

NOTICE OF OFFICE OF MANAGEMENT AND BUDGET ACTION

Linda Engelmeier 07/12/2000  
Department of Commerce  
14th and Constitution Avenue NW  
Room 5327  
Washington, DC 20230

In accordance with the Paperwork Reduction Act, OMB has taken the following action on your request for approval of a new information collection received on 04/06/2000.

TITLE: South Florida Artificial and Natural Reefs -  
Economic Valuation Study

AGENCY FORM NUMBER(S): None

ACTION : APPROVED  
OMB NO.: 0648-0410  
EXPIRATION DATE: 07/31/2003

BURDEN	RESPONSES	BURDEN HOURS	BURDEN COSTS
Previous	0	0	0
New	10,600	2,733	0
Difference	10,600	2,733	0
Program Change		2,733	0
Adjustment		0	0

TERMS OF CLEARANCE:

SEE PAGE 2 FOR TERMS OF CLEARANCE

NOTICE OF OFFICE OF MANAGEMENT AND BUDGET ACTION

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OMB NO.: 0648-0410

07/12/2000

TERMS OF CLEARANCE:

This collection is approved under the following conditions:

- All race/ethnicity questions must be changed to conform to OMB standards, issued October 30, 1997.
- All telephone surveys based upon boat registrations must send a letter of introduction to the respondents announcing the survey and warning them that the telephone call is coming. Significantly low response rates jeopardize the practical utility of this collection and additional contacts must be initiated to counter the growing reluctance of people to answer their phones or respond to phone surveys.
- All results of contingent valuation studies must be reported with the response rate. Questions of this nature are likely extremely sensitive to response rate, even where demographic information doesn't capture nonresponse bias.
- The OMB control number must be displayed on the information collection without exception.

NOTE: The agency is required to display the OMB control number and inform respondents of its legal significance (see 5 CFR 1320.5(b)).

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OMB Authorizing Official    Title

Donald R. Arbuckle                      Deputy Administrator, Office of  
Information and Regulatory Affairs

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# PAPERWORK REDUCTION ACT SUBMISSION

**Please read the instructions before completing this form. For additional forms or assistance in completing this form, contact your agency's Paperwork Clearance Officer. Send two copies of this form, the collection instrument to be reviewed, the supporting statement, and any additional documentation to: Office of Information and Regulatory Affairs, Office of Management and Budget, Docket Library, Room 10102, 725 17th Street NW, Washington, DC 20503.**

1. Agency/Subagency originating request	2. OMB control number <span style="float: right;">b. <input type="checkbox"/> None</span> a. _____ - _____
3. Type of information collection ( <i>check one</i> ) a. <input type="checkbox"/> New Collection b. <input type="checkbox"/> Revision of a currently approved collection c. <input type="checkbox"/> Extension of a currently approved collection d. <input type="checkbox"/> Reinstatement, without change, of a previously approved collection for which approval has expired e. <input type="checkbox"/> Reinstatement, with change, of a previously approved collection for which approval has expired f. <input type="checkbox"/> Existing collection in use without an OMB control number For b-f, note Item A2 of Supporting Statement instructions	4. Type of review requested ( <i>check one</i> ) a. <input type="checkbox"/> Regular submission b. <input type="checkbox"/> Emergency - Approval requested by _____ / _____ / _____ c. <input type="checkbox"/> Delegated
7. Title	5. Small entities Will this information collection have a significant economic impact on a substantial number of small entities? <input type="checkbox"/> Yes <input type="checkbox"/> No
8. Agency form number(s) ( <i>if applicable</i> )	6. Requested expiration date a. <input type="checkbox"/> Three years from approval date b. <input type="checkbox"/> Other Specify: _____ / _____
9. Keywords	
10. Abstract	
11. Affected public ( <i>Mark primary with "P" and all others that apply with "x"</i> ) a. ___ Individuals or households d. ___ Farms b. ___ Business or other for-profit e. ___ Federal Government c. ___ Not-for-profit institutions f. ___ State, Local or Tribal Government	12. Obligation to respond ( <i>check one</i> ) a. <input type="checkbox"/> Voluntary b. <input type="checkbox"/> Required to obtain or retain benefits c. <input type="checkbox"/> Mandatory
13. Annual recordkeeping and reporting burden a. Number of respondents _____ b. Total annual responses _____ 1. Percentage of these responses collected electronically _____ % c. Total annual hours requested _____ d. Current OMB inventory _____ e. Difference _____ f. Explanation of difference 1. Program change _____ 2. Adjustment _____	14. Annual reporting and recordkeeping cost burden ( <i>in thousands of dollars</i> ) a. Total annualized capital/startup costs _____ b. Total annual costs (O&M) _____ c. Total annualized cost requested _____ d. Current OMB inventory _____ e. Difference _____ f. Explanation of difference 1. Program change _____ 2. Adjustment _____
15. Purpose of information collection ( <i>Mark primary with "P" and all others that apply with "X"</i> ) a. ___ Application for benefits e. ___ Program planning or management b. ___ Program evaluation f. ___ Research c. ___ General purpose statistics g. ___ Regulatory or compliance d. ___ Audit	16. Frequency of recordkeeping or reporting ( <i>check all that apply</i> ) a. <input type="checkbox"/> Recordkeeping b. <input type="checkbox"/> Third party disclosure c. <input type="checkbox"/> Reporting 1. <input type="checkbox"/> On occasion 2. <input type="checkbox"/> Weekly 3. <input type="checkbox"/> Monthly 4. <input type="checkbox"/> Quarterly 5. <input type="checkbox"/> Semi-annually 6. <input type="checkbox"/> Annually 7. <input type="checkbox"/> Biennially 8. <input type="checkbox"/> Other (describe) _____
17. Statistical methods Does this information collection employ statistical methods <input type="checkbox"/> Yes <input type="checkbox"/> No	18. Agency Contact (person who can best answer questions regarding the content of this submission)  Name: _____ Phone: _____

## 19. Certification for Paperwork Reduction Act Submissions

On behalf of this Federal Agency, I certify that the collection of information encompassed by this request complies with 5 CFR 1320.9

**NOTE:** The text of 5 CFR 1320.9, and the related provisions of 5 CFR 1320.8(b)(3), appear at the end of the instructions. *The certification is to be made with reference to those regulatory provisions as set forth in the instructions.*

The following is a summary of the topics, regarding the proposed collection of information, that the certification covers:

- (a) It is necessary for the proper performance of agency functions;
- (b) It avoids unnecessary duplication;
- (c) It reduces burden on small entities;
- (d) It used plain, coherent, and unambiguous terminology that is understandable to respondents;
- (e) Its implementation will be consistent and compatible with current reporting and recordkeeping practices;
- (f) It indicates the retention period for recordkeeping requirements;
- (g) It informs respondents of the information called for under 5 CFR 1320.8(b)(3):
  - (i) Why the information is being collected;
  - (ii) Use of information;
  - (iii) Burden estimate;
  - (iv) Nature of response (voluntary, required for a benefit, mandatory);
  - (v) Nature and extent of confidentiality; and
  - (vi) Need to display currently valid OMB control number;
- (h) It was developed by an office that has planned and allocated resources for the efficient and effective management and use of the information to be collected (see note in Item 19 of instructions);
- (i) It uses effective and efficient statistical survey methodology; and
- (j) It makes appropriate use of information technology.

If you are unable to certify compliance with any of the provisions, identify the item below and explain the reason in Item 18 of the Supporting Statement.

Signature of Senior Official or designee

Date

Agency Certification (signature of Assistant Administrator or head of MB staff for L.O.s, or of the Director of a Program or Staff Office)

Signature

Date

Signature of NOAA Clearance Officer

Signature

Date

## SUPPORTING STATEMENT

### South Florida Artificial and Natural Reefs – Economic Valuation Study

#### A. Justification

1. The National Marine Sanctuaries Act (16 USC 1431, et seq.) and the Coastal Zone Management Act (16 USC 1451, et seq.) authorizes NOAA to manage or co-manage coastal and ocean resources. In the Florida Keys National Marine Sanctuary (FKNMS), the FKNMS co-manages with the State of Florida. The Florida Keys National Marine Sanctuary and Protection Act (Public Law 101-605 (H.R. 5909)), established the Florida Keys National Marine Sanctuary (FKNMS). This study involves artificial reefs and natural reefs off the coasts of southeast Florida. The State of Florida has an artificial reef program. Each coastal county can participate in this program and can apply for state funds to place artificial reefs off the coasts of their county. Counties also have permit authority for private groups wanting to sink artificial reefs. Counties actively manage the reefs.

NOAA, four south Florida counties (Palm Beach, Broward, Miami-Dade and Monroe) and the State of Florida have formed a partnership and are funding a study to estimate the market and non market economic use value of both the artificial and natural reefs in South Florida. The counties and the State of Florida are under increasing pressure to add new artificial reefs and there is a need to provide economic justification for these reefs. The FKNMS is responsible for protecting and managing the natural reefs off Monroe County. Twenty-two Sanctuary Preservation Areas (SPAs) and one Ecological Reserve (ER) are currently in place in the FKNMS and one more ER (Tortugas) is in the Draft Environmental Impact Statement stage of designation. SPAs and ERs are “no take” areas. Eighteen of the SPAs are open to nonconsumptive recreation use. Four of the SPAs are research only.

In 1998, the FKNMS initiated a Socioeconomic Monitoring Program for the FKNMS. The primary goal of the Socioeconomic Monitoring Program is to detect and document resultant changes in Sanctuary resource utilization patterns and their impact on market and non market economic values of Sanctuary resources. This data collection serves to fill this need for recreational uses of the artificial and natural reefs in the FKNMS. Dr. Vernon R. Leeworthy, Chief Economist for the National Ocean Service, Special Projects Office leads the Socioeconomic Monitoring Program for the FKNMS.

2. In 1997-1998, the State of Florida funded a pilot project to estimate the economic importance of artificial reefs in Northwest Florida. Dr. Frederick W. Bell, Professor at the Department of Economics, Florida State University and Dr. Mark Bonn, Associate Professor, Department of Hospitality Administration, Florida State University were hired to conduct the pilot study. The objectives of the study were to estimate separately the number of visitors and residents that used artificial reefs in each of five counties in Northwest Florida and estimate the market economic values (sales/output, income and employment) and non market economic values (consumer’s surplus) associated with the artificial reef use. The results of this study are published in Dr. Frederick W. Bell, Dr. Mark A. Bonn, and Dr. Vernon R. Leeworthy, Economic Impact and Importance of Artificial Reefs in Northwest Florida, December 1998, under contract to Office of Fisheries Management and Assistance Services, Florida Department of Environmental Protection, Tallahassee, Florida.

NOAA hired Dr. Frederick W. Bell to modify the questionnaires used in the Northwest Florida study for use in the four county South Florida area. Northwest Florida does not have natural reefs, so the methodology and questionnaires had to be adapted for South Florida in order to be able to estimate both recreational use and economic value separately for artificial and natural reefs.

The methodology requires four separate surveys; 1) Survey of Local Resident Reef Users, 2) Survey of General Non Resident Visitors, 3) Survey of Non Resident Boating Visitors, and 4) Survey of Recreational for Hire Operations. Four separate samples and four separate survey instruments (questionnaires) are utilized to gather the information. For the Survey of Local Resident Reef Users, an additional mail back survey is required for the contingent valuation questions.

## 1) Survey of Local Resident Reef Users.

The survey of local resident reef users is conducted using a computer aided telephone instrument (CATI) system and will be implemented by Florida State University's, Department of Hospitality Administration, Survey Research Center. The CATI system allows for complex skip patterns, so that only questions that are relevant to the respondent are asked. This is important when reviewing the questionnaire. The questionnaire may seem long, however, no respondent receives every question. Programming instructions for skip patterns and selection of respondents that get asked each question are placed in all caps bold type for clarity. The survey is divided into five sections with each section addressing a separate topic.

A telephone/mail/telephone or a telephone/mail back survey is being proposed as alternative sample designs for the contingent valuation questions (all fishermen and divers) and for the importance/satisfaction questions for Monroe County residents. Choice of different sampling designs will be based on costs and expected response rates on the mail backs. The contingent valuation questions require the respondent to read the scenarios. This is not something that can be done over the telephone, thus requiring an alternative approach (e.g., mail back or telephone/mail/telephone). The questionnaire included here is designed for mail back after having completed the telephone survey. However, this could be modified for the telephone/mail/telephone approach.

### Section 1: Screen of Saltwater Boating in County of Residence

The survey will be implemented on separate samples of permanent residents of the counties of Palm Beach, Broward, Miami-Dade, and Monroe located in Southeast Florida that have a registered boat in their county of residence and utilize that boat in the saltwater areas of their county of residence. Section 1 first screens for whether the household contains permanent residents of the county of interview (where the boat is registered) and whether the registered boat is used in the county of residence for saltwater activities. This is important for identifying the population of registered boats that are owned by permanent residents of the county and used in saltwater activities.

Questions 1 through 3, are used to identify the person in the household who is the primary user of the registered boat and arrange the interview. Once that person is identified, that person is asked if they would participate in a 5 to 20 minute interview. The respondent is then read the Privacy Act Statement and given the option of obtaining further contact information about the study. Question 4 then completes the screening to make sure the person is a permanent resident of the county where the boat is registered and that they use this boat for saltwater activities in their county of residence (county also where the boat is registered).

Those that meet the criteria for the study go on to Section 2 of the survey, while those that do not meet the screening criteria are sent to Section 5 to obtain a demographic profile. The purpose here is provide the necessary information to analyze factors that might explain, and therefore provide predictive capability, participation or use of boats in the saltwater environment. This would allow for a model that includes both boat characteristics, user characteristics, and characteristics of the county when the data are pooled across counties.

### Section 2: Activity Profile and Use of Reefs

A major objective of this study is to be able to estimate the amount of use, by type of use (e.g., fishing, snorkeling, and scuba diving) of both the artificial and natural reefs off the coasts of each of the four counties by permanent residents of each county. Questions 5 through 7, obtain estimates of this use measured as the annual number of days of use in each of the three type of activities. Answers to these three questions are also key to screening for what questions are asked of the respondent throughout the rest of the interview.

For those that did saltwater fishing, Questions 8 and 9 are used to obtain the proportion of saltwater days spent on artificial and natural reefs. It is possible that some respondents may double-count days, since, on a given day, they might fish on both artificial and natural reefs. The computer will be programmed to check if the answers to questions 8 and 9 exceed the answer to question 5 (total days saltwater fishing) and if so, Question 9a. is asked to obtain the proportion of use on artificial and natural reefs. This is important because the proportions of total expenditures and market economic impact that will be attributed to artificial and natural reef use will be dependent on the estimated proportions of use on artificial and natural reefs.

For those that did snorkeling or scuba diving, a slightly different approach is necessary for obtaining the relative proportion of artificial and natural reef use. Days for these two activities is not as good a measure as for fishing. The number of dives is a better measure. Questions 10 and 11 address snorkeling and Questions 12 and 13 address scuba diving.

For those residents of Monroe County ONLY, that did snorkeling or scuba diving Questions 11a. and 13a. are asked to get the number of dives in the Sanctuary Preservation Areas and Ecological Reserves in the Florida Keys National Marine Sanctuary. This will allow us to estimate the number of SPA and ER users and will allow us to segment the mail back importance and satisfaction data.

### Section 3: Expenditures

This section is designed to produce expenditure profiles for each of the three activity types (e.g., saltwater fishing, snorkeling and scuba diving). From the information obtained in this section, estimates will be made for each expenditure item on a per person per day basis and them multiplied by the total number of days (population estimate) to derive an estimate of total expenditures made in the each county by permanent residents of the county.

