty about both the benefits and costs. In response to public concerns about the socioeconomic impacts of many of the elements of the FKNMS management plan and especially the “no take” zones (e.g., SPAs and ERs), a socioeconomic element was included in the ecological monitoring program. Dr. Vernon R. (Bob) Leeworthy, formerly Leader of the Coastal and Ocean Resource Economics Program, NOAA, National Ocean Service, Management and Budget Office, Special Projects Division led the Socioeconomic Research and Monitoring Program for the FKNMS from its inception in 1998 and is now Chief Economist for the Office of National Marine Sanctuaries.

In 1998, 50 stakeholders and social scientists met for three days workshop and established a set of recommendations for what should be measured in the Socioeconomic Research and Monitoring Program and how frequently the measures should be taken. A team of social scientists reviewed the literature and a gap analysis was performed. What was currently known and an assessment of the gaps in knowledge were presented to all the workshop participants two weeks before the workshop. A total of 108 recommendations were made, with workshop participants preferring that FKNMS management establish priorities. Two top priorities are to: 1) monitor the financial performance of the commercial fishing operations that were displaced from the “no take” zones to test the hypotheses that there are short term losses and/or long term gains to commercial fishermen because of the zones and 2) monitor the use, perceptions of users as to quality of the SPAs and ERs, and changes in market and economic values associated with SPA and ER uses, to test the hypotheses that user conflicts were resolved and/or that there would be both short term and long term gains to non consumptive users and net gains to the local economy.

In recent FKNMS management plan revisions, there is now a moratorium on the addition of new artificial reefs. A recent analysis (Leeworthy et al, 2005) showed that introducing an artificial reef into the natural reef environment of the FKNMS reduced usage on the surrounding natural reefs, while increasing use on the surrounding artificial reefs, with a net increase in total reef use, dive business, and a net increase in economic impact in the local economy. However, uncertainties exist as to whether the results are simply a short-term effect. Longer-term monitoring is required to answer these uncertainties. Logbooks of Dive Shop operations are a cost effective way to monitor both artificial and natural reef use. The U.S.S. Vandenberg has been approved to be sunk as an artificial reef (pre-moratorium approval). Pre-sinking data collection was completed under this approval. Post-sinking data collection will be done under extension of this approval.

**2. Explain how, by whom, how frequently, and for what purpose the information will be used. If the information collected will be disseminated to the public or used to support information that will be disseminated to the public, then explain how the collection complies with all applicable Information Quality Guidelines.**

Two data collection efforts are proposed here for extension that will provide some of the necessary information to accomplish the above tasks; 1) Commercial Fishing Panels and 2) Dive Shop Logs.

***1) Commercial Fishing Panels***

**How**

There are four commercial fishing panels; 1) Commercial fishermen that were displaced from the Sambos Ecological Reserve, 2) Commercial fishermen that fished in the Tortugas Ecological Reserve prior to establishment, 3) General commercial fishermen in Monroe County that had not fished in any of the no take zones before their creation, and 4) Marine Life Collectors. Marine Life Collectors are those collecting for the aquarium business. Panel size is expected to be between 5 and 10 fishing operations per panel. Selection is based on review of Florida Fish and Wildlife Research Institute (FWRI) fish tickets, which record the catch, and location of catch for each fisherman. For the first three panels, which address displaced fishing due to the zones, FWRI records are used to confirm the amount of dependence on the special zones before displacement on July 1997 (i.e., when the no take regulations took effect in the Sambos ER and the SPAs). Panel members are recruited and must sign an affidavit that allows a researcher (under contract to NOAA) to gain access to the fishing operations fish ticket data. Panel participation is voluntary.

Data collection is done face-to-face and the panel member is not asked to complete any forms. Instead, the data collector will mail the commercial fisherman a list of the types of information that is being sought and arranges for an interview time and place. For each operation, information on catch, effort, revenues, operating and capital costs, and investment (replacement costs of boats and fishing equipment) is obtained on an annual basis. This information will allow for a financial performance analysis.

**Socioeconomic Profile.** This form consists of 12 questions. The socioeconomic profile questions provide information to compare panel members with the general commercial fishing population. Researchers at the University of Florida and the University of Miami interviewed the general commercial fishing population of Monroe County/Florida Keys in 1995 and in 1998 (before and after the management plan for the FKNMS went into effect) using the questionnaire that will be used here. Updates were also completed in 2000. We adopted the questionnaire designed and implemented by previous researchers to maintain the ability for comparisons.

