

# NOTICE OF OFFICE OF MANAGEMENT AND BUDGET ACTION

Date 11/30/2007

Department of Commerce  
National Oceanic and Atmospheric Administration  
FOR CERTIFYING OFFICIAL: Barry West  
FOR CLEARANCE OFFICER: Diana Hynek

In accordance with the Paperwork Reduction Act, OMB has taken action on your request received 03/01/2007

ACTION REQUESTED: New collection (Request for a new OMB Control Number)  
TYPE OF REVIEW REQUESTED: Regular  
ICR REFERENCE NUMBER: 200612-0648-005  
AGENCY ICR TRACKING NUMBER:  
TITLE: Socioeconomic Research and Monitoring Program for the Florida Keys National Marine Sanctuary: Recreation/Tourism in the Florida Keys - A Ten-year Replication  
LIST OF INFORMATION COLLECTIONS: See next page

OMB ACTION: Approved without change  
OMB CONTROL NUMBER: 0648-0572

The agency is required to display the OMB Control Number and inform respondents of its legal significance in accordance with 5 CFR 1320.5(b).

EXPIRATION DATE: 11/30/2008

DISCONTINUE DATE:

BURDEN:	RESPONSES	HOURS	COSTS
Previous	0	0	0
New	25,498	10,539	0
Difference			
Change due to New Statute	0	0	0
Change due to Agency Discretion	25,498	10,539	0
Change due to Agency Adjustment	0	0	0
Change Due to Potential Violation of the PRA	0	0	0

TERMS OF CLEARANCE: In accordance with 5 CFR 1320.10(c), at the formal request of the agency, OMB assigns an OMB Control Number to this collection, valid for one year. However, this approval does not represent an assessment by OMB that this information collection satisfies the principles of the PRA. OMB continues to have serious concerns about the practical utility of this collection due to questions about the soundness and appropriateness of the methods employed in the collection. NOAA has also not provided sufficient justification for the burden being imposed on the public for some components of this collection. Some of the specific concerns and issues include the following:

1. It is unclear why the 10-year retrospective on the tourism/recreation survey has been expanded to include additional surveys on "Global Climate Change and Coral Bleaching," "Coral Ecosystem Services: Societal Preferences and Policy/Management," and "Florida Reef Resiliency Program." NOAA has not justified why these surveys are being included with the 10-year retrospective, nor has NOAA described clearly which components of ICR pertain to 10-year retrospective.
2. NOAA fails to discuss the analytical methods that will be used to analyze the data gathered through this

## NOTICE OF OFFICE OF MANAGEMENT AND BUDGET ACTION

Date 11/30/2007

ICR. Without sufficient discussion, the evaluation of the practical utility of the information is not possible.

3. The resident and visitor surveys are extensive as currently written, but there is little emphasis on surveying businesses. NOAA does not explain the relative lack of focus on the business community.

#### 4. Resident surveys

Respondents are asked to recall and provide highly detailed information on recreational activities including activities by location, type of activity, number of days, etc. NOAA has not provided results from pretesting or other research that respondents are able to recall and report this information accurately.

The nature of the good being valued in the contingent valuation questions is not discussed. NOAA also fails to discuss how the bid amounts are generated. There is no discussion in the supporting statement on how the data from these questions will be analyzed.

No information is provided on the coverage or quality of the sampling frames for the resident survey of Monroe County.

#### 5. Visitor surveys (auto, air and cruise ships)

Respondents are asked to recall and provide detailed information on expenditures. NOAA has not provided results from pretesting or other research that respondents are able to recall and report this information accurately.

#### 6. Visitor CUSTOMER surveys.

Substitution surveys:

Sampling for the CUSTOMER survey does not use sound statistical methodology that can be generalized to the universe of study in violation of (5 CFR 1320.5(d)(2)(vi) .

Respondent's "favorite" and "most common" reefs may not be interchangeable. NOAA has not provided pretesting results that demonstrate that these terms are interchangeable.

The answer categories in the hypothetical behavior questions are forced to be artificially mutually exclusive. NOAA fails to discuss the basis for this design.

There is no discussion on how the hypothetical behavior data will be analyzed. The data seem suited to be used in RUM, but no such discussion is provided.

With the conjoint questions, NOAA fails to discuss the results from pretesting that evaluated the appropriateness of the design and the design values.

NOAA did not discuss the potential impact of the length of the questionnaire on data quality due to respondent fatigue or satisficing behavior. NOAA has not provided the results from pretesting on this issue.

On-site survey:

Respondents are asked to recall and provide detailed information on expenditures. It is not clear whether NOAA conducted pretests or other research to ensure that the respondents are able to recall and report this information accurately.

Coral bleaching survey:

## NOTICE OF OFFICE OF MANAGEMENT AND BUDGET ACTION

Date 11/30/2007

What are the bases for the policy scenarios described in the conjoint questions? Also, are the respondents likely to believe the policy scenarios? Please report pre-test results. What are the bases for design values in the policy scenarios?

7. Questionable research protocols are used to recruit respondents without discussion of alternatives: Using off-duty police officers to force sampled vehicles to leave the highway and enter a parking lot where they are solicited to participate in the voluntary survey seems coercive and ethically questionable.

The expected response rates are low, and NOAA's plans to analyze non-response bias focus solely on demographic factors, not key substantive variables from the surveys.

8. Burden level seems excessive and was inadequately justified.

The design calls for sampling more than a quarter of the households in Monroe county with responses expected from more than 13%. It is not clear why such a high fraction of the population should be burdened with this collection.

In general, clear precision requirements were not provided to justify the sample sizes. Sample sizes were described as exceeding "those achieved in previous studies" and exceeding by 50% or more the minimum requirements set by Dr. Chi-OK Oh, the designer of the choice experiment. No justification was provided for why it is necessary to exceed these levels and impose this greater level of burden on the public.

9. NOAA notes in Supporting Statement Part B (4) that this ICR requires no pretesting since some of the questionnaires are replication of past work and NOAA is relying on past experiences to inform new questionnaires. OMB disagrees with this assessment. This ICR is introducing new questionnaires with concepts not present in the previous surveys (e.g., Coral reef bleaching), and the environment in which the surveys are being conducted have changed significantly (e.g., declining response rates for some modes) to warrant new pretests.

10. The ICR does not discuss the relevant Institutional Review Board (IRB) review, and approval by University of Massachusetts-Amherst. If the ICR is revised in any way in response to the IRB review, including changes to methodologies or instruments, DOC/NOAA must resubmit the ICR for review.

OMB Authorizing Official:

Kevin F. Neyland  
Deputy Administrator,  
Office Of Information And Regulatory Affairs

List of ICs

IC Title	Form No.	Form Name	CFR Citation
Resident surveys	NA, NA, NA, NA, NA	Resident survey versions 4a-c, Resident survey versions 4d-f, Resident survey version 3, Resident survey version 1, Resident survey versions 2 a-d	
Supply side surveys for dive shop owners/operators and cruise ships	NA	Supply side surveys	
Visitor: Auto, Air and Cruise Ship Surveys	NA	Visitor auto, air and cruise surveys	
Visitor CUSTOMER surveys	NA, NA, NA, NA, NA, NA	CUSTOMER Coral Bleaching Surveys, CUSTOMER substitution surveys version 1-2, CUSTOMER substitution surveys versions 5-6, KAP/Reef valuation mail-back survey, CUSTOMER onsite survey, CUSTOMER substitution surveys versions 3-4	

# 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, Deputy Assistant Administrator, Line Office Chief Information Officer, head of MB staff for L.O.s, or of the Director of a Program or StaffOffice)

Signature

Date

Signature of NOAA Clearance Officer

Signature

Date

**Supporting Statement for Paperwork Reduction Act Submission:**

**Socioeconomic Research and Monitoring Program in Florida Keys National Marine  
Sanctuary: Recreation/Tourism in the Florida Keys: A 10-year Replication**

**OMB CONTROL No. 0648-xxxx**

**Expires: xx/xx/xxxx**

**U.S. Department of Commerce  
National Ocean and Atmospheric Administration  
National Ocean Service  
Management and Budget Office  
Special Projects  
1305 East West Highway, SSMC4, 9<sup>th</sup> floor  
Silver Spring, MD 20910**

**Contact: Dr. Vernon R. (Bob) Leeworthy  
(301) 713-3000 ext. 138  
Bob.Leeworthy@noaa.gov**



## Table of Contents

	Page Number
<b>Justification</b>	
Explain the circumstances that make the collection of information necessary.....	6
Explain how, by whom, how frequently and for what purpose the information will be used.....	7
How and Purpose: <b>Resident Survey</b> .....	8
Core Questions (included in all resident survey samples).....	8
Part A: Outdoor recreation activities during the past 12 months in the Florida Keys.....	9
Part B: Reef use in the Florida Keys during the past 12 months in the Florida Keys.....	10
Part C: Specialization.....	10
Your trip expenditures for your last trip in the Florida Keys to do outdoor recreation activities.....	10
Annual Vacation Equipment Purchases.....	11
Value of the Reefs.....	11
Environmental Issues.....	12
Satisfaction.....	12
Knowledge, Attitudes & Perceptions of Sanctuary Management Strategies and Regulations.....	12
Coral Reefs.....	13
Substitution.....	15
Alternative Management Options.....	16
Demographic Profile.....	19
<b>Visitor Survey</b> .....	20
Auto Survey Selection Method.....	23
Air Survey Selection Method.....	23
Auto, Air & Cruise Ship Survey Questionnaire.....	24
Expenditure Mailback.....	27
Long Version.....	27
Short Version.....	28
Satisfaction Mailback.....	28
CUSTOMER Survey (Sample 2).....	29
CUSTOMER Selection Rules.....	31
CUSTOMER On-site Survey Questionnaire.....	31
Introduction and Qualifying Questions.....	31
Trip Profile.....	31
Activity Participation and Use.....	32
Demographic Information.....	33
Knowledge, Attitudes & Perceptions of Sanctuary Management Strategies and Regulations and Non-market Economic Valuation of Reefs Mailback Questionnaire.....	33
Global Climate Change/Coral Bleaching.....	34
Substitution and Management Alternatives (Choice Questions).....	34