To accomplish the above requires that we identify the proportion of expenditures attributable to permanent residents of the county. Questions 14. A. and 14. B. do this for saltwater fishing, Q16. A. and Q. 16. B, do this for snorkeling, and Q.18. A. and Q18.B. do this for scuba diving.

Questions 15, 17, and 19 obtain the expenditure profiles for each of the three activities measured in expenditures per party per day in the county of residence.

The approach used above follows that used in the Northwest Florida Artificial Reef Study cited above. It is not expected that very many respondents will participate in all three activities and therefore it is expected that only a few respondents will be asked all the questions in this section.

### Section 4: Travel

This section is designed to yield information that could be used to test whether the travel cost model would work for residents of the counties. It has been our experience that the travel cost model does not always perform very well when restricted to populations that all come from relatively short distances. However, some applications have found the model to work. We expect that for residents that the Contingent Valuation Approach (WILL BE DONE BY MAIL) will be best method for estimating the non market economic values for the artificial reef program and for the natural reef system, however, the additional questions proposed here will give us the ability to test the travel cost model for residents. The questions are asked for the last trip for each activity (e.g., saltwater fishing, snorkeling, and scuba diving). The first question asks for the one-way mileage from the respondents place of residence to the location where they made their last trip to do the activity in their county of residence. This would be used with a cost per mile to derive an estimate of travel cost (Q. 20 for fishing, Q22 for snorkeling, and Q24 for scuba diving). The next two questions address the opportunity cost of time. Respondents are first asked if they lost any income opportunities on their last trip to do the activity in their county of residence (Q. 21 a. for fishing, Q23 a. for snorkeling, and Q25 a. for scuba diving). If yes, the respondent is then asked the amount they lost, before taxes (Q21 b for fishing, Q23 b for snorkeling and Q. 25 b for scuba diving). This is the same set of questions in OMB Approval # 0596-0110



CUSTOMER SURVEY (used in the Florida Keys in 1995-96 under OMB Approval # 0596-0110, which recently received approval for another three years).

## Section 5: Demographics

This is the final section of the interview. All of the questions asked in this section are standard. They aid in comparing studied samples with other known populations and other studies. The information is also useful in designing explanatory variables in models of participation and economic valuation. Years of boating experience in South Florida (Q.26) is expected to be important in explaining recreation activity participation. Length of boat (Q27), education level (Q35), household income (Q37 and Q38) and club membership (Q28) were all statistically significant variables in the discrete choice models estimated in the Northwest Florida Artificial Reef Study. Age (Q29) and Race/Ethnicity (Q33 and Q34) were important explanatory variables in travel cost models estimated for both the Florida Keys and for Northwest Florida.

### Contingent Valuation Questions – Mail back Questionnaire

There are three different valuation tasks; 1) Valuation of current natural reef use in Southeast Florida, 2) Valuation of current artificial reef use in Southeast Florida, and 3) Valuation of the Artificial Reef Program for New artificial reefs in Southeast Florida.

The respondent is first asked to refer to the enclosed BLUE CARD. On the card is a statement describing the background information about each valuation scenario and the reasons for saying no, don't know or refusing to answer the valuation question.

In the natural reef valuation task (Questions 1 and 2), the payment vehicle used is the respondents annual cost for their visits to Southeast Florida. They are asked if they would have been willing to pay a higher cost (randomly assigned dollar amount \$10, \$50, \$100, \$200, \$500, \$1,000) to support just their natural reef use in Southeast Florida. They are further reminded that the funds would be used to maintain water quality and the health of the natural reefs in their current condition and they are reminded of their ability to substitute to use of the artificial reefs in Southeast Florida, or to other places, or that they could spend their money on other things. The reminders are specifically done to address the issue of substitution.

The discrete choice format is used where they say YES or NO. We have also allowed for don't know or refusals. We follow-up on the reasons for saying no, don't know or refusals (Questions 2). The respondent is referred to the appropriate section on their colored card and asked for the category that best describes their reason. An "Other (specify)", category is also available.

The natural reef valuation questions were designed in a similar fashion to questions that were used for snorkelers in Key Largo, Florida in 1995-96 under OMB Approval 0596-0110. The scenario was accepted in that experiment. There were very few refusals or very few respondents that said no or don't know that gave a reason that suggested scenario rejection. In addition, the previous experiment used an open-ended payment card format. We selected our discrete choice randomly assigned dollar amounts roughly equivalent to the quintiles of the distribution of payments that people were willing to make in the snorkeling experiment. The upper \$1,000 is used in order to cut-down on the number of yes's in the upper tail.

The artificial reef use valuation mirrors the natural reef valuation (Questions 3 and 4). Similar wording and reminders are used and the same randomly assigned dollar amounts are used in the same discrete choice framework. Again, for those saying no, don't know or refused, we ask a follow-up question (Questions 4) to get the reason that best describes their response.

The artificial reef program – valuation of new reefs is a bit different from the valuation tasks posed for the natural reefs and the current supply of artificial reefs and their current use. Here the scenario is

about the artificial reef program to construct new reefs. The payment vehicle here is more of a direct user fee based on the an existing institution (boat registration decal) for those that own their own boats and simply higher fees or costs of charter/party boat or rental boats for those that use these boating modes for access.

This question (Questions 5) was largely based on the work on artificial reef valuation recently done in Northwest Florida. We had to make slight modifications to the Northwest Florida Study questions because in that application there were no natural reefs in the study area and no attempt was made to value the current use via the contingent valuation method (i.e., only the travel cost model was used for current use valuation).

In our modification of the Northwest Florida Artificial Reef Study, Artificial Reef Program New Reef Valuation question, we remind the respondents that the costs here would be in addition to those for maintaining the current artificial reefs and water quality and remind them of the substitution possibilities both within the study area (natural reefs), other places or that they could spend the money on other things.

The discrete choice method is used here with randomly assigned dollar amounts (e.g., \$5, \$10, \$20, \$30, \$50 and \$100). These dollar amounts are similar to what was used in the Northwest Florida Article Reef Study. We eliminated the \$1 amount used on the lower end in that study and added the \$100 amount to the upper end. This was done based on the analysis of the data in the Northwest Florida Study that revealed too many observations in each end of the distribution.

Again, we allow for answers of no, don't know or refused. We follow-up on these with Question 6.

The contingent valuation questions on current use of both the natural and artificial reefs will allow for direct comparisons with the values that will be derived from travel cost demand models. The valuation of new artificial reefs is a separate valuation and not comparable. This value could be used in benefit-cost analyses of the artificial reef program.

## 2) Survey of General Non Resident Visitors

There are four separate items used in this survey; 1) Screener Tally Sheet, 2) General Visitors Survey Questionnaire, 3) GREEN CARD (Information Card), and 4) WHITE CARD (Activities List).

- (1) Screener/Tally Sheet. This is used to screen for non residents of the county where the interview takes place and to screen for nonresidents that are ending their trip to the county where the interview takes place (exit condition). Non residents are the relevant population of the sample and the exit condition is necessary to minimize the amount of speculation about activities or spending that will take place in the county before the visit is ended. Certain practical exceptions based on past experience are included for the exit condition (e.g., scuba divers that must wait 24 hours before flying and others that plan to get an early start the next morning to leave the area, i.e., before noon the following day).

The tally sheet is used to assess the extent of refusals and language barriers and provides important information that project managers and supervisors can use to respond to problems, such as refusals or language barriers. If for example, there are many interviews not completed due to language barriers, the project manager can assign appropriate interviewers that speak other languages to the sites to conduct interviews. Also, project managers can more efficiently assign interviewer times at sites with knowledge of the times when exit interviews are more successful.

- (2) General Visitors Survey Questionnaire. This instrument collects information necessary to estimate the market economic values (sales/output, income and employment) associated with the general non resident visitors to each county. Although this objective is not needed for estimating the market and non market economic values associated with artificial and natural

reef use in each county, it does provide a reference for comparison between general non resident visitors and reef using visitors and is an important objective of project partners in each county and provides much of the public and private support for the project. However, certain measurements are required from the general non resident visitor population to allow for estimation of the market and non market economic values of reef use. The percentages of all non resident visitors that do each saltwater recreational activity are important parameters derived from this portion of the project. Combining these estimates with outputs from the Capacity Utilization Model (used to estimate total non resident visitor person-trips and person-days for each county) allows for estimation of the total number of non resident visitors that participate in each saltwater boating activity.

Before asking Question 1, the interviewer hands the respondent the GREEN CARD and asked to read the Privacy Act Statement. This statement informs the respondent that the interview is voluntary and that there are no penalties for not answering any of the questions. The respondent is informed about who is conducting and funding the study and the confidentiality of their information.

Questions 1a. asks for the total party size and 1b. asks for those that are not permanent residents of the county of interview. Question 2 asks for the number of non residents that are 16 years or older. This will help in avoiding double-counting with the resident survey. Some visitors are staying with family and friends and they are likely recreating together. This will also allow us to make adjustments to expenditures that are attributable to local residents.

Question 3 provides place of primary residence and is used for marketing profiles.

Question 4 is used to derive a measure of length of trip in days using arrival and departure times. Length of trip measures in days is an important alternative to the number of nights in defining day visitors for activity purposes. Not all overnight stays are multiple-day visits for purposes of activities. Example: A person that arrives on-site after 10:00 PM and leaves before noon the next day would have been an overnight visitor, but only a day visitor for activity purposes.

Questions 5 and 6 ask for the number of trips and number of days the respondent visited the county where interviewed over the past 12 months. This will allow for an assessment of repeat visitation which is important to local businesses and the local tourist development councils for marketing purposes.

Questions 7, 8 and 9 are focused on overnight visits and types of accommodations used, this information is important for connecting to the Capacity Utilization Model for estimating the total number of non resident visitors to each county. The GREEN CARD is used for Question 9 and the respondent is asked to read off the number corresponding to the category that best describes where they stayed on this trip to the county where interviewed.

Questions 10 through 13 provide the key information that will be used for deriving estimates of the total number of non resident visitors that participate in saltwater boating activities in each county. Question 10 first screens for participation in any kind of saltwater boating in the county of interview. The WHITE CARD (Activities card) is used to define what we mean rather than leave this to the respondent. Prior experience has shown that significantly different participation rates are estimated for broad categories of activities when they are left undefined versus use of a list as done here. The WHITE CARD (Activities Card) will be laminated and handed to the respondent. We use the same format of the approach that we have used in the CUSTOMER SURVEY (OMB APPROVAL # 0596-0110). We have provide coding space for up to seven (7) boating activities. Past experience in the area would indicate that this will be more than adequate. Even though visitors may participate in more than one activity, they rarely ever participate using more than one or two kinds of boating modes (e.g., charter, party, rental or private).

There are a couple of key features to the activity section (Questions 10 through 13). If the respondent did not participate in any saltwater boating activities, the interviewer skips to Question 14. If the person is traveling alone, Question 13 is not asked. In addition, past experience with this format requires training of the interviewers because implementation of this set of questions does not proceed as it literally appears. Instead, the person first reads off the WHITE CARD (Activities Card) the numbers corresponding to all the activities that they or the people in their group or party participated. Then for each of these activities the interviewer works across each of these activities to obtain if the respondent did the activity and how many others in the group did the activity. This method has proven to be less burdensome on respondents.

Question 14 asks for the primary purpose of the visit or trip to the county of interview. The respondent is referred to the GREEN CARD and asked to read the letter corresponding to the category that best describes the primary purpose of their trip to the county where interviewed. This is important for marketing purposes and segmenting different type of visitor groups.

Questions 15 through 23 ask for per party trip expenditures. Combined with party size, estimates of the average per person-trip can be derived. These in turn can be multiplied by the number of person-trips for the county (from the Capacity Utilization Model) to estimate total expenditures by category made in the county. These estimates of total spending or sales by category are then used to estimate income and employment impacts generated by this spending using a regional economic impact model.

Questions 24 through 28 obtain a demographic profile of the respondent. Q24 obtains year born to calculate age. Sex is observed not asked (Q25). Questions 26 and 27 ask for racial/ethnic background and use accepted U. S. Bureau of the Census categories. The GREEN CARD is used for Question 27 and the respondent is asked only to read the letter of the category that best describes them. Question 28 asks for household income, before taxes. The respondent is referred to the GREEN CARD and asked to read only the letter corresponding to the income category that best describes the respondents household income category.

- (3) GREEN CARD. This card will be laminated and its use is described above. It contains the Privacy Act Statement, and the necessary information for questions that require categorical responses.
- (4) WHITE CARD. This is the Activities card and will be laminated. It is handed to the respondent and defines what we mean by saltwater boating activities for Question 10 and to aid the respondent in answering Questions 11 through 13.

#### 1) Survey of Boating Non Resident Visitors

There are five items used in this survey; 1) Screener/Tally Sheet, 2) Boating Visitors Survey Questionnaire, 3) YELLOW CARD – Respondent Information Card, 4) WHITE CARD – Activities List, and 5) BLUE CARD for the contingent valuation questions.

- (1) Screener/Tally Sheet. This is used to screen for non residents of the county where the interview takes place and to screen for nonresidents that are ending their trip to the county where the interview takes place (exit condition) and that they engaged in saltwater recreational boating activities. Non residents boating visitors are the relevant population of the sample and the exit condition is necessary to minimize the amount of speculation about activities or spending that will take place in the county before the visit is ended. Certain practical exceptions based on past experience are included for the exit condition (e.g., scuba divers that must wait 24 hours before

flying and others that plan to get an early start the next morning to leave the area, i.e., before noon the following day).

The tally sheet is used to assess the extent of refusals and language barriers and provides important information that project managers and supervisors can use to respond to problems, such as refusals or language barriers. If for example, there are many interviews not completed due to language barriers, the project manager can assign appropriate interviewers that speak other languages to the sites to conduct interviews. Also, project managers can more efficiently assign interviewer times at sites with knowledge of the times when exit interviews are more successful.

- (2) Non Resident Boating Visitor Survey Questionnaire. After the interviewer has screened for eligible person and gets respondent participation, they code the county and location of the interview and the interview time and hand respondent the YELLOW CARD and ask them to read the Privacy Act Statement. The Privacy Act Statement tells the respondent that participation in the interview is voluntary and that there are no penalties for not answering all or some of the questions. The respondent is informed who is conducting and funding the study and its intended use. Confidentiality of the respondents information is also addressed.

Questions 1a. asks for total party size and 1b. asks for those that are not permanent residents of the county where interviewed. Question 2 follows Question 1b. with finding out how many non residents in the party are 16 years or older. This is done to avoid double-counting permanent residents, which is done in the survey of residents.

Question 3 through 5 are used to obtain information for the travel cost demand model. Question 3 obtains information on primary residence. This information is used in the travel cost demand models. A micro-computer program called Prophecy Plus uses zip code or city and can calculate both distance and time from place of origin to location of activity for auto visitors. Question 4 is designed to yield additional information on multiple-destination trips. Question 4.b. identifies whether the county where interviewed was the primary destination and, if not, location of the last place visited. This can be used to calculate a marginal distance from the interview site to the site visited last for people on multiple destination trips. Question 5 identifies all the modes of transportation used. This will allow us to better identify how people got to the location of the interview for non auto visitors as well as auto visitors and to calculate appropriate travel costs.

Question 6 obtains the time of arrival and departure for the trip to the county where interview. This information can be used to calculate the length of trips in days. Length of trip is an important variable in travel cost modeling.

Questions 7 and 8 obtain information on the annual number of trips to the county where interviewed and the days spent in the county where interviewed. Trips provides the dependent variable in travel cost models and number of days allows for normalizing estimates of value on a per person-day basis for comparison with other studies.