Question 1 asks for the age of the fisherman and Question 2s and 2a ask for race and ethnicity. Question 3 asks for the number of family members supported by the fisherman.

Question 4 asks about memberships in any groups. Chambers of Commerce, Environmental groups, the Monroe County Commercial Fishermen, Inc. (now the Florida Keys Fisherman Association—FKFA), and the Organized Fishermen of Florida (OFA) are the main groups that fishermen belong to in Monroe County.

Question 5 asks if the fisherman belongs to a fish house. Many fishermen are directly employed by fish houses and others simply sell their catch to a fish house without a formal agreement requiring them to land the fish with the fish house. This item adds information about where the fish are landed and what distributors/wholesale processors might be impacted.

Question 6 asks for the fisherman's primary hauling port/dock. This provides the connection from where the catch is obtained to where it is landed (i.e., where it has economic consequences).

Question 7 asks for the fisherman's years of experience fishing in Monroe County. This information is important for assessing the fisherman's ability to adapt to changes (their ability to change and their expected success in moving to other fishing grounds).

Question 8 asks for the replacement value of the gear and vessels owned. This information is used in assessing whether there are economic rents<sup>1</sup> earned in the fishery. Economic rents are appropriate to include in benefit-cost analyses. This information is also important for assessing financial performance.

Question 9 asks for items of cost that are not trip specific. The costs are annual expenses and include such items as maintenance and repair on vessels, traps and other gear, docking fees and fish house fees. Again, this information is critical for financial performance analysis.

Questions 10, 11 and 12 address the economic dependency of the fisherman on commercial fishing. Question 10 asks the percentage of the fisherman's income that is derived from commercial fishing. Question 11 asks for what the fisherman considers to be the best description of his or her occupation. The key distinction is whether they are part time or full time in the

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<sup>1</sup> Economic rent is the return over and above what it takes to maintain a factor of production in its current use; i.e. a return above the normal return on investment. Its relevance to the fisheries is that open access conditions lead to the elimination of economic rents as more labor and capital is employed than is needed often leading to both economic and biological overfishing.

commercial fishery. Some charter boat operations derive a portion of their income from the commercial fisheries because they sell some of their catch. Some fishermen that are normally considered recreational fishermen may on occasion sell their catch. In Florida, a person may obtain a permit that allows them to sell their catch for as little as \$25. Thus some recreational fishermen may be commercial fishermen for some portion of their catch. Question 12 asks for the percentage of their income derived from fishing in Monroe County.

Catch and Effort by Large Spatial Zones. This is not a questionnaire but is a framework for obtaining information. The data collector sits down with the fisherman and with the use of maps showing the large spatial zones and the fisherman's catch records provides their total catch (in pounds) for each species or species group and the percentage of the catch in each large spatial area. The percents across large spatial areas must sum to 100 percent for each species or species group. Seven zones have been established for the Florida Keys by previous researchers and we will continue to use these zones to maintain comparability. The information gathered here is important for establishing the fisherman's knowledge of alternative fishing sites and is important input into assessing fishermen's ability to relocate to other fishing grounds due to displacement from the "no take areas". Proponents of the "no take areas" have argued that commercial fishermen could simply replace their lost catch from other areas. Opponents counter that crowding effects will occur and not only will those displaced not be able to replace lost catch from other areas, but also that there will be additional losses as those displaced compete with fishermen for limited available catches in the other areas. Monitoring the distribution of catch over time will aid in testing these hypotheses.

Marine Life Collectors generally report their catch by numbers of different species rather than pounds. We use the species group classifications used by FWRI in their trip ticket information system.

Trip Costs by Species or Species Group. As with Question 8 and 9 in the Socioeconomic Profile, this information obtains costs. Here the variable or trip costs are obtained for a typical trip for each species or species group. Trip cost items include fuel and oil, ice, bait, food & supplies, spotter plane, other, and labor or crew shares. These questions obtain the information critical to the financial performance analysis.

### **By Whom**

Thomas J. Murray of Thomas J. Murray and Associates is the lead contractor with a sub-contract to the University of Miami, Rosenstiel School of Atmospheric and Marine Sciences (RSMAS). Manoj Shivilani is now with the Center of Independent Experts of Northern Tiaga Ventures, Inc. but will remain the main data collector.