By Whom.....	34
How Frequently.....	35
How Collection Complies with NOAA Information Quality Guidelines.....	35
Utility.....	35
Integrity.....	35
Objectivity.....	36
 Describe whether, and to what extent, the collection of information involves the use of automated, electronic, mechanical, or other technological techniques or other forms of information technology.....	36
 Describe efforts to identify duplication.....	36
 If the collection of information involves small businesses or other small entities, describe the methods used to minimize burden.....	36
 Describe the consequences to the Federal program or policy activities if the collection is not conducted or conducted less frequently.....	36
 Explain any special circumstances that require the collection to be conducted in a manner inconsistent with OMB guidelines.....	37
 PRA Federal Register Notification comments.....	37
 Explain any decision to provide payments or gifts to respondents other than remuneration of contractors or grantees.....	38
 Describe any assurance of confidentiality provided to respondents and the basis for assurance in statute, regulation, or agency policy.....	38
 Provide additional justification for any questions of a sensitive nature, such as sexual behavior and attitudes, religious beliefs, and any other matters that are commonly considered private.....	38
 Provide an estimate in hours of the burden of the collection of information.....	38
 Provide an estimate of the total annual cost burden to the respondents or record-keepers resulting from the collection (excluding the value of the burden hours).....	39
 Provide estimates of annualized cost to the Federal government.....	39

**Table of Contents (continued)**

**Page Number**

**Justification (continued)**

Explain the reasons for any program changes or adjustments reported in Items 13 or 14 of OMB 83-I..... 40

For collections whose results will be published, outline the plans for tabulation and publication..... 40

If seeking approval to not display the expiration date fro OMB approval of the information collection, explain the reasons why display would be inappropriate..... 41

Explain each exception to the certification statement identified in item 19 of the OMB 83-I..... 41

**Collections of Information Employing Statistical Methods**

Describe (including a numerical estimate) the potential respondent universe and any sampling or other respondent selection method used..... 41

Describe the procedures for the collection, including: the statistical methodology for stratification and sample selection; the estimation procedure; the degree of accuracy needed for the purposes described in the justification; any unusual problems requiring specialized sampling procedures; and any use of periodic (less frequent than annual) data collection cycles to reduce burden..... 47

Describe the methods used to maximize response rates and to deal with nonresponse... 48

Describe any tests of procedures or methods to be undertaken..... 49

Provide the name and telephone number of individuals consulted on the statistical aspects of the design, and the name of the agency unit, contractor(s), grantee(s), or other person(s) who will actually collect and/or analyze the information for the agency..49

References..... 50

Attachment A: Questionnaires.....54

    Resident Mail Survey Questionnaires.....55

    Visitor: Auto, Air and Cruise Ship Survey Questionnaires.....395

    Visitor: CUSTOMER Survey Questionnaires.....430

    Supply-side: Post-card Survey Questionnaires.....654

Attachment B: Authorities.....656

Attachment C: Federal Register Notice.....695

## List of Tables

Table Number	Description	Page Number
1	DIVING-attributes and levels for use in the FKNMS stated preference choice model.....	18
2	FISHING-attributes and levels for use in the FKNMS Stated preference choice model.....	19
3	Burden Hour Calculations.....	39
4	Resident Mail Survey: Expected Completes.....	42
5	Auto, Air and Cruise Ship Survey: Proposed Sampling (Expected Completes).....	44
6	CUSTOMER Survey Sampling (Expected Completes).....	45

## List of Figures

Figure Number	Description	Page Number
1	Resident Samples.....	9
2	Visitor Survey Samples.....	21
3	Visitor Survey Forms.....	22

## A. JUSTIFICATION

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

The National Marine Sanctuaries Act (16 USC 1431, et seq.) authorizes the use of monitoring within National Marine Sanctuaries (NMS) as does the Marine Protection, Research, and Sanctuaries Act of 1972 (16 USC 1432, et seq.). The Florida Keys National Marine Sanctuary and Protection Act (Public Law 101-605, Sec 7 (5)) also authorizes such monitoring. The Management Plan for the Florida Keys National Marine Sanctuary (FKNMS) established 18 Sanctuary Preservation Areas (SPAs) and one Ecological Reserve (ER) that are “no take” zones. In a separate two-year process (Tortugas 2000) a second ER was designed and approved Tortugas Ecological Reserve. All consumptive or take activities were displaced from these zones. These special zones were also created to resolve user conflicts. In creating these special zones, socioeconomic impact analyses were done as required under the National Environmental Policy Act (NEPA). In addition, a Regulatory Impact Review and an Initial and Final Regulatory Flexibility Analysis (if small businesses are potentially impacted by the no take regulations) were conducted. However, many of the benefits and costs identified in these analyses are speculative in nature and there is therefore a great deal of uncertainty about both the benefits and costs. In response to public concerns about the socioeconomic impacts of many of the elements of the FKNMS management plan and especially the “no take” zones (e.g., SPAs and ERs), a socioeconomic element was included in the ecological monitoring program. Dr. Vernon R. (Bob) Leeworthy, Leader of the Coastal and Ocean Resource Economics Program, NOAA, National Ocean Service, Management and Budget Office, Special Projects Division leads the Socioeconomic Research and Monitoring Program for the FKNMS.

In 1998, 50 stakeholders and social scientists met for a three-day workshop and established a set of recommendations for what should be measured in the Socioeconomic Research and Monitoring Program and how frequently the measures should be taken. A team of social scientists reviewed the literature and a gap analysis was performed. What was currently known and a preliminary assessment of the gaps in knowledge were presented to all the workshop participants two weeks before the workshop. A total of 108 recommendations were made, with workshop participants preferring that FKNMS management establish priorities. The workshop participants came to consensus in deciding that the work accomplished in the project “Linking the Economy and the Environment of the Florida Keys/Florida Bay would be accepted as “baseline” measurement for Recreation/Tourism. This project, conducted in 1995-96, was completed prior to the effective date (July 1, 1997) of all the FKNMS regulations, under OMB Control Number 0596-0110, by a Federal agency partnership among the USDA, Forest Service, NOAA and others. The basic survey under 0596-0110, called CUSTOMER, was modified for application in the Florida Keys and Everglades National Park.

In 2000-2001, NOAA formed a partnership with the State of Florida, four Florida counties and the private sector to conduct the “Socioeconomic Study of Reefs in Southeast Florida”. As part of this study, separate baseline estimates were made for use of artificial and natural reefs, the nonmarket economic value of reef use and the market economic use values (e.g. expenditures, sales/output, income and employment). A five-year replication was done on importance/satisfaction ratings for 25 natural resource attributes, facilities and services for both

resident and visitor boating users. This study was done under OMB Control Number 0648-0410. This study was also a modification of the CUSTOMER survey, with contingent valuation questions on reef use added.

The current application is based on a multiple agency, public-private partnership among NOAA, as represented by the FKNMS, the National Centers for Coastal Ocean Science (NCCOS) and the Coral Reef Conservation Program (CRCP); The Monroe County Tourist Development Council (TDC); The Nature Conservancy; The State of Florida; and various businesses and other private organizations in the Monroe County/Florida Keys. In addition to the socioeconomic assessment, this application also attempts to take an approximate decadal look at the recreation/tourism industry to support the Socioeconomic Research and Monitoring Program for the FKNMS with a five-year replication of reef use and valuation. Many think of the recreation/tourism study as equivalent to the Census of Outdoor Recreation in the Florida Keys. The TDC uses this study to weight their monthly surveys of visitors to the Florida Keys.

In the Socioeconomic Research and Monitoring Program for the FKNMS, not all measurements recommended could be done in either baseline 1995-96 or in 2000-2001 for recreation/tourism. Other priorities and availability of funding have required adopting more flexible baselines for tracking some issues (Knowledge, Attitudes and Perceptions of Sanctuary Management Strategies and Regulations--KAP). A baseline for KAP for commercial fishermen, Dive Shop Owners/Operators and members of local environmental groups was done in 1995-96 and is currently being replicated under OMB Control Number 0648-0534. In this application, we are providing baselines for the broader recreation/tourist users of the FKNMS.

New management strategies and new regulations have also come into being since July 1, 1997. In addition, new programs and new research priorities have been created in NOAA, which are directed at the FKNMS. The U.S. Coral Reef Task Force recommended to NOAA's CRCP that they fund adapting a study done on Global Climate Change and Coral Bleaching by the Australians on the Great Barrier Reef to the reefs of the FKNMS. NOAA's NCCOS funded a five-year study by University of Massachusetts-Amherst, Human Dimensions Program entitled "Coral Ecosystem Services: Societal Preferences and Policy/Management. The FKNMS has also joined the State of Florida and The Nature Conservancy in a project entitled "Florida Reef Resiliency Program". This application provides a platform for each of these efforts to achieve their objectives in addition to the basic requirements of the 10-year replication of the recreation/tourism study for the Socioeconomic Research and Monitoring Program for the FKNMS.

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

### **How and Purpose**

This project has multiple partners and multiple objectives. To accomplish multiple objectives, we take a modular approach to surveys. Individual survey modules are designed to achieve

different objectives. Modules are also mixed and matched to achieve objectives, especially when multivariate analyses are required.

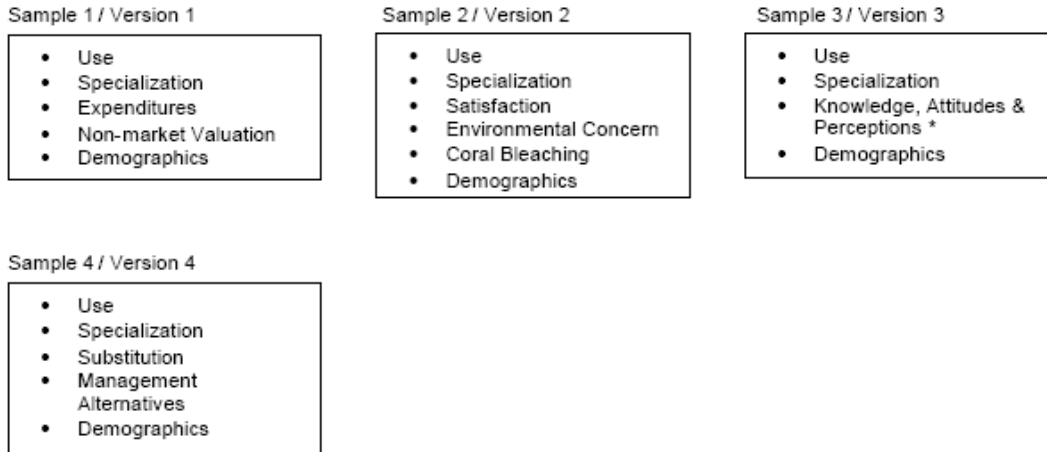
Overall, there are two basic populations to be surveyed: 1) Permanent residents of Monroe County/Florida Keys and 2) Visitors to Monroe County/Florida Keys, including seasonal visitors (visitors who spend up to six months in the Florida Keys).