Question 9 asks for the number of overnight trips to the county of interview over the past 12 months and Question 10 asks for the number of nights on the current trip. This allows for comparison of the average number of overnights per year with the average on the current trip. Past research has shown that the average length of trip varies significantly between the summer and winter seasons.

Question 11 asks for type of accommodations used from those on overnight stays and uses the YELLOW CARD and asks the respondent to simply read the number off the yellow card that corresponds to type of accommodations that they used. This links the boating visitors survey to the Capacity Utilization Model and the general visitors survey.

Questions 12 through 20 obtain activity participation and intensity of use information. Questions 12, 13 and 14 are the same as Questions 11, 12 and 13 in the general visitors survey. The WHITE CARD (Activities List) is handed to the respondent. As in the general visitors survey, the respondent first reads off all the activities for which the party did over the last 12 months in the county of interview. Then the interviewer asks, for each activity, Questions 13 and 14, but skipping Question 14 if the person is traveling alone. Then Question 15, number of days, is asked, but only for a limited set of the activities on the White Card (e.g. 100 through 200, 400 – 403, 407-410, and 500). Questions 16 and 17 are only asked for a limited set of activities (e.g., 400-403, 407-410, and 500). Questions 18, 19, and 20 are also only asked for a limited set of activities (e.g., 100 – 202). For diving activities, the number of dives on artificial and natural reefs will be used to derive the relative proportion of expenditures that should be associated with artificial and natural reef use. From past experience, we do not expect any respondent or party will have participated in more than seven of the activities on the WHITE CARD (Activities list).

Questions 21 through 23 are only asked for divers and glass-bottom boat riders in the Florida Keys. These questions provide the necessary information to estimate use in the Sanctuary Preservation Areas and Ecological Reserves in the Florida Keys National Marine Sanctuary. They will also provide the ability to segment the data that will be obtained from a mail back survey that will be coordinated with this effort from OMB Approval package entitled “Socioeconomic Monitoring Program for the Florida Keys National Marine Sanctuary”(The Sanctuary Preservation Area and Ecological Reserve Users Survey).

A map of the Florida Keys is handed to the respondent that shows the Sanctuary Preservation Areas and Ecological Reserves. The interviewer then informs the respondent that these areas are marked by yellow buoys and that only nonconsumptive recreation is allowed in these areas.

Question 21 then asks if they did any activities in the special areas over the past 12 month. If no they skip the rest of this section. If yes, the interviewer hands them the white card (activities list) and asks the respondent which activities on the list they did. Question 22 is asked of snorkelers and scuba divers and obtains the number of dives for each activity. Question 23 is asked of glass-bottom boat riders and asks how many rides they made and, on average, how many areas were visited on each ride.

Question 24 refers the respondent to Section 3 of the YELLOW CARD and asks them to read the letter the best describes their primary purpose for the trip to the county where interviewed. This information is important to segment groups for marketing purposes.

Questions 25 through 31 obtain expenditure profile information by activity type and type of boat used. Expenditures are for the most recent trip to the county where interviewed for the type of activity and type of boat measured on a per party per day basis. Combined with party size this can yield estimates of expenditures on a per person per day basis and expanded to population totals for expenditures by multiplying by total person-days of activity and boat type.

Questions 32 through 37 are contingent valuation questions.

There are three different valuation tasks; 1) current use value of natural reefs of Southeast Florida, 2) current use value for the artificial reefs of Southeast Florida, and 3) the artificial reef program for new reefs in Southeast Florida.

The BLUE CARD is handed to respondents. On the card is a statement describing the background information about each valuation scenario and the reasons for saying no, don't know or refusing to answer the valuation question.

In the natural reef valuation task (Questions 32 and 33), the payment vehicle used is the respondents annual cost for their visits to Southeast Florida. They are asked if they would have been willing to pay a higher cost (randomly assigned dollar amount \$10, \$50, \$100, \$200, \$500, \$1,000) to support just their natural reef use in Southeast Florida. They are further reminded that the funds would be used to maintain water quality and the health of the natural reefs in their current condition and they are reminded of their ability to substitute to use of the artificial reefs in Southeast Florida, or to other places, or that they could spend their money on other things. The reminders are specifically done to address the issue of substitution.

The discrete choice format is used where they say YES or NO. We have also allowed for don't know or refusals. We follow-up on the reasons for saying no, don't know or refusals (Questions 33). The respondent is referred to the appropriate section on their colored card and asked for the category that best describes their reason. An "Other ( specify)", category is also available.

The natural reef valuation questions were designed in a similar fashion to questions that were used for snorkelers in Key Largo, Florida in 1995-96 under OMB Approval 0596-0110. The scenario was accepted in that experiment. There were very few refusals or very few respondents that said no or don't know that gave a reason that suggested scenario rejection. In addition, the previous experiment used an open-ended payment card format. We selected our discrete choice randomly assigned dollar amounts roughly equivalent to the quintiles of the distribution of payments that people were willing to make in the snorkeling experiment. The upper \$1,000 is used in order to cut-down on the number of yes's in the upper tail.

The artificial reef use valuation mirrors the natural reef valuation (Questions 34 and 35). Similar wording and reminders are used and the same randomly assigned dollar amounts are used in the same discrete choice framework. Again, for those saying no, don't know or refused, we ask a follow-up question (Questions 35) to get the reason that best describes their response.

The artificial reef program – valuation of new reefs is a bit different from the valuation tasks posed for the natural reefs and the current supply of artificial reefs and their current use. Here the scenario is about the artificial reef program to construct new reefs. The payment vehicle here is more of a direct user fee based on the an existing institution (boat registration decal) for those that own their own boats and simply higher fees or costs of charter/party boat or rental boats for those that use these boating modes for access.

This question (Questions 36) was largely based on the work on artificial reef valuation recently done in Northwest Florida. We had to make slight modifications to the Northwest Florida Study questions because in that application there were no natural reefs in the study area and no attempt was made to value the current use via

the contingent valuation method (i.e., only the travel cost model was used for current use valuation).

In our modification of the Northwest Florida Artificial Reef Study, Artificial Reef Program New Reef Valuation question, we remind the respondents that the costs here would be in addition to those for maintaining the current artificial reefs and water quality and remind them of the substitution possibilities both within the study area (natural reefs), other places or that they could spend the money on other things.

The discrete choice method is used here with randomly assigned dollar amounts (e.g., \$5, \$10, \$20, \$30, \$50 and \$100). These dollar amounts are similar to what was used in the Northwest Florida Artificial Reef Study. We eliminated the \$1 amount used on the lower end in that study and added the \$100 amount to the upper end. This was done based on the analysis of the data in the Northwest Florida Study that revealed too many observations in each end of the distribution.

Again, we allow for answers of no, don't know or refused. We follow-up on these with Question 37.

The contingent valuation questions on current use of both the natural and artificial reefs will allow for direct comparisons with the values that will be derived from travel cost demand models. The valuation of new artificial reefs is a separate valuation and not comparable. This value could be used in benefit-cost analyses of the artificial reef program.

Questions 38 through 46 are the demographics section and final section of the interview. Question 38 asks for experience (years) boating in South Florida. Question 39 asks for boat ownership and the length and county of registration. Question 40 asks for membership in any clubs. Question 41 asks for year born to derive age of the respondent. Q42, Sex, is not asked but observed and coded. Questions 43 and 44 ask for racial/ethnic background and use standard U.S. Bureau of Census categories. For Question 44 the respondent is handed the YELLOW CARD and simply asked to read off the letter for the category that best describes them. Question 45 asks for household income, before taxes and the respondent again is referred to the YELLOW CARD where they are asked to read the letter corresponding to the income category that best describes their household. Q 46 asks if any income earning opportunities were lost on the current trip to the county where interviewed and, if so, how much was lost. This is used in travel cost demand models to incorporate the opportunity cost of time.

All the information in the demographics section (Questions 38 through 46) have been used successfully as explanatory variables either in travel cost demand models or in discrete choice contingent valuation models.

#### 1) Survey of Recreational for Hire Operators

This is a survey of recreational for hire operations that take out passengers for recreational fishing, snorkeling, scuba diving and glass-bottom boat rides in saltwater off the coasts of four Southeast Florida counties (Palm Beach, Broward, Miami-Dade and Monroe). The primary purpose of this data collection is to estimate the proportion of charter/party/guide service activity that takes place on the artificial and natural reefs in each county. The reason this survey is required is that the estimates obtained from passengers aboard these types of boats are not considered reliable, especially for those fishing. Our experience in the Northwest Florida Artificial Reef Study showed that fishermen that used charter and party boats did not know whether they were fishing on artificial or natural reefs. The



captains and mates rarely ever inform their passengers whether they are fishing on an artificial or natural reef. A secondary objective is to obtain information as to industry's opinions on how important the artificial reefs and natural reefs are to their businesses and how satisfied they are with the artificial reef program and the natural reefs in their areas of operation.

The questionnaire is divided into four sections; 1) Kind and Use of Vessel/ Boat, 2) Artificial and Natural Reef Use, 3) Sanctuary Preservation Area and Ecological Reef Use – Monroe County/Florida Keys Only and 4) Importance and Satisfaction of Reefs.

The approach that will be used is a mailback questionnaire. However, if response rates are low, volunteers may be used to visit the homes or business operations to obtain this information.

#### Section 1: Kind and Use of Vessel/Boat

Questions 1 and 2 identify the number of separate vessels/boats that the operation owns or operates, the length of each boat and the maximum number of passengers each is licensed to carry. Question 3 identifies the type of use served by the operation. Question 4 addresses the place of operation.

#### Section 2: Artificial and Natural Reef Use

This section is the most important part of the survey. Here the amount of use on artificial and natural reefs by activity type and county are obtained. For all activities passenger days are asked, but as in the boating visitors survey, number of dives and their distribution on artificial and natural reefs is asked for snorkeling and scuba diving. Coding is made easy by providing check if none for those activities or counties that are not relevant to the operation.

#### Section 3: For Monroe County/Florida Keys Only – SPA and ER Use

This section is only for those operations that operate in Monroe County/Florida Keys. In the Florida Keys special "no take" zones have been established as part of the establishment of the Florida Keys National Marine Sanctuary (FKNMS). A high priority element for the Socioeconomic Monitoring Program for the FKNMS is estimates of SPA and ER use. Overall snorkeling, scuba diving and glass-bottom boat use activity by type of boat (e.g., charter, party, rental and private household boat) have been estimated by four regions of the Florida Keys (e.g., Upper, Middle, Lower Keys and Key West). Consistency with these past studies is maintained here. Maps will be provided with the SPAs and ER as well as the regions displayed to aid respondents.

#### Section 4: Importance and Satisfaction

This section provides information on how the operations rate the importance to their businesses the artificial reef program, the natural reefs and the special zones in the Florida Keys. The operations are also asked to rate their satisfaction with the same three elements. A simple 1 to 5 Likert scale is used. The information can be analyzed using importance-performance analysis, a widely used marketing tool.

1. The local resident survey will be conducted by telephone and will use a computer aided telephone instrument (CATI). The CATI system software allows more efficient survey design by programming skip patterns so that questions that are not relevant to a particular respondent are not asked. The other surveys do not use any automated, electronic, mechanical, or other technological techniques of other forms of information technology. The means of data collection selected are based on the pilot study conducted on artificial reefs in Northwest Florida cited in item 1 above.

This project is a multiple agency partnership. At this time, the partners have not decided whether the data collected would be available on the internet. The partners have agreed to place any reports and data documentation on the internet in portable document format (PDF) and to put all the data and documentation on CD-ROM for distribution to the public.

2. Dr. Vernon R. Leeworthy, Chief Economist, NOAA's National Ocean Service, Special Projects Office has been doing research in coastal and ocean economics for over 20 years and has extensive experience with the research being conducted in Florida. The State of Florida does periodically conduct surveys of both residents and tourists recreational uses. The State of Florida has never designed their methodology to produce estimates at the county level, as required here, and their study is much more comprehensive, in terms of recreation activities in all types of environments, whereas the proposed study here is more focused on artificial and natural reef use in the marine environment. NOAA's National Marine Fisheries Service conducts, on an on-going basis, the Marine Recreational Fishing Statistics Survey (MRFSS). MRFSS is designed to produce statistics on catch and effort and are statistically reliable only at the state level of geographic resolution. The study partners considered trying to coordinate and modify the MRFSS to accommodate the study proposed here, however, the different objectives of the surveys do not mesh well and this approach was rejected. In addition, the study proposed here also addresses snorkeling, scuba diving and glass-bottom boat activities on the reefs for which the MRFSS does not cover.
3. The surveys proposed here will not have significant impact on small businesses. The Survey of Recreation for Hire Operations will involve small businesses. This will involve sending these small businesses a mail survey. The purpose is to get estimates of the amount of activity on artificial and natural reefs. This method was used in the study of artificial reefs in Northwest Florida and the mail survey was designed with the help of the industry. The contractor that will conduct this study will hold public meetings where they will explain how the study will be conducted and why the survey of recreation for hire operations is necessary to get reliable estimates of the use of artificial and natural reefs.
4. Currently, the federal, state and local agency partners in this project have permit responsibility for artificial reefs as well as management responsibility for the natural reefs in the area. There is a growing body of evidence that some types of artificial reefs may have adverse effects on the natural reefs. When applying for permits to place artificial reefs, proponents of artificial reefs claim that artificial reefs will take pressure off the natural reefs thus helping to avoid exceeding carrying capacity on the natural reefs. Also, in managing artificial and natural reefs there is a need to resolve user conflicts as well as to protect the resources. Investments in mooring buoys (to avoid anchor damages to corals) and designation of "no take" zones are two management tools being used in the Florida Keys National Marine Sanctuary. In addition, individual behaviors of users may also damage corals and other resources (e.g., touching corals). One of the most effective management tools is education and outreach. In order to design effective education and outreach efforts, managers need to know more about the users. So, the information collection proposed here will allow each of the managing agencies to provide economic evaluations of public investments in artificial and natural reefs and provide critical information on the users of the reefs to better design education and outreach efforts.
5. Data collection will be consistent with OMB guidelines.
6. PRA Federal Registration notice included. No comments were received.

Dr. Vernon R. Leeworthy, Chief Economist, NOAA's National Ocean Service, Special Projects Office and NOAA's representative in the multi-agency partnership, has been designing and conducting the type of surveys being proposed here for over 20 years. Dr. Frederick Bell, Professor of Economics at Florida State University and Mark Bonn, Associate Professor of Hospitality Administration, Florida State University have designed and tested the survey instruments that will be used here in the pilot study on artificial reefs of Northwest Florida cited in item 1 above. In addition, Dr. Walter J. Milon, Professor of Economics at the University of Florida is a sub-contractor of this project and helped design the visitor survey instruments.

7. The State and local agency partners have discussed the possibility that they might want to add a mail back component to the existing surveys of residents and boating visitors. Should the State and local partners decide to do this, they may negotiate with local businesses to organize a sweepstakes/lottery as

an incentive to fill-out and return the mail back portion of the survey. The local tourist development agencies are also supporting the project and they might want to handout gifts to visitors to promote the area.