NOAA economist Dr. Vernon R. Leeworthy is the Contract Officer's Technical Representative (COTR) and also is the Chief Economist for NOAA's Office of National Marine Sanctuaries. Dr. Leeworthy reviews all data and reports developed by the contractors. In addition, all project reports, past and future are converted to portable document format (pdf) and posted on the NOAA Web site (<http://sanctuaries.noaa.gov/science/socioeconomic/floridakeys>).

## **How Frequently**

Data is collected annually. Reports with simple summaries of the data are also produced annually. Analyses are done periodically (see web site). A more extensive analysis was performed for a five-year pre-post integrated assessment for the Tortugas Ecological Reserve, 151 nautical square mile no-take zone and will be posted soon on the web site (see Jeffries et al 2009 forthcoming).

## **Purpose**

The main purpose of the commercial fishing panels is to test whether FKNMS regulations and management strategies cause financial harm to commercial fishermen in the short-term and/or if in the long-term there is financial gain or loss to commercial fishermen. So far, in the short-term, for both the Sambos and Tortugas Ecological Reserves (largest no-take areas), there has been no negative economic impacts (see Leeworthy 2001 on the web site and forthcoming report on the Tortugas—Jeffries et al 2009).

## **How Collection Complies with NOAA Information Quality Guidelines**

**Utility:** Demonstrate whether FKNMS regulations and management strategies, especially “no take zones” (SPAs and ERs), are harming or benefiting financial performance of commercial fishermen. Information gives commercial fishermen representation in the adaptive management process. If significant negative impacts are found, then management must take some action, i.e., change regulations or other management strategies and/or establish compensation or assistance programs.

**Integrity:** Procedures have been established to protect the proprietary information provided by members of the commercial fishing panels. All business identification information is removed from all databases to be sent to NOAA or distributed to the public. Each business is assigned a database identification number in the database so each business can be tracked through time without revealing the identity of the business. The contractor maintains the codebook containing the database identification numbers with corresponding business identification. The contractor is not allowed to release the codebook to anyone. Release of proprietary business information is further protected by the Freedom of Information Act (5 USC 522 (b) (4)) concerning trade secrets or proprietary information, such as commercial business and financial records.

All project reports are converted to Read-Only in portable document format (pdf) before being placed on the NOAA Web site for public dissemination.

**Objectivity:** The contractor and sub-contractor were selected with the approval of both the commercial fishermen and NOAA. This ensures that the information is collected and reported in an unbiased manner. In addition, self-reporting by panel members is not allowed. Each panel member must sign an affidavit giving the contractor access to the State of Florida’s ‘trip ticket’ information. The trip ticket information includes pounds of catch and value of catch (revenue received by fisherman) by year, species, location of catch and location where landed. Each panel member’s accounting books are used to obtain costs and profits. These procedures ensure accurate, reliable and unbiased results.

All reports are reviewed by the contractor and sub-contractor and by two NOAA economists before release to the public. Reports initially developed by the contractor/sub-contractor are reviewed by two NOAA economists and vice versa. This report review procedure ensures all information is accurate, reliable, unbiased, complete and clear. None of the reports developed by contractor/sub-contractor or NOAA economists' express NOAA policy or management views. Instead, only objective analyses are produced that can be used by all parties (including NOAA policy and management staff) in the policy/management process. All reports that include analyses of data are peer reviewed.

## **2) *Dive Shop Logs***

### **How**

In 2001 and 2002, all the dive shops in the Key Largo and Key West areas of the FKNMS were asked to provide their dive logs for use of all areas. Contractors, Marine Habitats, Inc. for Key Largo area and Artificial Reefs of the Keys, Inc. for Key West area, have been collecting the monthly logs and entering them into databases. Most dive operations preferred copying (using copying machine) their logs on a monthly basis and mailing or handing to the contractor on the contractor's monthly visits to the Dive Shops. None wanted to e-mail their logs on a monthly basis. Contractors have been visiting the remaining Dive Shops and coping logbook information onto our Dive Log Questionnaires. We accommodated all methods of response. Logs included information on location of each dive, number of passengers who dove the location, how many were snorkelers and how many were SCUBA divers, the date and time of arrival and departure from each dive site, and whether they used a mooring buoy, anchored or drifted. The contractors have also asked to review dive shop past logbooks to develop historical use patterns. The dive shops already collect the information that we have been requesting and the burden has been minimal.