## **Resident Survey**

In 1995-96, the survey of residents was done by telephone/mail. This was a two-stage sampling with basic demographics collected by a random-digit dialing (RDD) survey. Households were recruited in a follow-up mail survey to get other details on recreation participation and use, expenditures, importance/satisfaction ratings and environmental concern. In 1995-96, telephone response rates were about 66% with over 82% agreeing to participate in the mail survey. The net response rate to the mail survey components was about 25% (see Leeworthy and Wiley, 1997b for details of the sample design, estimation methods, analysis of nonresponse bias and sample weighting) application. We expect to do a straight mail survey drawing samples from either Survey Sampling, Inc. or INFO USA for Monroe County residents.

We are proposing four different random samples to achieve all project objectives, while keeping burden to reasonable levels. Three of the samples will have a target sample size of 1,000 completes and one will have a target sample size of 2,000. There are a little over 37,000 households in Monroe County/Florida Keys containing about 80,000 people according to the 2000 Census. We plan to get completed surveys from 5,000 of those 37,000 households or about 13.5% of the population. Again, a modular approach is used to achieve multiple objectives, while minimizing burden. In this approach, Recreation Participation and Use, Demographics, and Specialization are considered “core” questions and are included in all versions of the resident questionnaires. Other components/modules include Expenditures, Environmental Concern, Satisfaction (Importance/Satisfaction), Knowledge, Attitudes & Perceptions of Management Strategies and Regulations, Substitution & Choice of Management Alternatives, Nonmarket Economic Use Values, and Climate Change/Coral Bleaching (Figure 1).

***Core Questions (included in all resident survey samples):*** As mentioned above, the “core” questions include questions on recreation participation and use, specialization, and demographics. In addition, there are two warm-up questions that address Monroe County as a place to live (questions 1 and 2). Question 3 is a screener question to identify if anyone in the household did any outdoor recreation activities in the Florida Keys during the past 12 months. A White Card is enclosed which lists activities we define as outdoor recreation. Those who answer Yes to question 3 are sent to complete Part A: Outdoor recreation activities during the past 12 months in the Florida Keys. Those who answer No (nonparticipants in outdoor recreation in the Florida Keys) to question 3 are sent to Part G: Demographic Profile. Obtaining demographic profiles of both participants and non participants in outdoor recreation allow us to analyze the importance of certain demographic factors in explaining participation in outdoor recreation in the Florida Keys, allow us to analyze non response bias, and allow for post weighting of sample data.



\* Figure 1. Resident Samples

**Part A: Outdoor recreation activities during the past 12 months in the Florida Keys.** Here we obtain complete recreation activity participation profiles for all members of the household. This, with Census data on number of household and number of residents in Monroe County/Florida Keys, will allow us to estimate the number of people participating in outdoor recreation in the Florida Keys. Information is obtained on activity participation by each respondent and number of others in the household (A2 and A4) and number of days of activity (A3) for each activity (A1) in each of five regions of the Florida Keys (Upper Keys, Islamorada, Marathon, Lower Keys and Key West). Respondents are provided an activity list (White Card) with each activity given a number code and a map of the five regions of the Florida Keys. In the 1995-96 study, only four regions were used (Upper Keys, Middle Keys, Lower Keys and Key West). However, The Monroe County Tourist Development Council asked us to split the Middle Keys into two regions so our information would correspond to their five districts, which also correspond to the areas covered by five Chambers of Commerce in the Florida Keys.

For number of days of activity by region, respondents are asked to answer this question only for those activities which have an “A” following their number. Activities with the suffix “A” are high priority activities for which intensity of use is required by project partners. Not collecting days of use for low priority activities lowers respondent burden.

Question A5 identifies respondents’ “most important activity”. This is used as a screener question for Part C. Specialization.

Question A6 asks about days of outdoor recreation spent outside the Florida Keys in the past 12 months, addresses the issue of substitution and is important for the assessment of Global Climate Change/Coral Bleaching with respect to the contingent behavior questions.

Part A questions will allow us to assess the trends in the type of activities, the extent of participation and use, and the regional distribution of activity in the Florida Keys since 1995-96.



**Part B: Reef use in the Florida Keys during the past 12 months: Both artificial and natural reefs.** In this section we obtain detailed information on activity participation and use of both the artificial and natural reefs of the Florida Keys to assess the trends in use since baseline 2000-2001. As in Part A, information is obtained from all members of the household on participation in activities on the reefs in all five regions of the Florida Keys (questions B1 thru B3). Again an activities list (Blue Card) is used to restrict the number of activities asked. Also, a check box is provided to indicate “No Reef Use” for each of the five regions. Both of these features are designed to reduce burden while obtaining the necessary information to assess the trends in use since 2000-2001.

Questions B4 thru B6 obtain the number of days by activity, region and type of reef (artificial versus natural). As in Part A, for activities which have an “A” suffix on the activity number (See Blue Card) is the respondent asked for days of activity.

Question B7 thru B9 focus on snorkeling and SCUBA diving activities and obtain number of dives on both the artificial and natural reefs. The Blue Card is used again to limit what activities are asked and a definition is provided on how we define a dive. Dives offers an alternative to days as a measure of activity, since it is common for a diver to undertake multiple dives per day. Some studies have used annual number of dives as a measure of reef carrying capacity.

**Part C: Specialization.** This module of questions was not in the 1995-96 or 2000-2001 studies. It was designed by researchers at the University of Massachusetts-Amherst, Human Dimensions Program, who have a five-year project sponsored by NOAA’s NCCOS entitled “Coral Reef Ecosystems: Societal Preferences and Policy/Management”. There has been a growing body of literature in outdoor recreation on the issue of recreational specialization over the past few decades (Bryan, 1977; Salz, Loomis and Finn, 2001; and Salz and Loomis, 2005). Recreation specialization or “specialization theory” has been used to predict how recreationists would respond to management strategies and regulations. This set of questions was adopted as “core” questions to enable researchers at the University of Massachusetts-Amherst, Human dimensions Program to test specialization theory in the FKNMS.

All the questions in Part C are used to develop a “specialization index” (Salz and Loomis, 2005). The specialization index values are then used as a predictor of behavior (support and/or compliance) with respect to management strategies and regulations.

**Your trip expenditures for your last trip in the Florida Keys to do outdoor recreation activities.** This module is a replication of the 1995-96 study and is included in only Version 1 of the Resident Survey as part D. Expenditure information is used in analyses to estimate the economic impact of outdoor recreation on the local Monroe County economy in terms of sales/output, income and employment. See Leeworthy and Wiley (1997a) for results from the 1995-96 study and Leeworthy and Wiley (1997b) for the technical appendix on the estimation procedures.

Questions D1 thru D6, ask for background data on the nature of the last trip taken. Last trip is used to reduce recall problems with remembering details of specific trips. Most of the literature suggests that two to three month recall is optimal for remembering trip details. Question D1

obtains information on the types of activities the respondent participated in on the last trip. This will be used to assess the representativeness of the types of trips for which expenditures are based. Questions D2 and D3 ask about location of trip distance traveled for the trip. Monroe County/Florida Keys is a linear county with mile markers on U.S. 1 (the only highway in and out of the Florida Keys). Questions D4 and D5 ask about the length of the trip measured in days and nights. With the Florida Keys being over 100 miles in distance from one end of the string of islands to the other, some people take overnight trips from their home in the Florida Keys to some other site in the Florida Keys. This provides a check on lodging costs. Question D6 provides the number of people the expenditures for the trip cover so we can normalize expenditures on a per person basis. The rest of the section focuses on the detailed amounts spent on each type of expenditure. Expenditures categories can then be mapped into industry categories as maintained by the U.S. Department of Commerce, Bureau of the Census in the Economic Censuses and the Bureau of Economic Analysis, regional Economic Information System Accounts for Monroe County to conduct economic impact analyses.

***Annual Vacation and Equipment Purchases.*** This section focuses on non trip related expenditures and looks at annual expenditures. Three columns are used as in the 1995-96 study to distinguish total expenditures (column A) from expenditures in South Florida (defined as Broward, Miami-Dade and Monroe counties—column B) and expenditures in Monroe County. This section is included only in Version 1 of the Resident Survey as Part E. This information will support economic impact analyses in both Monroe County and the wider South Florida regional economy.

***Value of the Reefs.*** This section is included as Part F in Version 1 of the Resident Survey only. This section is designed to estimate the nonmarket economic use value (consumer's surplus) of both artificial and natural reefs in the FKNMS and is a replication of what was done in 2000-2001 under OMB Control Number 0648-0410. Results of the analysis of 2000-2001 data can be found in Johns et al (2003a) and details on methods of analysis in Johns et al (2003b).

Question F1 uses as an example a program focused on maintaining the natural reefs of the FKNMS in their current condition. Respondents are asked to say yes or no to a randomly assigned dollar amount. The randomly assigned dollar amounts are the same as used in the 2000-2001 study. As in the 2000-2001 study, the payment vehicle is stated as an additional amount of costs for their last trip (the same trip used to obtain costs on in Part D). Question F1a is a follow-up for those who answer "no" to question F1 and asks for the reasons for saying "no". This will allow for identification of protest bids or rejection of scenarios.

Question F2 uses as an example a program focused on maintaining the artificial reefs of the FKNMS in their current condition. Again, respondents are asked to say yes or no to a randomly assigned dollar amount. The same dollar amount is assigned to the artificial reef program as the natural reef program in question F1. Question F2a is a follow-up for those who answer "no" to question F2 and asks for the reasons for saying "no". Again, this will allow for identification of protest bids or rejection of scenarios.

Question F3 combines the natural and artificial reef programs. Again, respondents are asked to say yes or no to a randomly assigned dollar amount. As in the 2000-2001 study, the randomly

assigned dollar amount is simply the addition of the randomly assigned dollar amounts used in question F1 and F2. Question F3a is the follow-up question for those who say “no” to question F3. Again, this will allow for identification of protest bids or rejection of scenarios.