8. For the Recreation for Hire Operations Survey, we assure the respondents that their name, address, business name, telephone or boat name will be treated as proprietary information under the Freedom of Information Act (5 USC Section 552 (B) (4)). Name, address, name of business, boat name or telephone number will be removed from all data bases before distribution of the information. For the Non resident visitors survey, we have a card we hand to the respondent and ask them to read the statement provided about the protection of their privacy. In the resident telephone survey, the interviewer will read a statement to the respondent.
9. No questions on the survey, except income and age, are generally considered sensitive. All answers are voluntary. Income is usually the question that has the highest non response. In the visitors surveys, we use letters corresponding to different ranges of income. The ranges of income are on a laminated card which is handed to the respondent and the respondent is asked to give the letter corresponding to the appropriate income range. In many past applications, we have found this method gives us the highest response rate.
10. Burden Hours

Estimated Number of Respondents:

- A. Local Resident Reef Users: 500 per county for a total of 2,000
  - 1) Telephone Survey: 2,000
  - 2) Contingent Valuation (CV) Mail back: 1,000
- A. Non Resident General Visitors: 3,200
- B. Non Resident Boating Visitors: 4,000
- C. Recreational for Hire Operations: 400

Estimated Time Per Response:

- A. Local Resident Reef Users:
  - 1) Telephone Survey: 12 minutes
  - 2) CV Mail back: 4 minutes
- A. Non Resident General Visitors: 10 minutes
- B. Non Resident Boating Visitors: 20 minutes
- C. Recreational for Hire Operations: one hour

Estimated Total Annual Burden Hours:

- A. Local Resident Reef Users:
  - 1) Telephone Survey: 400 hours
  - 2) CV Mail back : 67 hours
- A. Non Resident General Visitors: 533 hours
- B. Non Resident Boating Visitors: 1,333 hours
- C. Recreational for Hire Operations: 400 hours

Total.....2,733 hours

Estimated Total Annual Cost to Public: 2,733 hours (no additional costs expected on respondents)

The burden estimate here is 33 hours greater than included in our burden hour budget originally estimated. The small difference had to do with two changes: 1) For the resident survey, the CV questions were moved to a mail back survey from the telephone survey. The CV questions will therefore not get the full 2,000 sample. We assume a net 50 percent response rate to get the expected

1,000 completed CV questionnaires. 2) In the non resident surveys, our previous calculation of burden hours was based on aggregating for the general and boating visitors survey. Previously, we used an average of 15 minutes for 7,200 respondents, whereas here we broke it down to an average of 10 minutes for 3,200 respondents and an average of 20 minutes for 4,000 respondents.

For the surveys of residents and visitors the response time per respondent can vary widely. For the Local Resident Reef Users Survey, the times ranged from 5 minutes to 30 minutes in the Northwest Florida Artificial Reef Use Study. Because of the added complexity of including natural reefs and the need to constrain the average response time to 15 minutes on the telephone survey, we dropped many of the questions that were included on the Northwest Florida Artificial Reef Study. We think we got it down to an average of 12 minutes.

For the Non Resident General Visitor Survey, the times ranged from two minutes to 15 minutes with an average of 10 minutes in the Northwest Florida Artificial Reef Study. The research team believes these estimates will hold up in the south Florida application.

For the Non Resident Boating Visitors Survey, the times ranged from 5 minutes to 30 minutes with an average of 20 minutes in the Northwest Florida Artificial Reef Study. Those that are more avid recreators take more time. Our findings on many studies is that the more avid recreators do not mind spending the extra time when we are asking about things relevant to their experiences. However, the research team still wanted to try and design the questionnaire so that it would not exceed an average time of 20 minutes. As with the resident survey, many questions that were asked in the Northwest Florida Artificial Reef Study were dropped so that the questionnaire could address the added complexity of natural reef use. The research team believes that the current questionnaire will meet the average 20 minute time estimate.

The research team includes Dr. Vernon R. Leeworthy, Chief Economist, NOAA's National Ocean Service, Special Projects Office, Dr. Frederick W. Bell, Professor of Economics, Florida State University, Dr. Mark Bonn, Associate Professor, Department of Hospitality Administration, Florida State University, and Dr. Walter J. Milon, Professor of Economics, University of Florida.

13. Estimated Total Annual Cost to Public: (only one time application, no additional costs expected on respondents).

The resident mail back survey use prepaid postage with return envelopes and so no costs to respondents.

No new record keeping requirements are imposed on the recreation industry. Information is compiled from existing records.

14. Annualized Cost to the Federal Government

Interagency Agreement – Contract for study (data collection, analysis and reports).....	\$50,000
NOAA Staff time.....	\$8,154
GS-14 Economist 208 hours * \$39.20/hour	
Travel.....	\$4,000
 Total Cost to Federal Government.....	 \$62,154

15. Changes in Estimated of Burden Hours

The burden estimate here is 66 hours greater than included in our burden hour budget originally estimated. The small difference had to do with our previous aggregation in calculation of burden hours for the non resident visitor surveys. Previously, we used an average of 15 minutes for 7,200 respondents, whereas here we broke it down to an average of 10 minutes for 3,200 respondents and an average of 20 minutes for 4,000 respondents.

16. Outline of Plan for Tabulation and Publication of Results and Explanations of Complex Analytical Techniques that will be used

Separate chapters that will also serve as stand alone reports will be produced for each of the four counties in the study area. In each chapter/county, the report will produce separate tabular summaries of results for residents and non resident visitors and within these two groups their annual use and associated market (e.g., sales/output, income and employment) and non market (consumer's surplus) economic values for artificial and natural reefs separately. There will also be an executive summary chapter summarizing results across the four counties.

For calculating market economic impacts (e.g., sales/output, income and employment), sales-to-wages and wages-to-employment ratios by industry will be used along with appropriate regional multipliers. For the non market economic values (consumer's surplus), several approaches will be used. One approach used will be the travel cost approach. Truncated negative binomial models will be estimated using the LIMDEP software package. Discrete choice contingent valuation methods will also be employed. Logit and probit equations will be estimated from the discrete choice data. An more conservative approach of analyzing the discrete choice data will also be employed (Turnbull estimator). All of these methods were used in the Northwest Florida Artificial Reef Study cited in item 1 above, and are standard techniques used in the economics profession.

Contract to conduct the study ( Contract between Broward County Florida and Hazen and Sawyer) includes the following time table:

- A. Final Sample Designs and Survey Instruments..... May 31, 2000
- B. Visitor Survey – Summer.....September 22, 2000
- C. Resident Survey.....November 1, 2000
- D. Visitor Survey – Winter.....April 28, 2001
- E. Draft Report.....June 30, 2001
- F. Final Report.....July 31, 2001

17. Will display OMB approval number on forms as long as OMB approval comes in time to get study started in June 2000.

18. No exceptions to Item 19 on OMB 83-1.

**A. Collection of Information Employing Statistical Methods**

1. Describe the potential respondent universe and any sampling or other respondent selection method used.

1) Survey of Local Resident Reef Users

This survey will use a telephone survey of 500 permanent resident households that have registered boats greater than 14 feet in length in each of the four counties in the study area. Boat registration files are maintained by the State of Florida. The boat registration file includes all boats registered in each county. The relevant population is only a portion of the total number of registered boats in each county. First, boats registered in the county less than 14 feet in length are eliminated based on past research on boats used in the marine offshore environment. Second, boats registered to individuals or households with permanent addresses outside the county where registered are eliminated. From the remaining list, it must be determined what percent of the boats are utilized in the marine environment in the county of permanent residence. 500 households are then selected randomly from this list for each county.

## 2) Survey of Non Resident General Visitors

Fundamental to this study is the definition of a non resident visitor. A non resident visitor is a person that is not a permanent resident of the county visited. Thus a permanent resident of Broward County, Florida is a visitor to Miami-Dade County, Florida if they are doing recreation activity in Miami-Dade County.

For each county, a set of sites are selected to get a representative sample of all visitors to the area. Local Chambers of Commerce, hotel and motel associations, local tourist development councils and local businesses and guides are consulted. The objective is to select a set of sites and set sampling quotas so as to get representative samples of visitors. This may at first glance appear to have no scientific basis. However, in the Florida Keys, NOAA with local partners, conducted two survey simultaneously. One used a stratified random sample of all auto exiting the Florida Keys on U.S. 1 (the only road into the Florida Keys), at the two airports (Marathon and Key West) and at the Cruise Ship docks in Key West. The second survey was site based using local knowledge to get representative samples. The two surveys yielded samples that were not statistically different.

South Florida is characterized by two separate seasons; 1) Summer Season that runs from June through November and 2) Winter Season that runs from December through May. Almost every statistical test conducted on data from previous surveys have found statistically significant differences for origin of visitors, recreation activity, spending, etc. Separate samples will be implemented for each of the four counties. Sampling quotas of 400 interviews per county per season will be implemented or 1,600 interviews in the summer season and 1,600 interviews in the winter season with an annual sample size of 3,200.

## 3) Survey of Non Resident Boating Visitors

The sampling sites and site quotas to achieve representative samples will be done similarly to the general visitors with the use of local knowledge. Additional information is available from NOAA's National Marine Fisheries Service on the use from different access points in each county and by mode of fishing. The sample of boating visitors for each county will be stratified by season, activity (fishing, diving, glass-bottom boat rides) and by boat mode. Table 1 below shows the sampling quotas established for these sample stratifications.

Table 1. Proposed Sample Sizes for Visitor and Resident Surveys

	Summer	Winter	Total
<b>General Visitors</b>	400 x 4 = <b>1,600</b>	400 x 4= <b>1,600</b>	<b>3,200</b>
<b>Boating Visitors</b>			
<b>Fishing</b>	<b>1,600</b>	<b>1,600</b>	<b>3,200</b>
Charter	100 x 4 = 400	100 x 4= 400	800
Party	100 x 4 = 400	100 x 4= 400	800
Own	100 x 4 = 400	100 x 4= 400	800
Rental	100 x 4 = 400	100 x 4= 400	800
<b>Diving</b>	<b>1,200</b>	<b>1,200</b>	<b>2,400</b>
Charter/Party	100 x 4 = 400	100 x 4= 400	800
Own	100 x 4 = 400	100 x 4= 400	800
Rental	100 x 4 = 400	100 x 4= 400	800
<b>Glass-bottom Boats</b>	<b>100 x 1 = 100</b>	<b>100 x 1 = 100</b>	<b>200</b>
<b>sub-total Boating</b>	<b>2,900</b>	<b>2,900</b>	<b>5,800</b>

<b>Total - All Visitors</b>	<b>4,500</b>	<b>4,500</b>	<b>9,000</b>
<b>Residents-Boaters</b>			<b>500 x 4=2,000</b>

Notes: Number of interviews times number of counties. There are four counties.

Glass-bottom boat activity assumed only in Monroe County.

4) Survey of Recreational for Hire Operations

From previous studies, it was determined that non resident charter and party boat users did not always know and could not generally provide accurate estimates of the amount of use on artificial and natural reefs. This was especially true for fishing. Charter and party fishing captains rarely inform their passengers whether they are fishing on an artificial or natural reef or whether they are fishing on a reef or not.

NOAA's National Marine Fisheries Service (NMFS) has been conducting research on the charter and party boat fishing fleet. NMFS has compiled lists of charter and party boat fishing operations. For fishing, we will use the NMFS list as our population. For diving and glass-bottom boat operations, NOAA has compiled lists of all operations in the Florida Keys (Monroe County). The contractor for this study, will compile lists of dive operations in Palm Beach, Broward and Miami-Dade County. Each of the county agency partners in this project has lists that they have compiled of local dive operations. All recreation for hire operators will be sent questionnaires. The contractor hired to conduct the study will be responsible for developing the final list and sampling plan.

2. Describe the procedures for collecting:

1) Survey of Resident Reef Users

From the boat registration file for the State of Florida, as described in item 1 of this section, 500 households will be randomly selected and telephoned. This sample is used to obtain the percentage of registered boats that are used in the marine environment in the county registered. Then conditional on being used in the marine environment, the average number of days of use of these boats on artificial and natural reefs is then used to derive estimates of the number of party-days of use on artificial and natural reefs. To derive estimates of person-days of use on artificial and natural reefs, party-days on artificial reefs is multiplied by the average party size using the boat from the county where the boat is registered and similarly for person-days on natural reefs. This establishes how the population of boats registered in a particular county and used in the marine environment can be used to derive estimates of the number of party-days and person-days of use on artificial and natural reefs in each county. This is a more general description. The actual procedures will do this by activity (e.g., fishing and diving).

2) Survey of Non Resident General Visitors

This survey relies on selecting a set of sample sites and setting quotas for each sampling site to get a representative sample of non resident general visitors, as explained in item1 of this section above. At each site, all people are screened for residency i.e., if they are a permanent resident of the county where the interview takes place. If they are not permanent residents of the county where interviewed, then they are screened using an exit condition (i.e., are they ending their visit to the county where interviewed). In usual circumstances, the day and time when selected would be the approximate time of ending the visit. However, extensive previous research experience in

this area suggests a more flexible approach. First divers need 24 hours of off-gassing of nitrogen in their blood before they can fly. Second, for people staying at campgrounds, it is not convenient to interview them as they are packing-up or just completed packing-up. Experience has been to interview them the night before they plan to pack-up and leave. For interviews conducted in the evening, the person must be leaving the county before noon the next day. This minimizes the amount of activity the respondent must speculate about doing. For persons other than scuba divers or people staying at campgrounds, the exit condition is the day of the interview.

For estimating the number of visitors, the capacity utilization model (CUM). This model was used in the Florida Keys and compared against a more sophisticated stratified random sample of visitors that accessed the Florida Keys by highway, airport and cruise ship (see Vernon R. Leeworthy, Technical Appendix: Sampling Methodologies and Estimation Methods Applied to the Florida Keys/Key West Visitor Surveys, December 1996, NOAA, Silver Spring, MD). It can be found at (<http://www-orca.nos.noss.gov/projects/econkeys/econkeys.html>). The methods yielded similar estimates of the number of visitors. The CUM was also used in the Northwest Florida Artificial Reef cited above.

The CUM basically uses estimates of the number of hotel and motel rooms, campsites and vacation rental units in the county along with utilization rates. Utilization rates for private hotels can be obtained from Smith Travel Services on a monthly or quarterly basis. The CUM has to be supplemented with estimates of the number of visitors that stay overnight with friends and relatives and the number of day visitors. The percent that stay with friends and relatives can be obtained from a state-wide survey conducted regularly by the State of Florida and from the survey of general visitors. Estimates of the number of day visitors is obtained from the survey of general visitors.

Once estimates of the total number of visitors is estimated using the CUM, the general visitors survey is also used to obtain estimates of the percent of all visitors that participate in boating activities by activity (e.g., fishing and diving) and boating mode (own boat, rental boat, charter boat, or party boat).

### 3) Survey of Non Resident Boating Visitors

The general visitor survey and CUM described above yields estimates of the number of boating visitors by activity and boating mode for each county. To estimate the number of party-days and person-days of use by activity and boat mode for artificial and natural reefs, the boating visitors survey is used. Here oversampling using equal sample sizes per season, activity and boat mode are used as shown in Table 1 above for each county. The experience of the researchers in the Northwest Florida Artificial Reef Study was used to establish the sample sizes needed to get reliable estimates for each season/activity/mode stratum for each county.

Sample site selection and respondent selection follows the same protocols as the general visitor survey as to exit conditions. Here respondents are screened for having participated (or going to participate in a boating activity before leaving) during their current visit to the county where interviewed.

### 4) Survey of Recreational for Hire Operations

As described above, the current plan is to send out mail back questionnaires to all recreational for hire operations in the study area. The key information is the portion of person-days of fishing and diving activity on artificial and natural reefs. Even though this is asked of the non resident boating visitors that used charter or party boat operations, past research suggests that the information obtained from visitors would not be reliable. So we will derive an estimate of the portion of fishing and diving activity done on artificial and natural reefs from charter and party operations.



3. Describe the methods used to maximize response rates and to deal with nonresponse.

1) Survey of Resident Reef Users

Telephone surveys have been experiencing declining rates of response due to technologies such as answering machines and caller identification. There has been very little research that would inform us about potential nonresponse bias. However, low response rates do increase the probability of nonresponse bias. On the other hand, surveys with returns of less than 30 percent using mail back surveys have had no nonresponse bias. Low response rates do not mean that the survey will suffer from nonresponse bias, it only means the probability of nonresponse bias is higher.