If funding is obtained for FY10, monthly log data collection will resume for long-term monitoring of the effects of the institution of the "no take" zones. The dive logs will be combined with on-water observation data also collected by the contractors. Seventy-two days of on-water observation were obtained for the surrounding natural and artificial reefs for the sites where the Spiegel Grove was sunk (off Key Largo) and the planned sinking site for the U.S.S. Vandenberg. On-water observation data was stratified by season (summer and winter) and by type of day (weekday, weekend and holiday). By combining Dive Shop Logbook data with on-water observation data, a methodology has been developed to estimate total use (Dive Shop use plus non-Dive Shop use) of the surrounding natural and artificial reefs (see Leeworthy et al, 2005). This information will then be used to test the hypothesis of whether introducing an artificial reef into a natural reef environment will reduce usage on the surrounding natural reefs. We hope to also explore whether this methodology could be used to develop estimates of use for individual SPAs and ERs.

### **By Whom**

For the Key Largo area, Tom Maher of Marine Habitats, Inc, has collected the data. For the Key West area, data has been collected by Artificial Reefs of the Keys, Inc. (Joe Weatherby).

Artificial Reefs of the Keys, Inc. has now hired Resource Control Corporation to collect the data (Chris Norwood, Project Manager). NOAA economist, Dr. Vernon R. Leeworthy, will analyze the data and develop methods of estimation and will be responsible for developing all reports. Dr. Robert Smith of the Florida Keys Community College will provide peer review for all analyses, estimation methods and reports.

### **How Frequently**

Monthly collection of Dive Shop logbook data will resume. For application to assessing the sinking of new artificial reefs in the FKNMS, one year of data is obtained pre-sinking and one year of data is obtained post-sinking. For the U.S.S. Spiegel Grove, the original data collection, both pre-sinking and post-sinking was completed. Additional efforts are proposed to monitor efforts to test if the results obtained represent a short-term effect. For the U.S.S. Vandenberg, the pre-sinking data is complete under the current approval, but approval of the extension will be required to complete the post-sinking data collection. The State of Florida's Department of Economic Development and Tourism would like to extend data collection for the U.S.S. Vandenberg to test for longer-term impacts. For application to SPA and ER use estimation, monthly collection will be required. This latter application is contingent on development of the use estimation method.

### **Purpose**

The purpose of the application to assessing the sinking of new artificial reefs in the FKNMS is to test the hypothesis of whether sinking a new artificial reef in a natural reef environment reduces usage on the surrounding natural reefs. For application to the SPAs and ERs, the purpose is to monitor use of the SPAs and ERs to establish the benefits of these special zones.

### **How Collection Complies with NOAA Information Quality Guidelines**

**Utility:** The sponsors of sinking new artificial reefs in the FKNMS (e.g., Dive Shops, Monroe County Tourist Development Council and local Chambers of Commerce) maintain that introducing new artificial reefs into the FKNMS will reduce usage on surrounding reefs, while promoting a sustainable economy in Monroe County, Florida. The FKNMS has responsibility for protecting the natural environment and has permit authority (along with State and Local governments) over the new artificial reefs. The FKNMS is requiring, as part of the permit for new artificial reefs, that monitoring of use and ecological conditions of natural reefs sites surrounding the sinking sites for new artificial reefs. The data collection here supports the use-monitoring portion of the requirement. NOAA is aiding the local community with the socioeconomic portion of the monitoring. Results of the analyses of the data will determine if any new artificial reefs will be approved for sinking within the FKNMS.

For SPAs and ERs, monitoring use will support assessments of the benefits of "no take zones" and whether the use of these zones should be increased or decreased.

**Integrity:** Procedures have been established to protect the proprietary information provided by members of the commercial fishing panels. All business identification information is removed from all databases to be sent to NOAA or distributed to the public. Each business is assigned a database identification number in the database so each business can be tracked through time

without revealing the identity of the business. The contractor maintains the codebook containing the database identification numbers with corresponding business identification. The contractor is not allowed to release the codebook to anyone. Release of proprietary business information is further protected by the Freedom of Information Act (5 USC 522 (b) (4)) concerning trade secrets or proprietary information, such as commercial business and financial records.