By doing a five-year replication of the same questions, we hope to be able to test whether there is a change in the nonmarket economic value of the reefs in the FKNMS both on an average individual basis and in the aggregate across all residents.

***Environmental Issues.*** This module of questions is made up of 16 questions from the Weigel and Weigel (1978) study that are used to construct the Environmental Concern Index (ECI) or the Environmental Behavior Index (EBI). None of these questions can be interpreted independently nor are the responses to individual questions ever reported. Only the summary statistics are reported for the index (see Leeworthy and Wiley, 1997a). This module is the same set of questions used in the 1995-96 baseline study. It will be used in Version 2 of the Resident Survey, Part E only. The index will be used to test for relationships between the answers to the Climate Change/Coral Bleaching Choice questions.

***Satisfaction.*** This is the importance/satisfaction module, in which respondents are asked to provide their ratings, on a 1 to 5 scale, both on their importance and satisfaction for 25 natural resource attributes, facilities and services in the Florida Keys. This module of questions was asked in the baseline 1995-96 study of all residents and in 2000-2001 of all boating reef users. It will be asked only in Version 2 of the Resident Survey, Part D.

This module is divided into three parts. Part 1 asks the respondent how important each item was to him or her as contributing to an ideal recreation/tourism setting in the Florida Keys. Part 2 then asks how satisfied the respondent was with each item. Part 3 is a five-year retrospective rating and question D51 is used to screen out all those who were not residents of the Florida Keys or had not visited the Florida Keys in the past five years. Past research has shown that satisfaction scores are highly correlated with amount of experience with the area (Leeworthy and Wiley, 1997a). The number of items in Part 3 is reduced from 25 to 13 based on project partner priorities, this reduction helps to reduce respondent burden.

***Knowledge, Attitudes & Perceptions of Sanctuary Management Strategies and Regulations.*** This module of questions was not in the 1995-96 baseline study or the 2000-2001 reef study. The questions are almost exactly the same as those submitted under OMB Approval Number 0648-0534, Expiration Date: 7/31/2009, which is focused on a 10-year replication for three user groups; commercial fishermen, dive shop owners/operators, and members of local environmental groups. This application applies to the broader population of Monroe County that participates in outdoor recreation. However, we expect there will be some duplication with the other study. This module will be applied only in Version 3 of the Resident Survey, Part D.

This module contains 43 questions. Questions D1 thru D8 address sources where respondents get their information. This is extremely important to FKNMS education and outreach personnel for identifying effective means of communicating with the residents of Monroe County/Florida Keys.

Questions D10 thru D20 address people's perceptions of the FKNMS with respect to the processes and procedures followed in creating and enforcing management strategies and regulations and people's support for the FKNMS as a management/regulation institution. A 1 to 5 point scale is used, with 1 meaning Strongly Agree to 5 meaning Strongly Disagree.

Questions D21 thru D23 ask questions to gauge how important people think the FKNMS is in affecting the Florida Keys/Key West as a place to live and/or as a place to undertake their recreation activities.

Question D24 is a lead in question on the people's knowledge, attitudes and perceptions of FKNMS special zones. After answering question D24, respondents are provided information on three different kinds of zones that exist in the FKNMS.

Questions D25 thru D34 provide a set of statements about zones and ask the respondent to place an "X" under the column for each type of zone the statement applies. Questions D35 thru D37 ask about the use of the zones. Questions D38 thru D42 ask questions about how people perceive the effectiveness of the FKNMS management strategies and regulations. Question D43 provides an open-ended question format which allows respondents to list which regulations they would like to see changed and how they would like to see them changed.

***Coral Reefs.*** This module of questions was neither in the 1995-96 study nor the 2000-2001 reef study. These questions support NOAA's Coral Reef Conservation Program's attempt to implement the U.S. Coral Reef Task Force's recommendation to estimate the socioeconomic impacts of global climate change/coral bleaching in the FKNMS as was done for Australia's Great Barrier Reef (GBR). Australian economist, Hans Hoegh-Guldberg and Australian coral ecologist, Ove Hoegh-Guldberg, led the study on the GBR and have been asked to lead the study with a team of American researchers for the FKNMS. This module of questions is included in Version 2, Part F of the resident survey. There are four Versions: Version 2a, Version 2b, Version 2c and Version 2d. Each of these versions have different choice questions, so for the total sample of 1,000 that will receive Version 2, there will be a sample size of 250 completed for each version (a, b, c, and d).

The basic approach is based on scenario analysis over a range of potential impacts. Here a stated preference choice method is utilized where people are presented with alternative mixes of global and local management strategies. This is similar to the approach used by Layton and Brown (1998) on their analysis of the impacts of Global Climate Change and the forests on the Rocky Mountains. Each mix of strategies has an expected outcome stated in terms of the percent of live coral cover which is protected at various costs to the respondent's household. The costs for each mix of strategies is randomly assigned from a range of dollar amounts derived from the FKNMS Management Plan for local costs and from a range of dollar costs from several studies on the costs of eliminating greenhouse gas emissions and our Science Panels estimates for the different levels of greenhouse gas emissions. There are 81 possible combinations of global and local strategies. Twenty-four (24) of the 81 were randomly chosen for implementation. There will be four versions of this module of questions with each version containing six choice questions.

Respondents are given certain facts to help them make their decision. For each choice, a respondent faces three alternatives, which are mixes of global and local strategies each with an outcome in terms of the amount of live coral protected with a cost per household. Respondents choose their “most preferred alternative” and their “least preferred alternative” for each choice question. There will be four randomly assigned dollar amounts for each of the 24 alternatives. The baselines are based on the cost calculations and are shown in the attached questionnaires. The range of dollar amounts is simply 2 times the base, 3 times the base and four times the base.

Questions F1 thru F4 are warm-up questions to assess respondent’s perceptions on the threats to coral reefs and their opinions on various recommended actions. In question F1, respondents are asked to rank 12 different threats to the coral reefs with 1=greatest threat and 12=lowest threat. Question F2 is a follow-up to question F1 and provides the respondent an opportunity to list other threats not mentioned in question F1.

Question F3 list seven recommendations for actions to reduce the threats to coral reefs and asks the respondents to rank them from 1 to 7 with 1 meaning the highest rank or most important recommendation to 7 or the least preferred action. Question F4 is a follow-up to question F3 and allows the respondent to provide other recommended actions.

Respondents are then provided some facts about coral bleaching and climate change. Then they are asked some questions that address their knowledge, attitudes and perceptions about climate change and coral bleaching (Questions F5 thru F8).

After answering questions F5 thru F8, respondents are given some additional facts about climate change and coral bleaching and the local and global management strategies that can address the problem of climate change and coral bleaching. Different levels of protection are explained and the expected outcomes. Information is given on how costs were derived for management strategies. Information is also provided on how local and global strategies work together and how global strategies are more effective (in terms of efficiency in protecting coral cover) when mixed with local strategies. Then an example is provided to show respondents how to record their answers to the choice questions (questions F9 thru F14).

In questions F9 thru F14, respondents are presented with three alternative mixes of global and local strategies. Alternative A is always the “No change” alternative and cost the household \$0 per year, but results in a 95% loss in coral cover by year 2027. Alternatives B and C always represent more protective strategies with higher costs per household per year. The respondent is always asked to select his/her “most preferred alternative” and “least preferred alternative” for each choice question. After answering each choice question, respondents are asked an open-ended question to briefly explain the reason for their choices.

Questions F15 thru F19 take a different approach. The contingent behavior approach is used here. The approach is similar to that used by Richardson and Loomis (2004) on how visitors to Rocky Mountain National Park responded to the impacts of global climate change. Preceding these questions, respondents are first reminded of their responses in Part A on their participation in outdoor recreation both inside and outside the Florida Keys over the past 12 months. Question

F15 asks the respondent to confirm any outdoor recreation activities in the Florida Keys during the past 12 months.

Questions F16 thru F19 explore how respondents would have changed their number of days of outdoor recreation both in and outside the Florida Keys if they had faced different coral cover conditions. The contingent behavior results will be used in combination with expenditure profiles to estimate the economic impacts on the local economy due to global climate change/coral bleaching for various scenarios.

***Substitution.*** This is a module of questions designed by researchers at the University of Massachusetts-Amherst, Human Dimensions Program and supports both the NOAA NCCOS project entitled “Coral Reef Ecosystems: Societal Preferences and Policy/Management” and the Florida Reef Resiliency Program. The idea of substitution is not an economic definition of substitution, but instead is based on work in the recreation literature which views substitution in a slightly different manner.

Substituting another site, time or activity is thought to be a common coping strategy employed by resource users who experience conflict, crowding, loss of resource access, or who observe environmental degradation at an often used location. More research, especially leading to improved theory, is needed on recreation substitution with regard to snorkelers, SCUBA divers and recreational fishermen.

The following description is taken from Ditton & Sutton, 2004:

“Recreation substitution was first described as the interchangeability of activities in satisfying participant needs, motives, and preferences (Hendee & Burdge, 1974). This definition was expanded further to refer to the interchangeability of recreation experiences “such that acceptably equivalent outcomes” can be achieved by varying the timing, means of access, setting, or activity (Brunson & Shelby, 1993, p. 69). Thus, only when an alternative activity is perceived as satisfying one’s needs and providing outcomes equivalent to the original can it be considered substitutable (Iso-Ahola, 1980). If a replacement does not provide the same benefits as the original, it is a complement or an alternative, but not a substitute (Shelby & Vaske, 1991).

Previous studies of substitution decision making have identified various independent variables important to individuals’ willingness to substitute: frequency of participation, skill level, and monetary investment (Snow, 1980; Vaske & Donnelly, 1982). Based on recreation specialization theory (Bryan, 1977; Ditton, Loomis & Choi, 1992; Fisher, 1997), it can be expected that those with well developed skills, large investments in equipment, and who are more committed to [diving] than the other outdoor activities in which they participate are less likely to identify another outdoor activity that would provide them with the same satisfaction or enjoyment they received from [diving]”.

The following substitution questions will be cross analyzed with recreation specialization and demographic questions to better predict for managers how Florida Keys resource users will react to variations in use levels, user norms, natural and anthropogenic resource impacts, and alternative management actions.

There are two sections for the substitution questions; one for those who participate in snorkeling or SCUBA diving in the Florida Keys and one for those who participate in recreational fishing in the Florida Keys. If the respondent did not participate in the activities in the Florida Keys, he/she is instructed to go to the next section.