We plan to address this by requiring the contractor to make at least five callbacks. Recent experience shows that more than five callbacks are not worth the extra cost. Since, the sampling frame is the boat registration file, we can check to see if the responding sample distribution by type and length of boat is different from the boat registration file. If the differences are minor, sample weighting will be used to correct for possible differences due to nonresponse.

For the contingent valuation mail back survey, the Dillman Method for mail surveys will be followed for following up to increase response rates. An alternative method is also being discussed among the project partners. A telephone/mail/telephone survey may yield higher response rates. An additional alternative is a hybrid of the two above approaches. In this approach, a mail back questionnaire is used. If after normal follow-ups do not yield a completed interview, then a call will be arranged to try and convert by telephone.

2) Survey of Non Resident General Visitors and Non Resident Boating Visitors

Both the General and Boating Visitor Surveys will employ the Bicentennial Volunteers, Inc. to conduct all face-to-face interviews. The Volunteers have been conducting survey research for federal and state agencies (e.g., U.S. Forest Service, NOAA, Bureau of Land Management, U.S. Army CORPS of Engineers, TVA and many states) since 1988. The Bicentennial Volunteers, Inc. volunteer their time in exchange for a free campsite and a per diem. Refusal rates using the Volunteers is less than one percent, we therefore do not think nonresponse will be a problem.

3) Survey of Recreation for Hire Operations

We will follow the Dillman Method of mail surveys. This method has consistently produced response rates above 70 percent for a variety of populations. To maximize response rates we are also having the contractor conduct public meetings to explain the project and get local support. The sales staff at the local tourist development councils and local representatives of guide and dive operation associations have agreed to write their memberships and encourage them to participate. If these measures do not yield adequate responses, we will employ local volunteers to visit the operations and try and collect the information in face-to-face interviews.

4. Describe any tests of the procedures or methods to be undertaken.

All the survey methods proposed here were tested in the pilot study on the artificial reefs of Northwest Florida.

5. Names and Addresses of those Consulted.

Dr. Frederick W. Bell  
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Florida State University  
246 Bellamy Building

Tallahassee, FL 32306  
Telephone: (850) 644-7092  
Fax: (850) 644-4535  
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Dr. Mark A. Bonn  
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Florida State University  
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Dr. Walter J. Milon  
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e-mail: [wmilon@gnv.ifas.ufl.edu](mailto:wmilon@gnv.ifas.ufl.edu)

Contractor:

Hazen and Sawyer, P.C.  
4000 Hollywood Boulevard, Ste. 750 N  
Hollywood, FL 33021

Principal Investigator: Dr. Grace Johns  
Telephone: (954) 389-7818  
Fax: (954) 987 – 2949  
e-mail: [gmjohns@hazenandsawyer.com](mailto:gmjohns@hazenandsawyer.com)

South Florida Reef Valuation Study  
Resident Reef Users Survey

OMB APPROVAL #:  
EXPIRATION DATE:

You should receive the survey in about one week. It will be self addressed and will require no postage. As a reminder, your personal information is strictly confidential and will not be given out to anyone. When this survey is complete, any information such as name, address, telephone number will be destroyed.

Thank you very much for your participation.

**FOR MONROE COUNTY AND AGREED TO PARTICIPATE IN MAIL BACK SURVEY, SEND VERSION WITH CONTINGENT VALUATION AND SATISFACTION SURVEY.**

**FOR PALM BEACH, BROWARD AND DADE COUNTIES AND AGREED TO PARTICIPATE IN MAIL BACK SURVEY, SEND VERSION WITH CONTINGENT VALUATION QUESTIONS ONLY.**

South Florida Reef Valuation Study  
Resident Reef Users Survey

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**FOR PALM BEACH, BROWARD AND DADE COUNTIES AND AGREED TO PARTICIPATE IN MAIL BACK SURVEY, SEND VERSION WITH CONTINGENT VALUATION QUESTIONS ONLY.**

Resident Survey  
Valuation Questions

OMB APPROVAL #:  
EXPIRATION DATE:

Dear Resident,

We recently interviewed you by telephone about your boating activities in your home county and you indicated that you would be willing to complete this questionnaire. It is self-explanatory and should not take long to complete. Please record your answers accurately and legibly. Your answers represent many other people not included in this survey effort so it is very important that you return your questionnaire.

Your participation is voluntary. Notwithstanding any other provision of the law, no person is required to respond to, nor shall any person be subject to a penalty for failure to comply with, a collection of information subject to the requirements of the Paperwork Reduction Act, unless the collection of information displays a currently valid OMB Control Number.

After completion of this survey, your name, address and telephone number will be destroyed. All other information will be available for distribution.

When you complete the questionnaire, please use the self-addressed envelop enclosed and return your questionnaire to us. Your cooperation in this effort is greatly appreciated.

Sincerely,

Dr. Mark Bonn  
Department of Hospitality Administration  
Florida State University  
Tallahassee, FL 32306-2026  
Telephone: 850-644-8244

**Please note: It is very important that the same person who participated in the telephone interview also complete this questionnaire.**

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This research is being funded by a partnership between the State of Florida's Fish and Wildlife Conservation Commission, Palm Beach, Broward, Dade and Monroe Counties, and the National Oceanic and Atmospheric Administration. Public reporting burden for this collection of information is estimated to average 4 minutes, including time for reviewing instructions and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing burden, to Dr. Vernon R. Leeworthy, National Ocean Service, Special Projects Office, 1305 East West Highway, Silver Spring, MD 20910.

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The following questions ask about the value you place on the use of both the natural reefs/coral reefs and artificial reefs in Southeast Florida (Palm Beach, Broward, Dade and Monroe Counties). You are also asked about your value for the Artificial Reef Program and New reefs for Southeast Florida.

The BLUE CARD enclosed supplies important information that we will ask you to read before answering each question.

Could you first take a minute and read the information in Section 1 of the BLUE CARD about **Natural Reefs/Coral Reefs**. Throughout this questionnaire, when we refer to natural reefs, we mean to include coral reefs and any other hard-bottom reefs, except artificial reefs. Artificial reefs are those made by man and placed in the ocean or bays.

1. Considering your total annual costs for your use of the natural reefs of Southeast Florida, including travel expenses, hotel and campsites fees, food and drink, and all other expenses. If your total costs would have been \$\_\_\_\_\_ higher this year, would you have been willing to pay this amount to support just your natural reef use in Southeast Florida.

Please keep in mind that the added costs would have been used to make sure the water quality and health of the natural reefs would have been maintained in their current condition. Also, keep in mind that instead of using the natural reefs in Southeast Florida, you could have used the artificial reefs, gone to places other than Southeast Florida or spent this money on other things.

YES (Go to Question 3)       Don't Know (Go to Question 2)  
 NO (Go to Question 2)       Refused (Go to Question 2)

2. Please refer to Section 2 on the BLUE CARD and circle the letter below that best describes your reason for saying no, don't know or refusing. Write-in any other reason.

(circle): A B C D E F G H \_\_\_\_\_



Could you take a minute and read the information in Section 3 on the back side of the BLUE CARD for **Artificial Reefs**.

3. Considering your total annual costs for your use of the artificial reefs in Southeast Florida, including travel expenses, hotel and campsites fees, food and drink, and all other expenses. If your total costs would have been \$\_\_\_\_\_ higher this year, would you have been willing to pay that amount just to support your artificial reef use in Southeast Florida.

Please keep in mind that the added costs would have been used to make sure the water quality and health of the fish and sea life on the artificial reefs would have been maintained in their current condition. Also, keep in mind that instead of using the artificial reefs of Southeast Florida, you could have used the natural reefs, gone to places other than Southeast Florida or spent this money on other things.

YES (Go to Question 5)       Don't Know (Go to Question 4)  
 NO (Go to Question 4)       Refused (Go to Question 4)

4. Please refer to Section 4 on the BLUE CARD and circle the letter below that best describes your reason for saying no, don't know or refusing.

(circle): A B C D E F G H \_\_\_\_\_

Could you take a minute and read Section 5 of the blue Card on the **Artificial Reef Program for New Reefs**.

5. Would you be willing to pay \$ \_\_\_\_ per year when you renew your boat registration and/or that amount in higher fees to charter/party boat or rental boat operations to fund this program ? The amount paid would go to fund new artificial reefs in Southeast Florida.

Please keep in mind that this amount would be in addition to the costs above for maintaining the current artificial reefs and protecting the water quality. Also, keep in mind that instead of using the artificial reefs in Southeast Florida, you could have used the natural reefs, gone to places other than Southeast Florida or spent this money on other things.

YES (End of Survey)       Don't Know (Got to Question 6)  
 NO (Go to Question 6)       Refused (Go to Question 6)

6. Please refer to Section 6 on the BLUE CARD and circle the letter below that best describes your reason for saying no, don't know or refused.

(circle): A B C D E F G H I \_\_\_\_\_

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Resident Survey  
Valuation Questions

OMB APPROVAL #:  
EXPIRATION DATE:

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**Please place your completed questionnaire in the self-addressed envelope and mail it to us. Thank you very much for your help.**

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## **SECTION 1. NATURAL REEFS/CORAL REEFS**

Federal, State, and local government agencies are currently joined in a cooperative effort to protect the quality of water and the health of the natural reefs (especially the coral reefs) of Southeast Florida (Palm Beach, Broward, Miami-Dade and Monroe Counties and the Florida Keys).

Many different strategies have been proposed, and several are being evaluated which are designed to protect the water quality and health of the natural reefs of Southeast Florida.

All the proposed strategies will involve increased costs. Both resident and visitor populations are expected to increase in Southeast Florida. This will result in an increase in the amount of wastewater that will have to be processed. Also, additional use is expected on the natural reefs requiring additional management measures such as installation of additional mooring buoys to avoid anchor damage.

Both businesses and governments will be called upon to make the necessary investments to maintain, upgrade, and expand existing facilities to handle the added wastewater to ensure the future quality of water and health of the natural reefs.

These costs will most likely be passed onto both residents and visitors to Southeast Florida in a variety of ways. For example, higher water and sewage treatment bills, higher taxes, and higher prices for most, if not all, goods and services throughout Southeast Florida.

## **SECTION 2. REASONS FOR SAYING NO, DON'T KNOW OR REFUSAL**

**Please give the letter corresponding to the answer that best describes your reason.**

- A** A contribution of that amount is more than natural reefs are worth to me.
- B** I don't really know how much an natural reefs are worth to me.
- C** There are no problems with water quality or the natural reefs.
- D** Not enough information to form a decision.
- E** I don't understand or like the question.
- F** Already pay too much to the government.
- G** Government waste should be reduced to pay for water quality protection and management of the natural reefs.
- H** Other Reason (Please Specify)\_\_\_\_\_

**SECTION 3. ARTIFICIAL REEFS**

The State of Florida and the counties of Palm Beach, Broward, Miami-Dade and Monroe have invested in establishing a system of artificial reefs in Southeast Florida. The State of Florida and the counties spend money maintaining the current set of artificial reefs. In addition, the fish and sea life on the artificial reefs are impacted by water quality problems, so the investments in water quality protection will also help maintain the health of the fish and sea life on the artificial reefs as well as on the natural reefs.

**SECTION 4. REASONS FOR SAYING NO, DON'T KNOW OR REFUSAL**

**Please read the letter of the answer that best describes your reason.**

- A A contribution of that amount is more than the artificial reefs are worth to me.
- B I don't really know how much artificial reefs are worth to me.
- C Water quality is not a problem and artificial reefs don't need any management.
- D Not enough information to form a decision.
- E I don't understand or like the question.
- F Already pay too much to the government.
- G Government waste should be reduced to fund water quality protection and management of the artificial reefs.
- H Other Reason (Please Specify)\_\_\_\_\_

**SECTION 5. ARTIFICIAL REEF PROGRAM - NEW REEFS**

Artificial reef programs cost money. Suppose that the government proposed that all newly constructed reefs would be paid for by all users of the artificial reefs. Fishermen and divers with their own boats would pay for a decal as part of their boat registration and/or, if they used a charter/party boat (pay operation) or a rental boat, they would pay for the costs through higher fees charged by the pay operation.

**How would the money be used ?**

The money would go into a trust fund that could only be used for the construction and maintenance of artificial reefs in Southeast Florida.

**SECTION 6. REASONS FOR SAYING NO, DON'T KNOW OR REFUSAL**

- A A contribution of that amount is more than a new artificial reef is worth to me.
- B I don't really know how much an artificial reef is worth to me.
- C There are enough artificial reefs already.
- D Not enough information to form a decision.
- E I don't understand or like the question.
- F The government should fund the artificial reef program out of general revenue and not a specific tax or fee.
- G Already pay too much to the government.
- H Government waste should be reduced to fund the artificial reef program.
- I Other Reason (Please Specify)\_\_\_\_\_



**General Visitors Survey**

OMB Approval #:  
Expiration Date:

Screening Criteria: 1) NOT a resident of county of interview.  
2) Exit condition

Onsite survey number: \_\_\_\_\_

Date/time of interview:

County of Interview: \_\_\_\_\_

\_\_\_\_\_  
Month Day Time

1. a) How many people are here with you on your visit to (county of interview) ?

\_\_\_\_\_  
# people

1. a) How many of these people are not permanent residents of the (county of interview) ?

\_\_\_\_\_  
# people

2. How many of these people are 16 or older?

\_\_\_\_\_  
# people

3. Where is your primary residence?

\_\_\_\_\_  
City or nearest city County State Zipcode

Country: \_\_\_\_\_

- |   |  |                                    |
|---|--|------------------------------------|
| <input type="radio"/> USA                   | <input type="radio"/> Austalia/Oceania | <input type="radio"/> Other Europe |
| <input type="radio"/> Canada                | <input type="radio"/> Japan            | <input type="radio"/> Middle East  |
| <input type="radio"/> Mexico                | <input type="radio"/> Other Far East   | <input type="radio"/> Africa       |
| <input type="radio"/> Central/South America | <input type="radio"/> United Kingdom   | <input type="radio"/> Other        |

4. a) On this trip to (county of interview), when did you first arrive?

\_\_\_\_\_  
Month Day Time

b) On this trip to (county of interview), when do you plan to leave?

\_\_\_\_\_  
Month Day Time

5. Including this trip, how many times have you visited (county of interview) in the last 12 months - that is, since (date last year)?

\_\_\_\_\_  
# times

**General Visitors Survey**

OMB Approval #:  
Expiration Date:

6. Including this trip, how many days have you spent in (county of interview) in the last 12 months?

\_\_\_\_\_ # days

7. How many overnight trips have you made to (county of interview) in the last 12 months?

\_\_\_\_\_ # overnight trips

*If zero, go to Question 10.*

8. How many nights are you spending in (county of interview) on this trip?

\_\_\_\_\_ # nights

9. Where are you staying or did you stay on this trip to (county of interview)? Please read me the number from Section one of the Green Card.

- |                            |                       |
|----------------------------|-----------------------|
| 1 = Hotel/Motel            | 4 = Condominium (own) |
| 2 = Home of family/friends | 5 = Vacation Rental   |
| 3 = Campground             |                       |

Please refer to the White Card with the Activities List.

10. Over the last 12 months, did you engage in any kind of saltwater boating when visiting (county of interview)?

- YES    *Go to Q11.*                       NO  
*Go to Q14.*

**HAND RESPONDENT WHITE CARD WITH  
ACTIVITIES LIST**

I would now like to ask you about some of the activities in which you, or someone in your group, participated in while on your visits to (county of interview).