All project reports are converted to Read-Only in portable document format (pdf) before being placed on the NOAA Web site for public dissemination.

**Objectivity:** The contractors were selected with the approval of both the Dive industry and NOAA. This ensures that the information is collected and reported in an unbiased manner. Copies of actual dive logbooks are either sent to the contractor, picked-up by the contractor or the contractor sits down in the dive shop and records dive logbook data onto the Dive Shop logbook data sheet. These procedures ensure accurate, reliable and unbiased results.

The contractor and sub-contractor, two NOAA economists and Dr. Robert Smith of the Florida Keys Community College review all reports before release to the public. This report review procedure ensures all information is accurate, reliable, unbiased, complete and clear. None of the reports developed by contractor/sub-contractor or NOAA economists' express NOAA policy or management views. Instead, only objective analyses are produced that can be used by all parties (including NOAA policy and management staff) in the policy/management process. All reports that include analyses of data are peer reviewed.

NOAA Fisheries will retain control over the information and safeguard it from improper access, modification, and destruction, consistent with NOAA standards for confidentiality, privacy, and electronic information. See response to Question 10 of this Supporting Statement for more information on confidentiality and privacy. The information collection is designed to yield data that meet all applicable information quality guidelines. Prior to dissemination, the information will be subjected to quality control measures and a pre-dissemination review pursuant to [Section 515 of Public Law 106-554](#).

**3. Describe whether, and to what extent, the collection of information involves the use of automated, electronic, mechanical, or other technological techniques or other forms of information technology.**

The commercial fishing panels and the dive log data collections do not use any automated, electronic, mechanical, or other technological techniques or other forms of information technology. However, we are remaining flexible on how dive shops prefer to respond. In the past, most of the dive operations preferred to fax either weekly or monthly dive logs. None wanted to use e-mail. Others required the contractor to come to the Dive Shop and record data from the dive logs onto our forms. We accommodated all methods of communicating results that the dive shops preferred. In the commercial fishing panel study and Dive Shop Logs, employing a data collector that sits down with fishermen and/or Dive Shop Owner/manager and works with the fishermen/dive shop owner or manager to compile the information reduces burden. The respondent does not waste time reading instructions and figuring out how to provide and code the information. The data collector is there to facilitate the information collection and does all the coding. Appointments to meet with the data collector are also made to accommodate the



working schedule of the dive shop owner/fisherman to also lower the burden. Data entry into computer databases is done by the contractors and sent to NOAA.

**4. Describe efforts to identify duplication.**

The commercial fishing panels and the dive shop logs are not duplicative of any other known data collections. On the case of the commercial fishing panels, part of the data collection relies on the existing fish ticket system for reporting commercial fishing catch in Florida by FWRI. The dive shop logs are somewhat new, but most dive shops already keep some form of logbooks. Our log sheets are designed to complement existing logs. The dive shops have reviewed our dive logs and agree that they do not impose much burden and they all agree the information is critical to evaluating the impact of introducing artificial reefs into the FKNMS and the management of the SPAs and ERs and have been quite willing to participate.

**5. If the collection of information involves small businesses or other small entities, describe the methods used to minimize burden.**

The data collection is not expected to have a significant impact on small entities such as small businesses. Most of the commercial fishing operations are small businesses as are dive shops. In the case of the commercial fishing panels, however, by employing a data collector we minimize the burden on the respondent. We have been able to keep the burden to an average of 3 hours per respondent. Also, this data collection is something that the commercial industry asked us to do. Thus the respondents have a reason to participate and this will ensure high participation rates. The data collection proposed here is not part of a strategic research project where the respondents are not sure what the information will be used. The respondents will all know why they are participating. NOAA has made a commitment to the commercial fishing industry to conduct this kind of monitoring and this data collection delivers on that promise. Years seven and eight of the commercial fishing panels has been completed, see <http://sanctuaries.noaa.gov/science/socioeconomic/floridakeys/pdfs/commfishpan7and8.pdf> for the financial performance and <http://sanctuaries.noaa.gov/science/socioeconomic/floridakeys/pdfs/commfishpan7and8gis.pdf> for the geographic information system (GIS) spatial distributions of catch.