Besides the screening criteria, there are 13 questions in each section, which are only slightly modified to the reference activity. The respondent is asked to answer the questions using either their favorite or most common reef for the reference activity or, if he/she does not have a favorite or most common reef for their reference activity, then the last reef used is used for the reference activity. For these questions, “reefs” mean natural reefs in the Florida Keys.

Question 1 thru 5 pose different conditions which make the favorite/most common/last used reef for the reference activity either unavailable for the reference activity or less desirable for the reference activity. The respondent is asked to provide a response on how he/she would change his/her behavior.

Question 6 attempts to identify how many other reefs in the Florida Keys the respondent thinks offer an experience just as good as their favorite/most common/last used reef for the reference activity. Question 7 follows by asking how many other reefs in the Florida Keys the respondent thinks offer a similar, but not as good an experience for the reference activity as the favorite/most common/last used reef. Question 8 then asks the respondent to rate how similar the best similar reef is to the favorite/most common/last used reef. Question 8 uses a seven point scale with 1=Not as good, 4=Equivalent and 7=Better.

Question 9 asks about factors respondents consider when choosing a substitute site. The respondent is asked to rate the importance of nine factors plus an “other” (specify). Importance is scored on a five point scale with 1=Not at all important to 5=Extremely important.

Question 10 is a yes/no question that asks the respondent if other activities would provide the same satisfaction or enjoyment as the reference activity, if the reference activity was not possible to undertake either in the Florida Keys or elsewhere. Question 11 follow-up on question 10 to ask the respondent to identify up to three activities he/she might consider as substitute activities for the reference activity.

Question 12 asks about factors that might explain why respondents are not able to participate in their reference activity. Respondents are asked to rate seven factors plus an “other” (specify) factor using the same five point importance scale as in Question 9.

Question 13 asks about factors that motivate respondents in participating in their reference activity. The respondent is asked to score 12 factors plus an “other” (specify) factor on a five point scale on expectations with 1=Did not expect to 5=Very large expectations.

***Alternative Management Options.*** This is a module of questions designed by researchers at the University of Massachusetts-Amherst, Human Dimensions Program and supports both the NOAA NCCOS project entitled “Coral Reef Ecosystems: Societal Preferences and

Policy/Management” and the Florida Reef Resiliency Program. The questions are designed to support a conjoint analysis using a stated preference discrete choice model. These questions will be included in Version 4 of the Resident Survey and implemented in Sample 4 (2,000 expected completes). There are six versions of the survey to accommodate 48 different choice questions for each activity (fishing and diving), with each respondent getting 8 choice questions for fishing and 8 choice questions for diving. Large sample sizes are required for this module since researchers at the University of Massachusetts-Amherst, Human Dimensions Program want to be able to estimate some parameters by region in the Florida Keys. For their purposes, they have aggregated our five regions to three regions (Upper Keys, Middle Keys and Lower Keys/Key West).

The stated preference discrete choice (SPDC) model has its roots in the assumption that decisions about resource use and activity-related expenditures are the result of several factors considered jointly (Sorice, Oh, & Ditton, 2005). The model seeks to identify the tradeoffs people (snorkelers, SCUBA divers, and recreational fishermen in this case) are willing to make. This information can assist managers by illustrating how users might change their behavior in response to management actions.

The project proposed does not seek to evaluate any specific management alternatives, current or pending, within the FKNMS. Nor does it explicitly attempt to compare current management actions to users’ preferences. Rather, the purpose is to study how people evaluate generic packages of management attributes in order for managers to be able to predict support for new policies.

There are two sections for the choice questions; one for those who participate in snorkeling or SCUBA diving in the Florida Keys and one for those who participate in recreational fishing in the Florida Keys. If the respondent did not participate in the activities in the Florida Keys, he/she is instructed to go to the next section.

For diving, there are eight attributes for each choice question. Each attribute has three to four levels. In total there are 15,552 possible combinations of attributes/levels. Using the paired comparison approach and a randomized design, 48 of the 15,552 possible combinations are covered across six versions of the survey, with each respondent getting 8 paired choice questions.

For fishing, there are seven attributes for each choice question. Each attribute has three to four levels. In total there are 5,184 possible combinations of attributes/levels. Using the paired comparison approach and a randomized design, 48 of the 5,184 possible combinations are covered across six versions of the survey, with each respondent getting 8 paired choice questions.

Besides the screening criteria, for each reference activity, respondents are asked 8 choice questions. In each of the choices, two different trips are presented (Trip A and Trip B). The respondent is asked their preferred choice of trip. The respondent is always given the opportunity to select neither trip in each choice question.



Table 1 shows the attributes and their levels for snorkelers and SCUBA divers and Table 2 shows the attributes and levels for recreational fishermen.

**Table 1. DIVING- attributes and levels for use in the FKNMS stated preference choice model.**

<b>Attribute</b>	<b>Description</b>	<b>Level</b>
Number of Snorkelers and Divers	The number of other snorkelers and divers in the water at the reef site	1. The usual number of other snorkelers/divers at the dive site 2. 15% fewer snorkelers/divers 3. 30% fewer snorkelers/divers
Site Settings	Coral cover and algae cover at the reef site	1. High live coral cover 2. Mix of coral and algae cover 3. High algae cover
Restrictions	Percent area of reef site open to use	1. No area closed 2. 25% of area closed 3. 50% of area closed 4. 75% of area closed
Number of fish	Overall amount of fish observed on a dive	1. No increase in numbers of fish 2. 20% more fish 3. 40% more fish 4. 60% more fish
Size of Fish	Percent increase in the number of larger fish seen at the dive site	1. No increase in larger fish 2. 20% more larger fish 3. 40% more larger fish 4. 60% more larger fish
Species	Number of species of fish observed on a dive	1. Fewer species 2. No change in species numbers 3. Many more species
Enforcement	Number of patrols a person we expect to encounter	1. No additional patrols 2. One additional patrol 3. Two additional patrols
Travel cost / day	Travel cost that an diver spends for a diving trip per day (including gas and other trip expenses)	1. 10% less than your current total cost per day 2. Your current total cost per day 3. 10% more than your current total cost per day

**Table 2. FISHING-attributes and levels for use in the FKNMS stated preference choice model.**

<b>Attribute</b>	<b>Description</b>	<b>Level</b>
Number of Recreational Fishing Boats	The number of other angler boats near fishing location	1. The usual number of other boats near the location 2. 15% fewer boats 3. 30% fewer boats
Number of Boats	The number of other non-angler boats near fishing location	1. The usual number of other boats near the location 2. 15% fewer boats 3. 30% fewer boats
Restrictions	Percent area of zone closed to use	1. No area closed 2. 25% of reefs in zone closed 3. 50% of reefs in zone closed 4. 75% of reefs in zone closed
Number of Species	Number of different species	1. No increase in numbers of species caught 2. Fewer species caught 3. More species fish caught
Number of fish	Overall amount of fish caught	1. No increase in numbers of fish caught 2. 10% more fish caught 3. 20% more fish caught 4. 30% more fish caught
Size of Fish	Percent of legal sized fish caught	1. No increase in the number of caught kept 2. 20% more keepers 3. 40% more keepers 4. 60% more keepers
Travel cost / day	Travel cost that an angler spends for a fishing trip per day (including gas and other trip expenses)	1. 10% less than your current total cost per day 2. Your current total cost per day 3. 10% more than your current total cost per day

**Demographic Profile.** The demographic questions are “core” questions and thus included in every version of the resident survey. This section is labeled as different Parts (e.g. Part G in Versions 1 and 2 and Part E in Version 3) of the questionnaire and is always the last section of a questionnaire version. Demographic profiles serve multiple purposes. First, many demographic factors are explanatory variables in various multivariate analysis (e.g. activity participation, spending and nonmarket economic valuation). Second, the demographic profiles allow us to compare our samples to the general population to assess whether we got representative samples and to analyze potential nonresponse bias. Third, demographic factors are used for post sample weighting.

Questions 1 and 2 ask about the number of permanent residents of Monroe County live in the household and how many of these people are 16 years of age or older. This information will allow us to compare household sizes with Census and provide important information for extrapolating estimates from sample to population.

Question 3 asks about the closest mile marker to the respondent's residence. This will allow us to calculate mileage from the respondent's residence to the site of the last trip for the expenditure profile.

Question 4 asks about access to the water from respondent's residence. This is a key feature of the Florida Keys as many residents live on canals, which provide a place to dock their boats and increase the probability of participating in boating activities. Question 5 asks if they own a boat.

Question 6 asks for how many years the respondent has lived in Monroe County. Various relationships have been found between experience and other project measurements. Satisfaction ratings and years of experience are highly correlated. In many studies in Florida, it has been found that there is negative relationship between participation in various recreation activities and years of experience living in Florida.

Questions 7 thru 14 are focused on the usual demographic factors for comparison with Census data and supporting other analyses. Question 7 is used to derive age. Questions 8 and 9 address race/ethnicity. Question 10 addresses level of educational attainment and question 11 addresses employment status.

Question 12 asks if the respondent works outside Monroe County. This is important information in our methods for estimating the amount of visitors that access the Florida Keys via the highway and supplements information obtained from the Census of Inter-county Commuters.

Question 13 obtains zip code of the residence. Originally, this was to be a telephone/mail survey. This may not be needed if it is a mail survey only.

Question 14 is total household income before taxes and is a critical demographic factor for many analyses.

## **Visitor Survey**

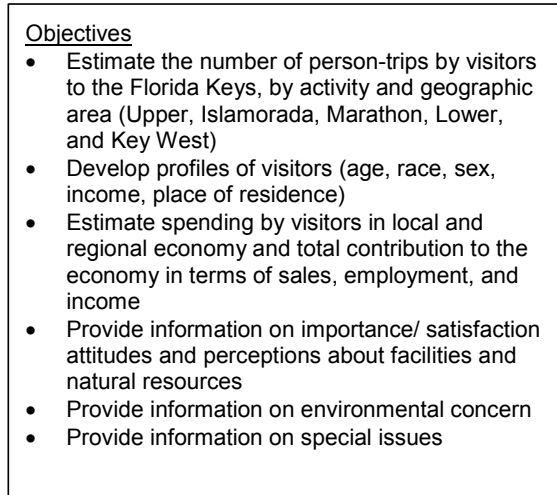
In 1995-96, the visitor survey was done using two separate sample designs. We propose to use the same sample designs, only modified with the current changes in institutional structures. For detailed sample designs, estimation methods, analyses of nonresponse bias and sample weighting used in 1995-96, see Leeworthy (1996). For an overview of objectives from each of the two visitor samples proposed and the components of each questionnaire see Figure 2. Figure 3 provides a graphic overview of the different questionnaire forms that will be discussed below.