Q11. In which of these activities did you or someone in your group participate during the last 12 months?

Q12. As I read each activity in which you said you or someone in your group participated, could you tell me which activity YOU participated in during the past 12 months? *If the person is alone, skip to Q14.*

Last 12 months		
Activity	Resp	# Others
_____	○	_____
_____	○	_____
_____	○	_____
_____	○	_____
_____	○	_____
_____	○	_____
_____	○	_____

**General Visitors Survey**

OMB Approval #:

Expiration Date:

Q13. Now as I read each activity would you tell me how many others in your group who are not residents of (county of interview) participated in the activity in (county of interview) during the past 12 months?

Q14. Please refer to Section 2 on your green card and tell me which reason best describes your primary purpose of your trip to (county of interview). Please read the letter from the green card.

- A Recreation or vacation
- B Visit family or friends
- C Business trip
- D Business/pleasure
- E Other (specific) \_\_\_\_\_

Now I would like to ask you about your trip expenses. Please provide your best estimate of the total for each category for your party for this trip. Include only the amounts spent in this county.

- Q15 \_\_\_\_\_ Lodging accommodations
- Q16 \_\_\_\_\_ Food & beverage at restaurants/bars
- Q17 \_\_\_\_\_ Food & beverage at grocery/convenient stores
- Q18 \_\_\_\_\_ Sport activities including charter/party/guide fees, boat ramp/marine fees, tackle and bait fees
- Q19 \_\_\_\_\_ Admission to events and attractions
- Q20 \_\_\_\_\_ Evening entertainment
- Q21 \_\_\_\_\_ Rental car, taxi, bus fares
- Q22 \_\_\_\_\_ Shopping (clothing, gifts, souvenirs)
- Q23 \_\_\_\_\_ All other

Finally, for statistical purposes, we need to know a few things about you.

Q24. In what year were you born? 19 \_\_\_\_ \_\_\_\_

Q25. Sex: Male \_\_\_\_\_ Female \_\_\_\_\_ (Observed, not asked)

Q26. Are you Hispanic, Latino or of Spanish origin?

YES

NO



**General Visitors Survey**

OMB Approval #:  
Expiration Date:

Q27. Please refer to Section 3 of the green card and tell me which category best describes you.

- A White
- B Black or African American
- C American Indian or Alaska Native
- D Native Hawaiian or other Pacific Islander
- E Asian
- F Other

Q28. Please refer to section 4 of the green card and tell me which income category best describes your annual household income last year before taxes. Please give me the letter on the card corresponding to the amount that is the closest to your annual household income.

- a
- b
- c
- d
- e
- f
- g
- h
- i
- j
- k
- l
- m
- n
- o
- Refused
- Don't know

That's it. Thank you very much for participating in this survey. I hope you enjoyed your stay.

## GREEN CARD

### PRIVACY ACT STATEMENT

Your participation is voluntary. Notwithstanding any other provision of the law, no person is required to respond to, nor shall any person be subject to a penalty for failure to comply with, a collection of information subject to the requirements of the Paperwork Reduction Act, unless the collection of information displays a currently valid OMB Control Number.

Since each interviewed person will represent many others not interviewed, your cooperation is extremely important. This study is being conducted by Hazen & Sawyer and the University of Florida for the State of Florida, Palm Beach, Broward, Miami-Dade and Monroe Counties and the National Oceanic and Atmospheric Administration. Uses of the information include evaluation of present recreation uses and planning for future recreation visitation. At the end of the study any materials identifying you such as name, address or telephone number will be destroyed. All other information will be available for distribution. The interview should take 5 to 15 minutes with an average of 10 minutes.

### Section 1. Overnight Accommodations

- |                            |                                      |
|----------------------------|--------------------------------------|
| 1 = Hotel/Motel            | 4 = Condominium or Second Home (own) |
| 2 = Home of family/friends | 5 = Vacation Rental                  |
| 3 = Campground             |                                      |

### Section 2. Primary Purpose of Trip

- |                             |                       |
|-----------------------------|-----------------------|
| A = Recreation or Vacation  | D = Business/Pleasure |
| B = Visit family or friends | E = Other (Specific)  |
| C = Business trip           |                       |

### Section 3. Race/Ethnicity

- A. White
- B. Black or African American
- C. American Indian or Alaska Native
- D. Asian
- E. Native Hawaiian or Other Pacific Islander
- F. Other

### Section 4. Annual Household Income before Taxes

*Please give only the letter of your income category.*

- |                        |                          |
|------------------------|--------------------------|
| A Less than \$5,000    | I \$40,000 to \$44,999   |
| B \$5,000 to \$9,999   | J \$45,000 to \$49,999   |
| C \$10,000 to \$14,999 | K \$50,000 to \$59,999   |
| D \$15,000 to \$19,999 | L \$60,000 to \$74,999   |
| E \$20,000 to \$24,999 | M \$75,000 to \$99,999   |
| F \$25,000 to \$29,999 | N \$100,000 to \$149,999 |
| G \$30,000 to \$34,999 | O \$150,000 or more      |
| H \$35,000 to \$39,999 |                          |

## WHITE CARD

### ACTIVITIES LIST

Number

#### Activities by Boat in Saltwater

---

##### **Snorkeling**

- 100 Snorkeling from charter/party boat (pay operation)
- 101 Snorkeling from Rental boat
- 102 Snorkeling from private boat (own boat/friend's boat)

##### **Scuba Diving**

- 200 Scuba diving from charter/party boat (pay operation)
- 201 Scuba diving from rental boat
- 202 Scuba diving from private boat (own boat/friend's boat)

##### **Special Activities while Snorkeling or Scuba Diving**

- 300 Diving for lobsters
- 301 Underwater photography
- 302 Wreck diving
- 303 Spear fishing
- 304 Collecting tropical fish or shellfish
- 305 Current/drift diving

##### **Fishing - Offshore/Trolling**

- 400 Fishing from charter boat (pay operation six persons or less) - offshore
- 401 Fishing from party or head boat (charge per person) - off shore
- 402 Fishing from rental boat - offshore
- 403 Fishing from private boat (own boat/friend's boat) - offshore

##### **Fishing - Flats or Back Country**

- 404 Fishing from Charter/party boat (pay operation) - flats or back country
- 405 Fishing from rental boat - flats or back country
- 406 Fishing from private boat (own boat/friend's boat) - flats or back country

##### **Fishing - Bottom**

- 407 Bottom fishing from charter boat (pay operation six persons or less)
- 408 Bottom fishing from party or head boat (charge per person)
- 409 Bottom fishing from rental boat
- 410 Bottom fishing from private boat (own boat/friend's boat)

##### **Viewing Nature and Wildlife**

- 500 Glass bottom boat rides (pay operation)
- 501 Back country boating excursions (pay operation/guided service/NOT FISHING)
- 502 Viewing nature and wildlife from rental boat
- 503 Viewing nature and wildlife from private boat (own boat/friend's boat)

##### **Personal Watercraft (jet skis, wave runners, etc.)**

- 600 Personal watercraft - rental
- 601 Personal watercraft - private (own boat/friend's boat)

##### **Sailing**

- 700 Sailing charter/party boat (pay operation)
- 701 Sailing rental boat
- 702 Sailing private boat (own boat/friend's boat)

##### **Other Activities NOT MENTIONED ABOVE** (parasailing, hang gliding, sunset cruises, water-skiing)

- 800 Other activities from charter/party (pay operation)
- 801 Other activities from rental boat
- 802 Other activities from private boat (own boat/friend's boat)



**Boating Visitors Survey**

OMB Approval #:  
Expiration Date:

- Screening Criteria:
- 1) NOT a resident of county of interview.
  - 2) Engaged in saltwater boating activities in county of interview in the past 12 months.
  - 3) Exit Condition

Survey number: \_\_\_\_\_

Date/time of interview:

\_\_\_\_\_

Month      Day      Time

County of Interview (circle): Palm Beach   Broward   Dade   Monroe

Interview Site: \_\_\_\_\_

**HAND RESPONDENT YELLOW CARD AND ASK THEM TO READ PRIVACY ACT STATEMENT**

- 1. a) How many people are with you on your visit to (county of interview)? \_\_\_\_\_ # people
- 2. b) How many of these people are not permanent residents of (county of interview)? \_\_\_\_\_ # people
- 2. How many of these people are 16 or older? \_\_\_\_\_ # people
- 3. Where is your primary residence? \_\_\_\_\_ # people

\_\_\_\_\_

City or nearest city      County      State      Zip Code

Country: \_\_\_\_\_

- USA       Austalia/Oceania       Other Europe
- Canada       Japan       Middle East
- Mexico       Other Far East       Africa
- Central/South America       United Kingdom       Other

- 4. a) On this trip, is (county of interview) the only destination?  
 YES    *Go to Q5.*       NO    *Go to Q4b.*
- 4. b) Is (county of interview) your primary destination for this trip?  
 YES    *Go to Q5.*       NO    *Go to Q4c.*

**Boating Visitors Survey**

OMB Approval #:  
Expiration Date:

4. c) Where did you last visit before coming to (county of interview)?

City or nearest city	County	State	Zip Code
----------------------	--------	-------	----------

5. Look at Section 1 of the Yellow Card. How did you get to (county of interview)? Please give the letters of all that apply. (*Circle all that apply*)

- |                                     |                       |
|-------------------------------------|-----------------------|
| A Automobile - private              | H Air - Marathon      |
| B Automobile - rental               | I Air - Key West      |
| C Air - Miami                       | J Air - other Florida |
| D Air - Ft Lauderdale/<br>Hollywood | Specify _____         |
| E Air - West Palm Beach             | K Cruise ship         |
| F Air - Tampa                       | L Own boat            |
| G Air - Orlando                     | M Other               |
|                                     | Specify _____         |

6. a) On this trip to (county of interview), when did you first arrive

Month	Day	Time
-------	-----	------

b) When do you plan to leave?

Month	Day	Time
-------	-----	------

7. Including this trip, how many times have you visited (county of interview) in the last 12 months, that is since (date last year)?

\_\_\_\_\_  
# times

8. Including this trip, how many days have you spent in (county of interview) in the last 12 months?

\_\_\_\_\_  
# days

9. How many overnight trips have you made to (county of interview) in the last 12 months?

\_\_\_\_\_  
# overnight trips

10. How many nights are you spending in (county of interview) on this trip?

\_\_\_\_\_  
# nights

*If zero, go to Q12.*

## Boating Visitors Survey

OMB Approval #:  
Expiration Date:

11. Please refer to the Yellow Card in Section 2 and tell me the number corresponding to where you stayed on this trip to (county of interview)? (circle)

1 = Hotel/Motel

4 = Condominium (own)

2 = Home of family/friends

5 = Vacation Rental

3 = Campground

I would now like to ask you about some of the activities in which you or someone in your group, participated while on your visits to (county of interview).

### HAND RESPONDENT WHITE CARD WITH ACTIVITIES LIST

Q12. In which of these activities did you or someone in your group participate during the last 12 months in (county of interview)? Please read me the number corresponding to each activity on the card.

Q13. As I read you each activity in which you said you or someone in your group participated, please tell me which activity you participated in during the past 12 months in (county of interview).

*If person by themselves, skip to Q15.*

Q14. As I read each activity, please tell me how many others in your group who are not permanent residents of (county of interview) participated in the activity in (county of interview) during the last 12 months.

Q15. As I read each activity, would you tell me how many day you participated in the activity in (county of interview) over the past 12 months?

Q16. How many of the days of (activity) were on artificial reefs?

Q17. How many of the days of (activity) were on natural reefs?

*If no DIVING activities, skip to Q19.*

*Don't ask Q18-Q20 for special snorkeling or scuba diving (activities 300-305).*

Q18. Over the past 12 months, in the (county of interview), how many dives did you make (read activity; snorkeling or scuba diving)?

Q19. How many of these dives were on artificial reefs (for each snorkeling and scuba diving activity)?

Q20. How many of these dives were on natural reefs (for each snorkeling and scuba diving activity)?

# Boating Visitors Survey

OMB Approval #:  
Expiration Date:

Q12 Activity	Q13 Resp	Q14 # Others	Q15 Respondent # of days	Q16 # of days artificial reef	Q16 # of days natural reef	Q17 # of days natural reef	Q18 Respondent # of dives	Q19 Resp # dives artificial reef	Q20 Resp # dives natural reef
-----	0	-----	-----	-----	-----	-----	-----	-----	-----
-----	0	-----	-----	-----	-----	-----	-----	-----	-----
-----	0	-----	-----	-----	-----	-----	-----	-----	-----
-----	0	-----	-----	-----	-----	-----	-----	-----	-----
-----	0	-----	-----	-----	-----	-----	-----	-----	-----
-----	0	-----	-----	-----	-----	-----	-----	-----	-----
-----	0	-----	-----	-----	-----	-----	-----	-----	-----



**Boating Visitors Survey**

OMB Approval #:  
Expiration Date:

**For the Florida Keys Only - Divers and Glass-bottom Boat Riders Only.  
For Others Skip to Question \_\_\_\_.**

The map of the Florida Keys show the Sanctuary preservation Areas and Ecological Reserves currently in place. These areas are marked by yellow buoys. These areas only allow non-consumptive activities such as snorkeling, scuba diving and viewing. No one is allowed to take anything from these areas.

Q 21. Over the past 12 months, did you participate in any of your activities in any of these areas?

YES

NO (Go to Q24)

Could you please refer to the White Card and tell me which activities which you participated in, in these special areas?

**For Snorkeling and Scuba Diving**

Q22. How many dives did you make in these areas for snorkeling and Scuba Diving?

Q23. a) How many boat rides did you make to these areas?

Q23. b) On average, how many of these areas did you visit on each boat ride?

<u>Activity</u>	<u>Q22/Q23a Dives/Rides</u>	<u>Q23b Areas Visited</u>
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____

Q24. Please refer to section 3 on your Yellow Card and tell me which reason best describes your primary purpose of your trip to (county of interview). Please read the letter from the Yellow Card.