Almost all dive shops in both Key Largo and Key West have been participating and respondents do not say the dive logs have been a great burden. They are only concerned that we protect the privacy of their individual business data since the dive business is extremely competitive and they do not want their competitors to have access to their data on business volume.

**6. Describe the consequences to the Federal program or policy activities if the collection is not conducted or is conducted less frequently.**

NOAA and the managers of the FKNMS have agreed to include socioeconomic monitoring in the ecological monitoring program for the FKNMS. The information collection proposed here delivers on items identified by the user groups as necessary elements of a socioeconomic monitoring program. Many federal agencies that manage natural resources have been tasked by the National Academy of Sciences to adopt adaptive management practices. Adaptive management requires monitoring, both ecological and socioeconomic, to be able to assess what

is happening to both the natural resources and the humans that depend upon those resources. The FKNMS has taken important steps along these lines and is living up to their compact with the stakeholders that have participated in developing the management plan for the FKNMS and have helped design the Socioeconomic Monitoring Program. Not completing these data collections would leave NOAA and the FKNMS in violation of these agreements.

**7. Explain any special circumstances that require the collection to be conducted in a manner inconsistent with OMB guidelines.**

Data collection will be consistent with OMB guidelines.

**8. Provide information on the PRA Federal Register notice that solicited public comments on the information collection prior to this submission. Summarize the public comments received in response to that notice and describe the actions taken by the agency in response to those comments. Describe the efforts to consult with persons outside the agency to obtain their views on the availability of data, frequency of collection, the clarity of instructions and recordkeeping, disclosure, or reporting format (if any), and on the data elements to be recorded, disclosed, or reported.**

A Federal Register Notice published on June 26, 2009 (74 FR 30523) solicited public comment on this collection. None was received.

**9. Explain any decisions to provide payments or gifts to respondents, other than remuneration of contractors or grantees.**

No payment or gifts are given to respondents.

**10. Describe any assurance of confidentiality provided to respondents and the basis for assurance in statute, regulation, or agency policy.**

The commercial fishing panel participants have all been involved in similar data collection efforts and understand the data protection issues. Our data collector, under contract to NOAA, assigns each operation a unique identification code for all databases. The codebook that links the operation to the unique identification number is never provided to NOAA. This book remains in the hands of the contractor. The code book contains the name, name of business, address and telephone number and the database identification number corresponding to each name, name of business, address and telephone number. The databases for distribution will contain the identification numbers, but the names, names of businesses, addresses and telephone numbers will be destroyed. The remaining data will be available for distribution.

We will provide a separate sheet with each data collection (included in package) authorities, the way in which the information will be used to further performance or agency functions, provide an estimate of burden of time, name and address of sponsoring office, assurance that responses are voluntary, and the extent of confidentiality. The extent of confidentiality is assured by exemption under the [Freedom of Information Act](#) (5 USC 522(b)(4) concerning trade secrets or proprietary information, such as commercial business and financial records.

The dive shops are not concerned that NOAA has their individual business data. They simply want assurance that their individual business data is not given out to others. The dive industry in the Florida Keys is very competitive and each business does not want their competitors to know their number of customers. All databases used for research and available for distribution will not contain business name, address or telephone number.

**11. Provide additional justification for any questions of a sensitive nature, such as sexual behavior and attitudes, religious beliefs, and other matters that are commonly considered private.**

NA.

**12. Provide an estimate in hours of the burden of the collection of information.**

Estimated Number of Respondents:

- A. Commercial Fishing Panel Members: Approximately 40
- B. Dive Shops: 69

Estimated Time Per Response:

- A. Commercial Fishing Panels: 3 hours
- B. Dive Shops: 10 hours

Estimated Total Annual Burden Hours:

- A. Commercial Fishing Panels: 120 hours
- B. Dive Shops: 690 hours

Total.....810 hours

For the commercial fishing panel data collection, the above estimates were produced in consultation with Manoj Shivlani of the University of Miami. Mr. Shivlani has done studies that included data collection similar to what is being proposed here. The questions in the socioeconomic profile of commercial fishermen and the data collection methods for catch and effort for the commercial fisheries were previously asked in a Sea Grant project in Florida and published in a Sea Grant report (J. Walter Milon, Daniel O. Suman, Manoj Shivlani and Kathryn A. Cochran, Commercial Fisher' Perceptions of Marine Reserves for the Florida Keys National Marine Sanctuary, Florida Sea Grant TP-89, December 1997, Florida Sea Grant College, University of Florida, Gainesville, Florida). Manoj Shivlani at the University of Miami under the existing approval has done the data collection and our estimates of burden hours have proved to be quite accurate.