**Sample 1. Survey of Air, Auto and Cruise Ship passengers.** There are essentially three ways that visitors access the Florida Keys: 1) by Air through either Key West International Airport or Marathon Airport. In 1995-96, Marathon provided commercial airline service; now Marathon only provides service to private airplanes; 2) by Auto, U.S. 1 is the only road which can be used to access the Florida Keys; and 3) by Cruise Ship. All cruise ships visit Key West only. A fourth way visitors can access the Florida Keys is by private boat. In 1995-96, we estimated that less than one percent of visitors access the Florida Keys by their own boat. Some additional

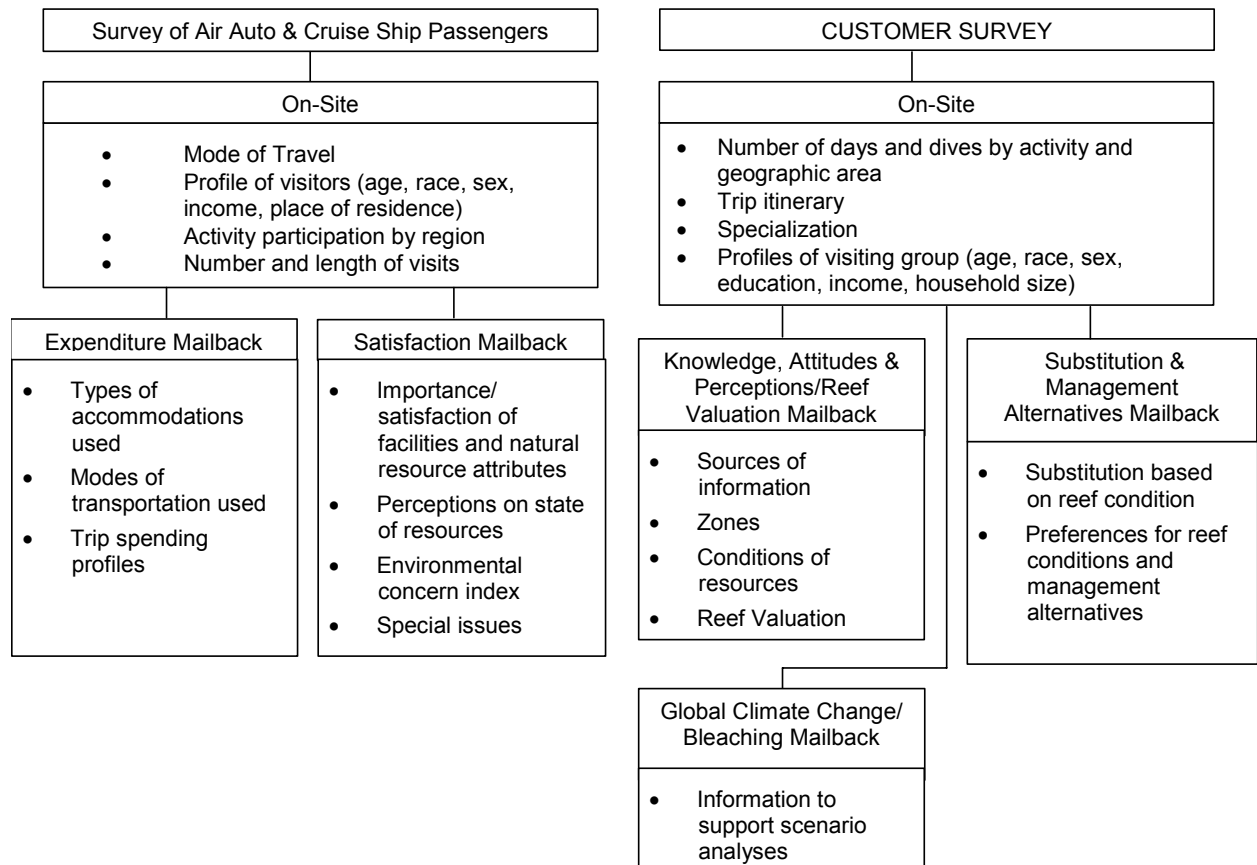
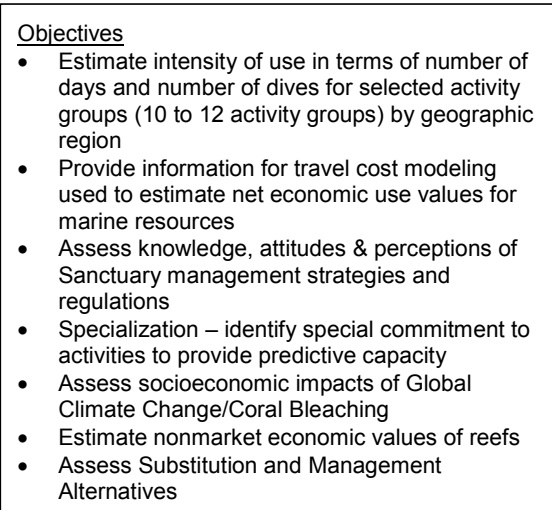
ways visitors can access the Florida Keys are by commercial bus service and a new ferry service from Naples Florida to Key West. Both of these services are relatively small, but they will be included in the survey.

**Figure 2. Visitor Survey Samples**

Sample 1



Sample 2

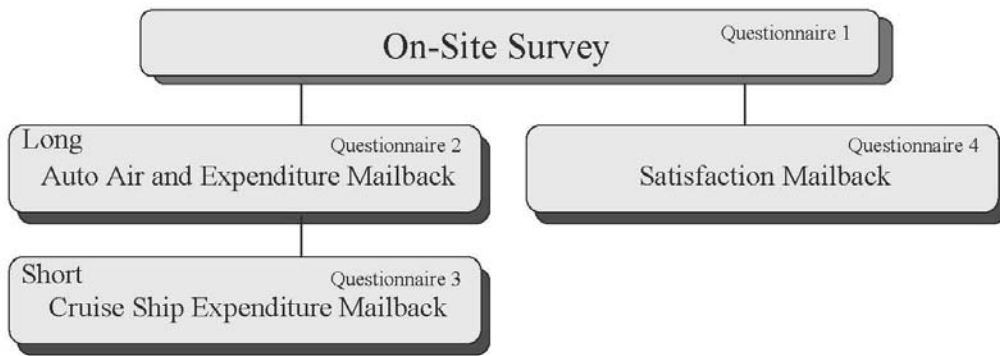


### Figure 3: Visitor Survey Forms

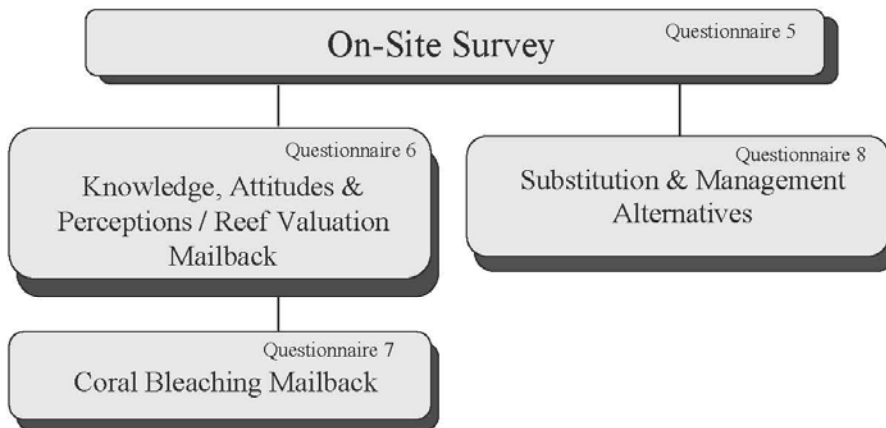
Attached are the eight questionnaires used in three different samples of visitors to the Florida Keys.

Each of these questionnaires is numbered in the upper right hand corner. A schematic of the study design and the eight questionnaires is shown below.

#### Sample 1. Air, Auto, and Cruise Ship Survey



#### Sample 2. Customer Survey, Florida Keys



Sample 1 is a stratified random sample of visitors and is used to derive estimates of total visitation and provides the information necessary for deriving sample weights for Sample 2 called the CUSTOMER Survey Sample. CUSTOMER is not a truly stratified random sample, as will be explained below.

Sample 1 is stratified by the different types of access. We will have air enplanement counts for all flights leaving the Florida Keys from the Airport Authority, traffic counts from the Florida Department of Transportation at the 106.5 mile marker for all traffic by the hour every day of the year, and number of cruise ships and number of people onboard each cruise ship from the Key West Port Authority. A highway survey will be conducted 80 days per year stratified by season, type of day (weekday and weekend/holiday) and time of day (morning and afternoon). The airport surveys will also be stratified by season, type of day and time of day. The cruise ship survey will also be stratified by season but will be based on when port calls are scheduled. Each ship scheduled has a known passenger capacity and arrival and departure time. The ferry and bus services are highly variable due to low demand. We use the same design procedures as used for cruise ships. See Leeworthy (1996) for how estimates of total person-trips and total person-days were estimated.

*Auto Survey-Selection Method.* Off-duty police officers are used for traffic control. A permit will be obtained from the Florida Department of Transportation to conduct the survey. Signs are set up notifying drivers that a survey is being conducted. Two police cars are placed on both sides of the northbound lanes of the highway with their emergency lights on to calm the traffic. An officer selects randomly (every 5<sup>th</sup> car on light traffic days, every 10<sup>th</sup> car on medium traffic days and every 20<sup>th</sup> car on heavy traffic days) eligible vehicles (eligible vehicles exclude commercial vehicles and buses) and points to the driver and directs them into a parking lot. The police officer never comes into contact with people in selected vehicles; he simply points at them and directs them into the parking lot. Cones are placed in the middle of the highway to help direct drivers into a parking lot. Once in the parking lot, drivers are greeted by a member of the Bicentennial Volunteers, Inc. and asked if they are permanent residents of Monroe County. If so, they are thanked, tallied on the Tally Sheet (see Tally Sheet, Auto Survey, U.S. 1) and sent back into the traffic stream. If not permanent residents of Monroe County, they are asked if they are ending their stay in the Florida Keys: if not, they are thanked and sent back into the traffic stream. If they are ending their trip to the Florida Keys, they are then screened for having participated in any recreation/tourist activities (the volunteer hands them the Blue Card which lists recreation/tourists activities). Those not qualifying for the survey are thanked and sent back into the traffic stream, if they qualify they are asked if they would participate in a 5-10 minute interview about their visit to the Florida Keys. If they refuse or there is a language barrier, they are sent back into the traffic stream, and if they agree to the interview they are sent to a parking spot where another volunteer interviews them. The tally sheet is used to record the disposition of each contact. Also, traffic is tallied every 15 minutes of a sampling period for 10 minutes at a time to determine the proportion of eligible vehicles in the car traffic counts (see Tally sheet, left and right lanes of U.S. 1). The complete method of estimation is explained in Leeworthy (1996).