- A Recreation or vacation
- B Visit family or friends
- C Business trip
- D Business/pleasure
- E Other (specify) \_\_\_\_\_

**Ask Q25 if they participated in fishing from own boat (activities 403, 406 or 410).**

Q22. On the most recent saltwater fishing day using your own or a friend's boat, approximately how much did your party spend on the following items in (county of interview):

**Boating Visitors Survey**

OMB Approval #:  
Expiration Date:

**Ask Q26 if they participated in fishing from a private or rental boat (activities 402 or 409).**

Q26. On the most recent saltwater fishing day using a private rental boat, approximately how much did your party spend on the following items in (county of interview):

**Ask Q27 if they participated in fishing from a charter boat (activities 400 or 407).**

Q27. On the most recent saltwater fishing day using a charter boat, approximately how much did your party spend on the following items in (county of interview):

**Ask Q28 if they participated in fishing from a party boat (activities 401 or 408).**

Q28. On the most recent saltwater fishing day using a part boat (charge per person), approximately how much did your party spend on the following items in (county of interview):

	Q25 Own <u>Boat</u>	Q26 Rental <u>Boat</u>
Boat fuel	\$ _____	\$ _____
Tackle	\$ _____	\$ _____
Bait	\$ _____	\$ _____
Ice	\$ _____	\$ _____
Ramp fees	\$ _____	\$ _____
Marine fees	\$ _____	\$ _____
Lodging	\$ _____	\$ _____
Camping fees	\$ _____	\$ _____
Food and beverages - stores	\$ _____	\$ _____
Food and beverages - restaurants/bars	\$ _____	\$ _____
Auto gas	\$ _____	\$ _____
Auto rental	\$ _____	\$ _____
Equipment rental	\$ _____	\$ _____

	Q27 Charter <u>Boat</u>	Q28 Party <u>Boat</u>
Charter fee	\$ _____	\$ _____
Lodging	\$ _____	\$ _____
Camping fees	\$ _____	\$ _____
Food and beverages - stores	\$ _____	\$ _____
Food and beverages - restaurants/bars	\$ _____	\$ _____
Auto gas	\$ _____	\$ _____
Auto rental	\$ _____	\$ _____
Equipment rentals	\$ _____	\$ _____

**Boating Visitors Survey**

OMB Approval #:  
Expiration Date:

**Ask Q29 if they participated in snorkeling or scuba diving from their own or a friends boat (activities 102 or 202).**

Q29. On the most recent saltwater snorkeling or scuba diving day using your own or a friends boat, approximately how much did your party spend on the following items in (county of interview):

**Ask Q30 if they participated in snorkeling or scuba diving from a rental boat (activities 101,201)**

Q30. On the most recent saltwater snorkeling or scuba diving day using a rental boat, approximately how much did your party spend on the following items in (county of interview):

**Ask Q31 if they participated in snorkeling or scuba diving from a charter/party boat (activities 100,200)**

Q31. On the most recent saltwater snorkeling or scuba diving day using a rental boat, approximately how much did your party spend on the following items in (county of interview):

	Q29 Own Boat	Q30 Rental Boat
Boat rental	\$ <u>XXXXXXXXXX</u>	\$ _____
Boat fuel	\$ _____	\$ _____
Air refills	\$ _____	\$ _____
Ice	\$ _____	\$ _____
Ramp fees	\$ _____	\$ _____
Marina fees	\$ _____	\$ _____
Other equipment rentals	\$ _____	\$ _____
Lodging	\$ _____	\$ _____
Camping fees	\$ _____	\$ _____
Food and Beverages - Stores	\$ _____	\$ _____
Food and Beverages - restaurants/bars	\$ _____	\$ _____
Auto gas	\$ _____	\$ _____
Auto rental	\$ _____	\$ _____

		Q31
		Charter
		<u>Boat</u>
Charter/party boat fee	\$	_____
Equipment rental	\$	_____
Air refills	\$	_____
Ice	\$	_____
Ramp fees	\$	_____
Marina fees	\$	_____
Lodging	\$	_____
Camping fees	\$	_____
Food and Beverages - Stores	\$	_____
Food and Beverages - restaurants/bars	\$	_____
Auto gas	\$	_____
Auto rental	\$	_____

Now I would like to ask you a few questions about how you value both the artificial and natural reefs in Southeast Florida.

**CONTINGENT VALUATION QUESTIONS**

Now I would like to ask you a few questions about how you value both the artificial and natural reefs in the (county of interview).

**If the person DID ANY ACTIVITY on artificial or natural reef. Hand respondent BLUE CARD.**

Could you take a minute and read the information in Section 1 on the BLUE CARD about the Natural Reefs.

32. Considering your total annual costs for visiting Southeast Florida and using the natural reefs, including travel expenses, hotel and campsites fees, food and drink, and all other expenses. If your total costs would have been \$\_\_\_\_\_ higher this year, would you have been willing to pay this amount to support just your natural reef use in Southeast Florida.

Please keep in mind that the added costs would have been used to make sure the water quality and health of the natural reefs would have been maintained in their current condition. Also, keep in mind that instead of visiting Southeast Florida and using the natural reefs, you could have used the artificial reefs, gone to places other than Southeast Florida or spent this money on other things.

- YES (Go to Question 34)   
  Don't Know (Go to Question 33)  
 NO (Go to Question 33)   
  Refused (Go to Question 33)

**Boating Visitors Survey**

OMB Approval #:  
Expiration Date:

33. Please refer to Section 2 on the BLUE CARD and read me the letter that best describes your reason for saying no, don't know or refusing.

(circle): A B C D E F G H \_\_\_\_\_

Could you take a minute and read the information in Section 3 on the back side of the BLUE CARD.

34. Considering your total annual costs for visiting Southeast Florida and using the artificial reefs, including travel expenses, hotel and campsites fees, food and drink, and all other expenses. If your total costs would have been \$\_\_\_\_\_ higher this year, would you have been willing to pay that amount just to support your artificial reef use in Southeast Florida.

Please keep in mind that the added costs would have been used to make sure the water quality and health of the fish and sea life on the artificial reefs would have been maintained in their current condition. Also, keep in mind that instead of visiting Southeast Florida and using the artificial reefs, you could have used the natural reefs, gone to places other than Southeast Florida or spent this money on other things.

\_\_\_ YES (Go to Question 36)    \_\_\_ Don't Know (Go to Question 35)  
\_\_\_ NO (Go to Question 35)    \_\_\_ Refused (Go to Question 35)

35. Please refer to Section 4 on the BLUE CARD and read to me the letter that best describes your reason for saying no, don't know or refusing.

(circle): A B C D E F G H \_\_\_\_\_

Could you take a minute and read Section 5 of the blue Card on the Artificial Reef Program for New Reefs.

36. Would you be willing to pay \$ \_\_\_\_\_ per year when you renew your boat registration and/or that amount in higher fees to charter/party boat or rental boat operations to fund this program ? The amount paid would go to fund new artificial reefs in Southeast Florida.

Please keep in mind that this amount would be in addition to the costs above for maintaining the current artificial reefs and protecting the water quality. Also, keep in mind that instead of visiting Southeast Florida and using the artificial reefs, you could have used the natural reefs, gone to places other than Southeast Florida or spent this money on other things.

\_\_\_ YES (Go to Question 38)    \_\_\_ Don't Know (Go to Question 37)  
\_\_\_ NO (Go to Question 37)    \_\_\_ Refused (Go to Question 37)

**Boating Visitors Survey**

OMB Approval #:  
Expiration Date:

37. Please refer to Section 6 on the BLUE CARD and read to me the letter that best describes your reason for saying no, don't know or refused.

(circle): A B C D E F G H I \_\_\_\_\_

Q38. How long have you been boating in South Florida?

\_\_\_\_\_ years

Q39. a) Do you own your own boat?

YES *Go to Q48b*                       NO *Go to Q49*

Q40. b) What is the length of your boat? \_\_\_\_\_ feet.

Q41. c) Where is it registered?

\_\_\_\_\_                      \_\_\_\_\_  
County                      State

Q42. Are you a member of a fishing or diving club?

YES     NO

Q43. In what year were you born? 19 \_\_\_\_ \_\_\_\_

Q44. Sex:     Male                                       Female                      (Observed, not asked)

Q45. Are you Hispanic, Latino or of Spanish origin?

YES     NO

Q46. Please refer to section 4 of the Yellow Card and tell me which category best describes you?  
Please read the letter of the category.

- |        |   |                                  |   |                                     |
|--------|---|----------------------------------|---|-------------------------------------|
| Circle | A | White                            | D | Native Hawaiian or Pacific Islander |
|        | B | Black or African American        | E | Asian                               |
|        | C | American Indian or Alaska Native | F | Other (specify) _____               |

**Boating Visitors Survey**

OMB Approval #:  
Expiration Date:

Q47. Please refer to section 5 of the Yellow Card and tell me which income category best describes your annual household income last year, before taxes. Please give me the letter on the card that corresponds to the category.

- a
  - b
  - c
  - d
  - e
  - f
  - g
  - h
  - i
  - j
  - k
  - l
  - m
  - n
  - o
- Refused
- Don't know

Q48 a) During this trip to (county of interview), were you giving up any income earning activities?

- YES  NO



Q48. b) How much income, before taxes, do you estimate you lost during this trip to (county of interview)?

\$ \_\_\_\_\_

# YELLOW CARD

## RESPONDENT CARD

### PRIVACY ACT STATEMENT

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### Section 1. Modes of Transportation

- |   |                                    |   |                     |
|---|------------------------------------|---|---------------------|
| A | Automobile – private               | H | Air – Marathon      |
| B | Automobile – rental                | I | Air – Key West      |
| C | Air – Miami                        | J | Air – other Florida |
| D | Air – Ft. Lauderdale/<br>Hollywood |   | Specify _____       |
| E | Air – West Palm Beach              | K | Cruise ship         |
| F | Air – Tampa                        | L | Own boat            |
| G | Air – Orlando                      | M | Other               |
|   |                                    |   | Specify _____       |

### Section 2. Overnight Accommodations

- |                            |                                      |
|----------------------------|--------------------------------------|
| 1 = Hotel/motel            | 4 = Condominium or second home (own) |
| 2 = Home of family/friends | 5 = Vacation rental                  |
| 3 = Campground             |                                      |

### Section 3. Primary Purpose of Trip

- |                             |                       |
|-----------------------------|-----------------------|
| A = Recreation or Vacation  | D = Business/Pleasure |
| B = Visit family or friends | E = Other (Specify)   |
| C = Business trip           |                       |

### Section 4. Race/Ethnicity

- A. White
- B. Black or African American
- C. American Indian or Alaska Native
- D. Asian
- E. Native Hawaiian or Other Pacific Islander
- F. Other

### Section 4. Annual Household Income before Taxes

*Please give only the letter of your income category.*

- |   |                      |   |                        |
|---|----------------------|---|------------------------|
| A | Less than \$5,000    | I | \$40,000 to \$44,999   |
| B | \$5,000 to \$9,999   | J | \$45,000 to \$49,999   |
| C | \$10,000 to \$14,999 | K | \$50,000 to \$59,999   |
| D | \$15,000 to \$19,999 | L | \$60,000 to \$74,999   |
| E | \$20,000 to \$24,999 | M | \$75,000 to \$99,999   |
| F | \$25,000 to \$29,999 | N | \$100,000 to \$149,999 |
| G | \$30,000 to \$34,999 | O | \$150,000 or more      |
| H | \$35,000 to \$39,999 |   |                        |



# YELLOW CARD

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| D | Air – Ft. Lauderdale/<br>Hollywood |   | Specify _____       |
| E | Air – West Palm Beach              | K | Cruise ship         |
| F | Air – Tampa                        | L | Own boat            |
| G | Air – Orlando                      | M | Other               |
|   |                                    |   | Specify _____       |

### Section 2. Overnight Accommodations

- |                            |                                      |
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### Section 3. Primary Purpose of Trip

- |                             |                       |
|-----------------------------|-----------------------|
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| C = Business trip           |                       |

### Section 4. Race/Ethnicity

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- B. Black or African American
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- D. Asian
- E. Native Hawaiian or Other Pacific Islander
- F. Other

### Section 4. Annual Household Income before Taxes

*Please give only the letter of your income category.*

- |   |                      |   |                        |
|---|----------------------|---|------------------------|
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| B | \$5,000 to \$9,999   | J | \$45,000 to \$49,999   |
| C | \$10,000 to \$14,999 | K | \$50,000 to \$59,999   |
| D | \$15,000 to \$19,999 | L | \$60,000 to \$74,999   |
| E | \$20,000 to \$24,999 | M | \$75,000 to \$99,999   |
| F | \$25,000 to \$29,999 | N | \$100,000 to \$149,999 |
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| H | \$35,000 to \$39,999 |   |                        |

# YELLOW CARD

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### Section 1. Modes of Transportation

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| C | Air – Miami                        | J | Air – other Florida |
| D | Air – Ft. Lauderdale/<br>Hollywood |   | Specify _____       |
| E | Air – West Palm Beach              | K | Cruise ship         |
| F | Air – Tampa                        | L | Own boat            |
| G | Air – Orlando                      | M | Other               |
|   |                                    |   | Specify _____       |

### Section 2. Overnight Accommodations

- |                            |                                      |
|----------------------------|--------------------------------------|
| 1 = Hotel/motel            | 4 = Condominium or second home (own) |
| 2 = Home of family/friends | 5 = Vacation rental                  |
| 3 = Campground             |                                      |

### Section 3. Primary Purpose of Trip

- |                             |                       |
|-----------------------------|-----------------------|
| A = Recreation or Vacation  | D = Business/Pleasure |
| B = Visit family or friends | E = Other (Specify)   |
| C = Business trip           |                       |

### Section 4. Race/Ethnicity

- A. White
- B. Black or African American
- C. American Indian or Alaska Native
- D. Asian
- E. Native Hawaiian or Other Pacific Islander
- F. Other

### Section 4. Annual Household Income before Taxes

*Please give only the letter of your income category.*

- |   |                      |   |                        |
|---|----------------------|---|------------------------|
| A | Less than \$5,000    | I | \$40,000 to \$44,999   |
| B | \$5,000 to \$9,999   | J | \$45,000 to \$49,999   |
| C | \$10,000 to \$14,999 | K | \$50,000 to \$59,999   |
| D | \$15,000 to \$19,999 | L | \$60,000 to \$74,999   |
| E | \$20,000 to \$24,999 | M | \$75,000 to \$99,999   |
| F | \$25,000 to \$29,999 | N | \$100,000 to \$149,999 |
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| H | \$35,000 to \$39,999 |   |                        |

## YELLOW CARD

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### Section 1. Modes of Transportation

- |   |                                    |   |                     |
|---|------------------------------------|---|---------------------|
| A | Automobile – private               | H | Air – Marathon      |
| B | Automobile – rental                | I | Air – Key West      |
| C | Air – Miami                        | J | Air – other Florida |
| D | Air – Ft. Lauderdale/<br>Hollywood |   | Specify _____       |
| E | Air – West Palm Beach              | K | Cruise ship         |
| F | Air – Tampa                        | L | Own boat            |
| G | Air – Orlando                      | M | Other               |
|   |                                    |   | Specify _____       |

### Section 2. Overnight Accommodations

- |                            |                                      |
|----------------------------|--------------------------------------|
| 1 = Hotel/motel            | 4 = Condominium or second home (own) |
| 2 = Home of family/friends | 5 = Vacation rental                  |
| 3 = Campground             |                                      |

### Section 3. Primary Purpose of Trip

- |                             |                       |
|-----------------------------|-----------------------|
| A = Recreation or Vacation  | D = Business/Pleasure |
| B = Visit family or friends | E = Other (Specify)   |
| C = Business trip           |                       |

### Section 4. Race/Ethnicity

- A. White
- B. Black or African American
- C. American Indian or Alaska Native
- D. Asian
- E. Native Hawaiian or Other Pacific Islander
- F. Other

### Section 4. Annual Household Income before Taxes

*Please give only the letter of your income category.*

- |   |                      |   |                        |
|---|----------------------|---|------------------------|
| A | Less than \$5,000    | I | \$40,000 to \$44,999   |
| B | \$5,000 to \$9,999   | J | \$45,000 to \$49,999   |
| C | \$10,000 to \$14,999 | K | \$50,000 to \$59,999   |
| D | \$15,000 to \$19,999 | L | \$60,000 to \$74,999   |
| E | \$20,000 to \$24,999 | M | \$75,000 to \$99,999   |
| F | \$25,000 to \$29,999 | N | \$100,000 to \$149,999 |
| G | \$30,000 to \$34,999 | O | \$150,000 or more      |
| H | \$35,000 to \$39,999 |   |                        |

## WHITE CARD

### ACTIVITIES LIST

Number

#### Activities by Boat in Saltwater

---

##### **Snorkeling**

- 100 Snorkeling from charter/party boat (pay operation)
- 101 Snorkeling from Rental boat
- 102 Snorkeling from private boat (own boat/friend's boat)

##### **Scuba Diving**

- 200 Scuba diving from charter/party boat (pay operation)
- 201 Scuba diving from rental boat
- 202 Scuba diving from private boat (own boat/friend's boat)

##### **Special Activities while Snorkeling or Scuba Diving**

- 300 Diving for lobsters
- 301 Underwater photography
- 302 Wreck diving
- 303 Spear fishing
- 304 Collecting tropical fish or shellfish
- 305 Current/drift diving

##### **Fishing - Offshore/Trolling**

- 400 Fishing from charter boat (pay operation six persons or less) - offshore
- 401 Fishing from party or head boat (charge per person) - off shore
- 402 Fishing from rental boat - offshore
- 403 Fishing from private boat (own boat/friend's boat) - offshore

##### **Fishing - Flats or Back Country**

- 404 Fishing from Charter/party boat (pay operation) - flats or back country
- 405 Fishing from rental boat - flats or back country
- 406 Fishing from private boat (own boat/friend's boat) - flats or back country

##### **Fishing - Bottom**

- 407 Bottom fishing from charter boat (pay operation six persons or less)
- 408 Bottom fishing from party or head boat (charge per person)
- 409 Bottom fishing from rental boat
- 410 Bottom fishing from private boat (own boat/friend's boat)

##### **Viewing Nature and Wildlife**

- 500 Glass bottom boat rides (pay operation)
- 501 Back country boating excursions (pay operation/guided service/NOT FISHING)
- 502 Viewing nature and wildlife from rental boat
- 503 Viewing nature and wildlife from private boat (own boat/friend's boat)

##### **Personal Watercraft (jet skis, wave runners, etc.)**

- 600 Personal watercraft - rental
- 601 Personal watercraft - private (own boat/friend's boat)

##### **Sailing**

- 700 Sailing charter/party boat (pay operation)
- 701 Sailing rental boat
- 702 Sailing private boat (own boat/friend's boat)

##### **Other Activities NOT MENTIONED ABOVE** (parasailing, hang gliding, sunset cruises, water-skiing)

- 800 Other activities from charter/party (pay operation)
- 801 Other activities from rental boat
- 802 Other activities from private boat (own boat/friend's boat)

**SECTION 1. NATURAL REEFS/CORAL REEFS**

Federal, State, and local government agencies are currently joined in a cooperative effort to protect the quality of water and the health of the natural reefs (especially the coral reefs) of Southeast Florida (Palm Beach, Broward, Miami-Dade and Monroe Counties and the Florida Keys).