**13. Provide an estimate of the total annual cost burden to the respondents or record-keepers resulting from the collection (excluding the value of the burden hours in Question 12 above).**

There are no costs. Fishing panel information is gathered through interviews, and dive shop logs are copied from the shops. No new recordkeeping requirements are imposed on respondents since dive shops already maintain dive logs.

**14. Provide estimates of annualized cost to the Federal government.**

Annualized Cost to the Federal Government:

Socioeconomic Monitoring Program – Florida Keys National Marine Sanctuary

Contracts for Data Collectors.....\$195,000  
a. Contracts for Commercial Fishing Panels.....\$65,000  
b. Contract for Dive Logs.....\$130,000

NOAA Staff time in developing questionnaires, maps and contract

a. Development and oversight.....\$4,160  
1. ZP/13-14 Economist 52 hours \* \$80.00/hour..... \$4,160  
b. Travel.....\$3,000

Total Cost to Federal Government.....\$202,160

**15. Explain the reasons for any program changes or adjustments.**

In order to cover the entire Florida Keys for monitoring, our most recent study identified that there are 69 dive shops and we will continue with the 40 commercial fishing panel members. This is an increase of 2 respondents from the dive shop population. Total burden hours increases from 790 to 810 hours.

**16. For collections whose results will be published, outline the plans for tabulation and publication.**

A. Commercial Fishing Panels

Information is collected annually. Financial performance analysis has been done for short-term impacts. Historical information for base year 1998 has been collected, as well as information for years 1999, 2000, 2001, 2002, 2003, 2004, 2005, and 2006. There has been a short hiatus in the panel collection data due to shortage of funding. An assessment has been conducted on the trends in the local, regional and state fisheries, and changes in other regulations that might be affecting the commercial fisheries, plus weather events (e.g., hurricanes) and other environmental events that may have affected the fisheries in the region. The objective was to determine the separate effects of the SPAs and ERs on the financial performance of commercial

fisheries. Annual reports are presented at the Zone Performance meetings each year (usually February) held by the FKNMS. All reports for this effort are reported on our Web site ([http://sanctuaries.noaa.gov/science/scocioeconomic/floridakeys/commercial\\_fishing/fishing\\_pannels.html](http://sanctuaries.noaa.gov/science/scocioeconomic/floridakeys/commercial_fishing/fishing_pannels.html)).

The data collection is expected to be an on-going effort to allow us to be able to test whether there are long-term gains or losses from the SPAs and ERs to the commercial fisheries.

#### B. Dive Logs

Information from monthly logs will be collected annually. The data will be combined with on-water observation data to test a methodology for estimating total use of the natural and artificial reefs surrounding the sites selected for sinking new artificial reefs in the FKNMS. The analytical method tests the hypothesis of whether introduction of an artificial reef into a natural reef environment reduces the usage on the surrounding natural reefs. The methodology will also be evaluated for developing an affordable method of monitoring use for individual SPAs and ERs. We developed a method using data obtained for the Spiegel Grove (under this existing approval) that was sunk off Key Largo, Florida in the FKNMS in 2002. We completed analysis of the data, development and peer review and the results were published in the Bulletin of Marine Science (see Leeworthy et al, 2005). The existing approval was also used to gather pre-sinking data for the U.S.S. Hoyt Vandenberg that has now been sunk off Key West, Florida and for monitoring the U.S.S. Spiegel Grove to determine if the shifting of effort away from natural reefs to artificial reefs was simply a short-term phenomenon. Post sinking monitoring of the USS Vandenberg is the primary focus of the Dive Shop surveys. All reports documenting methods and communicating summary results will be posted on our Web site ([http://santuaries.noaa.gov/science/socioeconomic/floridakeys/recreation/new\\_reefs.html](http://santuaries.noaa.gov/science/socioeconomic/floridakeys/recreation/new_reefs.html)).

**17. If seeking approval to not display the expiration date for OMB approval of the information collection, explain the reasons why display would be inappropriate.**

Not applicable.

**18. Explain each exception to the certification statement.**

There are no exceptions.