*Air Survey-Selection Method.* A schedule of flights leaving the Florida Keys is first obtained from the airport manager. Sampling days and times are then selected. Sampling is also stratified by season (summer and winter). People are screened after they pass through security.

Volunteers use the Tally Sheet, Air Survey to screen for eligible respondents. Again, respondents are chosen randomly using a similar rule as in the Auto survey by choosing every 5<sup>th</sup>, 10<sup>th</sup> or 20<sup>th</sup> person based on the number of people coming through security to the terminal departure lounge. People are first asked if they are a permanent resident of Monroe County, if so they are thanked and told we are only interviewing nonresidents of Monroe County and then tallied. If they answered no, they are asked if they did any recreation/tourist activity. The volunteer hands them the Blue Card, which lists what we mean by recreation/tourist activities. If no they are thanked and tallied; if yes, they are asked if they will participate in a 5-10 minute interview. If no, they are tallied and if yes, they are interviewed.

For private planes in Key West and Marathon, we will select random days and times stratifying by season, type of day and time of day as with the auto and air surveys and use the same tally sheet as the commercial airplane passenger survey. We will label the tally sheet as the private plane tally sheet with one for Key West and one for Marathon. The airport managers will provide the numbers of private planes departing each day.

*Cruise Ship Passenger-Selection Method.* All cruise ship passengers that disembark the ships in Key West are considered visitors that participated in recreation/tourist activities, so the selection method and tallying is shortened versus the auto and air surveys. However, in 1995-96, we learned that not all passengers disembark the ships in Key West. Some passengers on ships that anchor in the channel and then transport passengers from the cruise ship to the docks choose not to visit Key West and stay onboard. We send a team to count the number of passengers that get off the ships that anchor in the channel. We do this for a sample of ships each season to derive an average percent of passengers that disembark the ships. We then apply the estimated percent of passengers that disembark the ships to the total number of passengers on the ship manifests, maintained by the Port Authority, to arrive at estimates of passengers that are recreating visitors.

For the cruise ships, ship port calls are first obtained from the Port Authority. Ships are randomly selected for passenger interviews. Ships are stratified for selection by passenger carrying capacity and by whether they are anchored at the docks or ferry their passengers from ships anchored in the channel. Separate samples are done by season (summer and winter).

For each ship selected, volunteers randomly select passengers as they are approaching the ship to get back aboard thus ending their visit to Key West. Again random selection is done by selecting every 5<sup>th</sup>, 10<sup>th</sup> or 20<sup>th</sup> passenger depending on volume of traffic. Passengers are simply asked if they are a permanent resident of Monroe County. If yes, they are thanked and told we are only interviewing nonresidents of Monroe County. If no, they are asked if they would participate in a 5-10 minute interview. Again, disposition of each contact is tallied on the Tally Sheet, Cruise Ship.

*Auto, Air and Cruise Ship Survey Questionnaire.* The survey is limited to four pages (three pages of questions) to stay within the 5-10 minute survey time period. Surveys conducted off the highway, in the airports and on the cruise ships cannot exceed 10 minutes since people are ending their trips and are in the process of traveling. We have not changed our survey questionnaire from that used in 1995-96, so we are certain in will be successful in staying within the 5-10 minute constraint.

The Auto, Air and Cruise ship survey on-site questionnaire has several cards that are printed on color paper and assist respondents in answering questions. The Green Card is the “Respondent Card” and contains the “Confidentiality Statement”; Section 1, responses to question 11a; Section 2, responses to question 12; section 3, responses to question 15b; and Section 4, responses to question 16. The “White Card” is the Activities List and the Map of the Florida Keys, which specifies the five regions of the Keys is the third card used. The “Yellow Card” is the Special Events Card” that lists special events promoted by the TDC. The “Yellow Card” cannot be produced at this time since events are time dependent and we don’t have the schedules of events for the time periods of sampling.

To begin the interview, the interviewer is handed the Green Card and asked to read the Confidentiality Statement. The interviewer assigns an interview number to each onsite questionnaire. This is important because there are two mailback questionnaires that are handed to each respondent, if they agree to participate in the mailback portion of the survey. These interview numbers must be written also on the mailbacks so data on the mailbacks can be linked to the on-site questionnaire data.

The interviewer records the location of the interview, the day, month and time of the interview and the number of people in the vehicle (auto survey) or number of people in the party (air and cruise ship survey).

Question 1 asks for the number in the vehicle (party) that is age 16 or older. Question 2 obtains information on primary residence. Information is obtained on City or Nearest City; County (if USA); State (if USA); zip code (If USA); country; and then country/region of world.

Question 3 asks for time of arrival in the Florida Keys (month, day and time). This information is combined with time of interview to construct an alternative measure of length of stay.

Question 4 asks about the number of times the respondent visited the Florida Keys and participated in recreation/tourist activities over the past 12 months. Similarly, question 5 asks the number of days the respondent spent in the Florida Keys over the past 12 months where the respondent did some recreation/tourist activities.

Question 6 asks the number of nights spent in each of the five regions of the Florida Keys on the current trip. The interviewer first determines if there was an overnight trip from information obtained in question 3 and the interview date. If overnight trip, they hand the respondent the map of the Florida Keys with the five regions of the Florida Keys.

The next section of the survey (page 2) asks about activity participation in each of the five regions. The interviewer first hands the respondent the “White Card”, which is the activity list. The interviewer first asks question 7 which asks the respondent to read of the activity numbers for each activity they the respondent or anyone else in their vehicle (party) did during this trip to the Florida Keys. Question 8 then asks for each activity in which regions the respondent participated in the activity. Question 9 then asks for how many others participated in each activity in each region.



The next section (top of page 3) asks about special events and the primary purpose of the trip. All of these questions support objectives of the Monroe County Tourist Development Council (TDC). Questions 10 thru 11c address special events. A “Yellow Card” will be produced closer to the time of the beginning of the summer season survey (June 15 – August 31, 2007). The “Yellow Card” will list all the special events sponsored by the TDC with names and dates of the events. The interviewer first hands the “Yellow Card” to the respondent, then asks Question 10, which simply asks if the respondent attended any of the events. The respondent is then handed the “Green Card” and referred to Section 1 of the “Green Card” for answers to question 11a, which asks about the importance of the special events in planning the trip to the Florida Keys. Question 11b follows with asking if attending any special events resulted in extending the length of stay on the trip. If yes, question 11c. asks for how many days longer the trip was extended. Appropriate skip patterns are built into each question to direct the interviewer to the next appropriate question.

Question 12 asks for which reason best describes the primary purpose of the trip to the Florida Keys. The respondent is referred to Section 2 of the “Green Card” for the responses to this question.

The next to last section of the survey (bottom of page 3) is the demographics section. Questions 13 thru 17, obtain information on the respondent only for age, sex, race/ethnicity, household income, and ownership of a second home in the Florida Keys.

Question 18 is important for the expenditure mailback survey and asks who is paying the expenses and information necessary for putting expenditures on a per person per trip basis.

The last section of the survey (page 4) asks respondents if they would agree to participate in the mailback surveys. The respondent is informed of a sweepstakes/lottery that will be conducted for all people that respond to the mailback survey. Respondents are told there are two surveys; the expenditure survey and the satisfaction survey. Agreeing to take both surveys and responding to both surveys will double their chance of winning the sweepstakes/lottery. See answer to Question 9 on gifts to respondents.

Names, addresses and telephone numbers are obtained that will allow for follow-up efforts; one post card reminder is sent after two weeks and a full survey after one month if they have not returned their completed mailback questionnaires. The information is also used to notify winners and award the prizes. This information is destroyed after the prizes are awarded.

Separate surveys are conducted of summer and winter season visitors. Almost every statistical test we have ever performed has found statistically significant differences between summer and winter season visitors. For the Florida Keys, as with the rest of South Florida, the summer season is defined as from June through November and the winter season from December through May. Our survey year will consist of the summer season being June through November 2007 and the winter season being December 2007 through May 2008. Our samples will be taken for the summer season from June 15, 2007 through August 31, 2007 and the winter season samples will be taken between January 15, 2008 and April 31, 2008. These are approximately the same

times used in the 1995-96 and 2000-2001 studies. See Leeworthy (1996) for the 1995-96 study and Johns et al (2003b) for the 2000-2001 study.

***Expenditure Mailback.*** This questionnaire is almost identical to the one used in 1995-96. The only difference is a couple of new expenditure items. As described above, this questionnaire is handed to all Auto, Air and Cruise Ship passengers that agree to participate in the mailback survey. The questionnaire is designed as a self-mailer, which can be folded and sealed and dropped in the mail for delivery. At this time, we don't yet know who will implement the survey (contracts or agreements have not yet been completed), so the introductory letter's letterhead and the return address are not correct, they are just used as holding places.

There are two versions of the expenditure mailback. One version is for those who accessed the Florida Keys by Auto and Air, and were on trips of more than one day. This version can generally be referred to as the "long version". The second version is the "short version" and is designed to reduce the burden and increase response rates for those who accessed the Florida Keys by Cruise Ship and those who were on day-trips. In our analysis of nonresponse bias in the 1995-96 study, we found that day-trippers had a lower response rate and had lower expenditures both on a per person-trip and on a per person-day basis. This resulted in a slight upward bias in estimates of expenditures, which was adjusted for by sample weighting (see Leeworthy, 1996).