Many different strategies have been proposed, and several are being evaluated which are designed to protect the water quality and health of the natural reefs of Southeast Florida.

All the proposed strategies will involve increased costs. Both resident and visitor populations are expected to increase in Southeast Florida. This will result in an increase in the amount of wastewater that will have to be processed. Also, additional use is expected on the natural reefs requiring additional management measures such as installation of additional mooring buoys to avoid anchor damage.

Both businesses and governments will be called upon to make the necessary investments to maintain, upgrade, and expand existing facilities to handle the added wastewater to ensure the future quality of water and health of the natural reefs.

These costs will most likely be passed onto both residents and visitors to Southeast Florida in a variety of ways. For example, higher water and sewage treatment bills, higher taxes, and higher prices for most, if not all, goods and services throughout Southeast Florida.

**SECTION 2. REASONS FOR SAYING NO, DON'T KNOW OR REFUSAL**

**Please give the letter corresponding to the answer that best describes your reason.**

- A** A contribution of that amount is more than natural reefs are worth to me.
- B** I don't really know how much an natural reefs are worth to me.
- C** There are no problems with water quality or the natural reefs.
- D** Not enough information to form a decision.
- E** I don't understand or like the question.
- F** Already pay too much to the government.
- G** Government waste should be reduced to pay for water quality protection and management of the natural reefs.
- H** Other Reason (Please Specify)\_\_\_\_\_

**SECTION 3. ARTIFICIAL REEFS**

The State of Florida and the counties of Palm Beach, Broward, Miami-Dade and Monroe have invested in establishing a system of artificial reefs in Southeast Florida. The State of Florida and the counties spend money maintaining the current set of artificial reefs. In addition, the fish and sea life on the artificial reefs are impacted by water quality problems, so the investments in water quality protection will also help maintain the health of the fish and sea life on the artificial reefs as well as on the natural reefs.

**SECTION 4. REASONS FOR SAYING NO, DON'T KNOW OR REFUSAL**

**Please read the letter of the answer that best describes your reason.**

- A** A contribution of that amount is more than the artificial reefs are worth to me.
- B** I don't really know how much artificial reefs are worth to me.
- C** Water quality is not a problem and artificial reefs don't need any management.
- D** Not enough information to form a decision.
- E** I don't understand or like the question.
- F** Already pay too much to the government.
- G** Government waste should be reduced to fund water quality protection and management of the artificial reefs.
- H** Other Reason (Please Specify)\_\_\_\_\_

**SECTION 5. ARTIFICIAL REEF PROGRAM - NEW REEFS**

Artificial reef programs cost money. Suppose that the government proposed that all newly constructed reefs would be paid for by all users of the artificial reefs. Fishermen and divers with their own boats would pay for a decal as part of their boat registration and/or, if they used a charter/party boat (pay operation) or a rental boat, they would pay for the costs through higher fees charged by the pay operation.

**How would the money be used ?**

The money would go into a trust fund that could only be used for the construction and maintenance of artificial reefs in Southeast Florida.

**SECTION 6. REASONS FOR SAYING NO, DON'T KNOW OR REFUSAL**

- A** A contribution of that amount is more than a new artificial reef is worth to me.
- B** I don't really know how much an artificial reef is worth to me.
- C** There are enough artificial reefs already.
- D** Not enough information to form a decision.
- E** I don't understand or like the question.
- F** The government should fund the artificial reef program out of general revenue and not a specific tax or fee.
- G** Already pay too much to the government.
- H** Government waste should be reduced to fund the artificial reef program.
- I** Other Reason (Please Specify)\_\_\_\_\_

**SOUTHEAST FLORIDA REEF STUDY  
RECREATION INDUSTRY SURVEY**

**IMPORTANT INFORMATION ABOUT THIS INFORMATION COLLECTION**

**1. Authorizations to Collect the Information**

The National Marine Sanctuaries Act (16 USC 1431, et seq.) authorizes the Florida Keys National Marine Sanctuary to establish regulations to protect sanctuary resources or resolve user conflicts. This act also authorizes the Sanctuary to do research and collect information necessary for evaluating new regulations. The counties are authorized to conduct this data collection under Section 163.01, Florida Statutes.

**2. How the Information Will Be Used**

The National Oceanic and Atmospheric Administration (NOAA), Palm Beach, Broward, Miami-Dade and Monroe Counties, and the State of Florida, Fish and Wildlife Commission have joined in a partnership to estimate the economic value of Southeast Florida's artificial and natural reefs.

The information collected here will be primarily used by the agencies to estimate the proportion of charter/party boat fishing, diving and glass-bottom boat use on artificial and natural reefs. This will aid researchers in establishing the economic importance of the charter/party boat industry in the local economies of each county in the region.

**3. Statement of Burden**

Public reporting burden for this collection of information is estimated to average about one hour per response, including time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing burden, to Dr. Vernon R. (Bob) Leeworthy, Chief Economist, National Ocean Service, Special Projects Office, 1305 East West Highway, SSMC 4, 9<sup>th</sup> floor, Silver Spring, MD 20910.

**4. Your Participation and Protections of Confidentiality**

Your participation is voluntary. Notwithstanding any other provision of the law, no person is required to respond to, nor shall any person be subject to a penalty for failure to comply with, a collection of information subject to the requirements of the Paperwork Reduction Act, unless the collection of information displays a currently valid OMB Control Number.

Any information that identifies you or your business (name, name of business, address and telephone number) will not be given to anyone. The information that identifies you or your business (name, address, business name, boat name or telephone number) will be treated as proprietary information pursuant to the Freedom of Information Act (5 USC Section 552 (B) (4)). All other information will be available for distribution.

**SOUTHEAST FLORIDA  
CHARTER/PARTY BOAT SURVEY  
ARTIFICIAL AND NATURAL REEF USE**

We are conducting a study of the economic value of both artificial and natural reef use in the saltwater areas off the counties of Palm Beach, Broward, Miami-Dade and Monroe Counties.

The study is being funded through a partnership with the State of Florida's Fish and Wildlife Commission, the four counties and the National Oceanic and Atmospheric Administration (NOAA).

Separate surveys of residents and non residents of each county are being conducted. However, for those people that use charter/party/guide boat services, we have found that they do not know whether they have fished (and sometimes whether they had dived) on artificial or natural reefs.

As an experienced captain or guide that takes people out for fishing, diving or glass-bottom rides, we would like your assistance in more accurately estimating the proportion of use on artificial and natural reefs.

The information sheet included here explains the authorities to collect this information, how the information will be used, a statement of burden (estimate of how much time this will take), who to contact if you have any questions about the information collection, and your participation and protections of the confidentiality of your information.

**SECTION 1: KIND AND USE OF VESSEL/BOAT**

1. How many vessels/boats do you own or operate to take out paying passengers  
\_\_\_\_\_ ?  
# boats

2. What is the length of each boat and how many passengers is each boat licensed to carry ?

	Length	Number of Passengers
Boat 1	_____	_____
Boat 2	_____	_____
Boat 3	_____	_____
Boat 4	_____	_____

3. How would you classify your activity ? Check the category that best describes your operation. Charter = 6 or less passengers Party = more than six passengers

- |  |  |
|--|--|
| <input type="checkbox"/> Charter – Fish Only   | <input type="checkbox"/> Party – Fish Only     |
| <input type="checkbox"/> Charter – Dive Only   | <input type="checkbox"/> Party – Dive Only     |
| <input type="checkbox"/> Charter – Fish & Dive | <input type="checkbox"/> Party – Fish & Dive   |
| <input type="checkbox"/> Glass-bottom boat     | <input type="checkbox"/> Other (specify) _____ |



4. From what ports/cities and county do you launch your boat (s). If more than three, give the top three.

Port/City	County
1. _____	_____
2. _____	_____
3. _____	_____

**SECTION 2: ARTIFICIAL AND NATURAL REEF USE**

Here we need your best estimates of the proportion of your passengers activity for the latest year. Below we ask for the information by activity type (e.g., fishing, snorkeling, scuba diving, or glass-bottom boat rides), by county (e.g., Palm Beach, Broward, Miami-Dade, and Monroe) and by type of reef (e.g., artificial and natural).

For fishing, we need your best estimate of the number of **passenger-days**. A passenger-day is defined as one passenger for any part of a day (half day or whole day). For snorkeling and scuba diving, we need to know both passenger-days and the number of dives.

For glass-bottom boats, we need to know passenger-days and the proportion of time spent on artificial and natural reefs.

\_\_ check if none. **Fishing Passenger-days**

COUNTY	Check if none	Total Passenger-Days	Percent on Artificial Reef	Percent on Natural Reef	Percent Not on Reefs
Palm Beach	_____	_____	_____	_____	_____
Broward	_____	_____	_____	_____	_____
Miami-Dade	_____	_____	_____	_____	_____
Monroe	_____	_____	_____	_____	_____

\_\_ check if none. **Snorkeling Passenger-days**

COUNTY	Check if none	Total Passenger-Days	Percent on Artificial Reef	Percent on Natural Reef	Percent Not on Reefs
Palm Beach	_____	_____	_____	_____	_____
Broward	_____	_____	_____	_____	_____
Miami-Dade	_____	_____	_____	_____	_____
Monroe	_____	_____	_____	_____	_____

\_\_ check if none. **Snorkeling Dives**

COUNTY	Check if none	Total Dives	Percent on Artificial Reef	Percent on Natural Reef	Percent Not on Reefs
Palm Beach	_____	_____	_____	_____	_____
Broward	_____	_____	_____	_____	_____
Miami-Dade	_____	_____	_____	_____	_____
Monroe	_____	_____	_____	_____	_____

\_\_ check if none. **Scuba Diving Passenger-days**

COUNTY	Check if none	Total Passenger-Days	Percent on Artificial Reef	Percent on Natural Reef	Percent Not on Reefs
Palm Beach	_____	_____	_____	_____	_____
Broward	_____	_____	_____	_____	_____
Miami-Dade	_____	_____	_____	_____	_____
Monroe	_____	_____	_____	_____	_____

\_\_ check if none. **Scuba Diving - Dives**

COUNTY	Check if none	Total Dives	Percent on Artificial Reef	Percent on Natural Reef	Percent Not on Reefs
Palm Beach	_____	_____	_____	_____	_____
Broward	_____	_____	_____	_____	_____
Miami-Dade	_____	_____	_____	_____	_____
Monroe	_____	_____	_____	_____	_____

\_\_ check if none. **Glass-bottom Boat Rides - Passenger-days**

COUNTY	Check if none	Total Passenger-Days	Percent on Artificial Reef	Percent on Natural Reef	Percent Not on Reefs
Palm Beach	_____	_____	_____	_____	_____
Broward	_____	_____	_____	_____	_____
Miami-Dade	_____	_____	_____	_____	_____
Monroe	_____	_____	_____	_____	_____

**SECTION 3: FOR Monroe County/Florida Keys ONLY**

In July 1997, the Florida Keys National Marine Sanctuary established 18 Sanctuary Preservation Areas (SPAs) and one Ecological Reserve (Sambos Ecological Reserve). These areas are available for non consumptive activities (e.g., snorkeling, scuba diving and glass-bottom boat rides). Generally, these are “no take areas”, except there are a couple of exceptions for bait fishing by permit.

Here could you tells us the amount of use given above that occurs on the SPAs and the Sambos Ecological Reserve. A map is enclosed that shows the SPAs and the Sambos Ecological Reserve and the four regions of the Florida Keys.

\_\_\_ Check if none.    **Snorkeling – SPAs and ER**

Region	Check if none	Total Passenger-days	Total Passenger-Dives
Upper Keys	___	_____	_____
Middle Keys	___	_____	_____
Lower Keys	___	_____	_____
Key West	___	_____	_____

\_\_\_ Check if none.    **Scuba Diving – SPAs and ER**

Region	Check if none	Total Passenger-days	Total Passenger-Dives
Upper Keys	___	_____	_____
Middle Keys	___	_____	_____
Lower Keys	___	_____	_____
Key West	___	_____	_____

\_\_\_ Check if none.    **Glass-bottom Boat Rides – SPAs and ER**

Region	Check if none	Total Passenger-days
Upper Keys	___	_____
Middle Keys	___	_____
Lower Keys	___	_____
Key West	___	_____

**SECTION 4: IMPORTANCE AND SATISFACTION OF REEFS**

For the following questions, would you please use the following 1-5 rating scales:

IMPORTANCE	Not at all Important 1	Not Very Important 2	Somewhat Important 3	Important 4	Very Important 5
SATISFACTION	Not at all Satisfied 1	Not Very Satisfied 2	Somewhat Satisfied 3	Satisfied 4	Very Satisfied 5

1. How important is the State of Florida’s artificial reef program to your business ?  
\_\_\_\_\_ (Rating 1-5)
2. How satisfied are you with the State of Florida’s artificial reef program ?  
\_\_\_\_\_ (Rating 1-5)
3. How important are the natural reefs off South Florida to your business ?  
\_\_\_\_\_ (Rating 1-5)
4. How satisfied are you with the natural reefs off South Florida ?  
\_\_\_\_\_ (Rating 1-5)
5. How important are the SPAs and ER in the Florida Keys to your business ?  
\_\_\_\_\_ (Rating 1-5)
6. How satisfied are you with the SPAs and ER in the Florida Keys ?  
\_\_\_\_\_ (Rating 1-5)

**THANK YOU VERY MUCH FOR YOUR PARTICIPATION**

**Please place your completed forms in the self-addressed envelop and mail.**

**If you have lost your self-addressed envelop, please mail to:**

**Hazen and Sawyer  
4000 Hollywood Boulevard, Ste. 750 N  
Hollywood, Florida 33021**