*Long Version.*

Part A focuses on the expenditures made on the recent trip (the interview trip). First respondents are asked who was paying expenses. There are two choices. If they paid their own expenses or if they shared expenses with someone else, they are asked to check the first box and then are instructed to report only expenses they personally paid for. If they were paying all the expenses for themselves and for one or more others, they are asked to check the second box. If they checked the second box, they are asked for the number of people they were paying expenses for, including themselves. Again, this will allow for normalizing estimates of expenditures per person-trip. Estimates of expenditures per person-trip will be multiplied by aggregate estimates of person-trips to derive total aggregate expenditures.

Trip expenditures are obtained for each expenditure item in three ways and for reporting purposes are organized into three columns. Column A: Total amount spent for this trip; Column B: Of the amount in column A, how much did you spend in South Florida; and Column C: Of the amount in column B, how much did you spend in the Florida Keys.

Respondents are first provided an explanation of the three columns and the definition of South Florida, then are provided an example using expenditure item "LODGING, PRIVATELY OWNED."

Part B. Annual Vacation and Equipment Purchases. The expenditure items in this section are non trip related expenditures. We ask for expenditures during the past 12 months. First, questions 1 and 2 ask for total boating trips away from home and the number of those trips to the Florida Keys over the past 12 months. Respondents are then provided an example and how the answers in the example should be recorded in the three columns. The expenditure items are

broken down into three sections: 1) Major Recreational Equipment, 2) Boating Equipment and 3) Annual Lodging-related Fees.

The last page of the survey provides for people supplying their names, addresses and telephone numbers so they can be entered into a sweepstakes/lottery to win various prizes. The prizes are listed. We don't know the exact prizes that will be offered at this time, so the current prize list is just a holding place. The prizes are provided by private businesses as part of their contribution to the project. A local bank will conduct the sweepstakes lottery. We (whoever is the contractor implementing the surveys) will provide the bank a list of database identification numbers. The bank will select the winning numbers and we will then send the bank names, addresses and telephone numbers of the winners. We will then destroy all names, addresses and telephone numbers in project databases. See details in answer to Question 9 which addresses gifts to respondents.

*Short Version.* This version of the expenditure survey was designed for Cruise ship passengers, who in 1995-96 did not stay in Key West for more than a few hours. Based on the results of the 1995-96 study, we will give this version to not only Cruise Ship passengers, but all those who are day-trippers. As discussed above, we think this will reduce nonresponse bias associated with day-trippers with low expenditures that don't want to fill out a large mailback on expenditures since so many of the expenditure items were not relevant (see Leeworthy, 1996 which found that there wasn't nonresponse bias in the Satisfaction mailback—people were willing to answer a more significant set of questions, if the questions seemed more relevant). In 1995-96, both the expenditure and satisfaction mailback were given to the same people, but the satisfaction mailback had significantly higher response rates.

The short version of the expenditure mailback questionnaire differs from the long version by a shorter list of expenditure items for trip expenditures and total elimination of the non-trip related expenditures.

*Satisfaction Mailback.* As in the 1995-96 and 2000-2001 studies, visitors interviewed on-site are asked to participate in two mailback surveys (expenditure and satisfaction). They are handed both the expenditure and satisfaction mailback surveys, which are both designed as self-mailer questionnaires, if they agree to participate. As with the expenditure mailback, the introductory letter on the first page, the return address/self-mailer page, and the sweepstakes/lottery cannot be completed at this time and the current versions just serve as holding places.

Question 1a, asks respondents to rate the importance of 25 natural resource attributes, facilities and services as they contribute to an ideal recreation/tourism setting for the activities they did in the Florida Keys on a five point scale, where 1=Not important and 5=Extremely important. Not Applicable (NA) and Don't Know (DK) responses are also provided. The respondent is asked to simply circle the appropriate response for each item.

Question 1b, asks the respondents to rate their satisfaction with the same list of items for which they rated importance in Section 1a. Again a five point scale is used with 1=Terrible to 5=Delighted. Again, respondents can answer Not Applicable (NA) or Don't Know (DK).

In analysis, the information from questions Ia and Ib are combined in what is called importance-satisfaction or importance-performance analysis (see Leeworthy and Wiley, 1997 for the importance-performance analysis using the 1995-96 study data and Leeworthy et al, 2004 for a comparative analysis of 1995-96 and 2000-2001 data). Importance-performance analysis provides a simple but more powerful method of analysis and interpretation than simple satisfaction scores. It allows for assessment of relative priorities.

The next section uses a five-year retrospective to look at trends in satisfaction scores for 11 of the 25 items included in questions Ia and Ib. The 11 items were selected by project partners based on their priorities and by reducing the list, reduces respondent burden. In the baseline 1995-96 study, the questions were designed for analysis of trends because no trend data existed. In this application, we have the 1995-96 data and we can compare changes in scores with the new data from questions 1a and 1b. We have decided to maintain this section since it provides an alternative method of assessing trends.

Question Ic asks if the visitor had visited the Florida Keys more than five years ago. This is important because in analyzing the 1995-96 and 2000-2001 data we found that those who had more experience with use of the Florida Keys had significantly different satisfaction scores (lower) than those who had less experience—a frame of reference effect. Those who visit the Florida Keys for the first time think everything is great and provide relatively higher satisfaction scores.

Question Id asks the respondent to rate their satisfaction, as of five or more years ago, with 11 items. The same five-point satisfaction scale used for questions Ib is used.

In the next section, a few special issue questions are asked. These questions address various issues for project partner objectives. Questions IIa and IIb address issues on boating for the FKNMS. Marina capacity and boat access to FKNMS waters is thought to be limited relative to growing demand. The FKNMS wants to know how many boats are trailered versus stored in marinas in the Florida Keys. This will provide aggregate estimates of capacity that will support future micro studies of capacity and the relationship to particular reefs.

The remaining questions in this section address issues of the Monroe County Tourist Development Council (TDC). Questions IIIa through IVc address the issue of return visitation and if cruise ship passengers return to the Florida Keys as non-cruise ship visitors on subsequent trips.

The last section of questions is the 16 questions for the Environmental Concern Index (ECI) or the Environmental Behavior Index (EBI) discussed in the Resident Survey above. The index will allow us to test if there are changes in the ECI or EBI of the visitor population.

**Sample 2. CUSTOMER Survey.** The CUSTOMER survey has its origins in the 1972 and 1977 Federal Estate Surveys, which later became the Public Area Recreation Visitor Survey (PARVS). PARVS was implemented on hundreds of recreation sites between 1985 and 1992. PARVS became CUSTOMER in the early 1990's. So CUSTOMER is the product of many years of research and learning about surveys on outdoor recreation. CUSTOMER was used in both the

1995-96 and 2000-2001 surveys. Actually, the Auto, Air, Cruise Ship Survey questionnaires are the CUSTOMER Survey questionnaires shortened. OMB approval for CUSTOMER expired 4/31/2006 and the survey was conducted under the burden hours of the USDA, Forest Service, hence the approval number 0596-0110, even though CUSTOMER was a multiple Federal agency effort including NOAA. As in the 1995-96 and 2000-2001 applications of CUSTOMER in the Florida Keys, it has been modified to meet the needs in the Florida Keys. There is an on-site questionnaire that takes on average 15 minutes to complete. There are also three follow-up self-mailer mailback questionnaires designed to achieve other project objectives (see Figures 2 and 3). These objectives were already discussed in the resident survey (e.g. Global Climate Change/Coral Bleaching and Coral Ecosystem Services: Societal Preferences and Policy/Management), so they will not be repeated here.

What is important to note here is that as in the 1995-96 and 2000-2001 studies, CUSTOMER is not a strictly stratified random sample. Because the on-site component of CUSTOMER takes on average 15 minutes to complete, it cannot be implemented in the Auto, Air and Cruise Ship Survey, which is a strict stratified random sample. Sample stratification in CUSTOMER is achieved by the use of “local knowledge”.

The Monroe County/Florida Keys is unique in that it has five different local Chambers of Commerce. In addition, the TDC has five districts (our regions) that correspond to the jurisdictions of the Chambers of Commerce. Within each TDC district there are sub-groups called umbrellas that promote different aspects of the tourist industry. There is a dive umbrella, a fishing umbrella, and a historic site and museum umbrella in each region. In addition to the Chambers of Commerce and TDC, there are several other organizations representing hotels/motels, dive shop owners/operators, and fishing guides. This local infrastructure contains a wealth of knowledge about local recreation/tourism.

In the 1995-96 and 2000-2001 studies, we used “local knowledge” to help us stratify our CUSTOMER samples across and within regions of the Florida Keys to get “representative” samples of visitors. In both previous studies, locals provided us with 200 interview sites and helped us stratify the samples across the 200 sites. We randomly select visitors at each of the 200 sites, but it is “local knowledge” that determines how we stratify the samples. That is why we describe CUSTOMER as not being a strict stratified random sample.

In analyzing the 1995-96 study data, which used the same two-sample approach being proposed here, we tested for differences between the two-samples. We found few statistically significant differences for demographic factors and activity participation. Sample weights were constructed using sample 1 to weight for sample 2. See Leeworthy (1996) for a discussion of these tests and the sample weighting. In the 1995-96 study, we concluded that “local knowledge” was very successful in providing us with a “representative” sample. Of course there is no guarantee that we will have the same success with “local knowledge” as we did in 1995-96, but all the same local infrastructure exists today and we believe they are even more informed today than they were more than a decade ago. So we propose to follow the same protocols as in the 1995-96 study relying on sample 1 to weight sample 2 for any discrepancies.

*CUSTOMER Selection Rules.* Although visitors are selected at random, there are rules for

qualification. As with the Auto, air and Cruise ship survey, they must not be permanent residents of Monroe County/Florida Keys, they must have participated in some form of outdoor recreation on their current visit, and they must be ending their visit. This last criterion is critical because we use CUSTOMER to estimate the intensity of use for each recreation activity in each region of the Florida Keys. We don't want people extrapolating about what they will or might do; we want to know what they did. We do relax the "exit condition" in a couple of circumstances. In the 1995-96 study, we learned that people in campgrounds are hard to interview in the morning they are leaving, since they are busy breaking camp. Interviewers try to interview at campsites in the evenings and if visitors are planning to leave before noon the next day, they are then qualified for the interview. Also, at other interview sites, when interviews are conducted at the end of the day, if the person will be leaving the Florida Keys before noon time the next day, they are qualified for the interview.

***CUSTOMER, On-site Survey Questionnaire.*** The CUSTOMER Survey On-site questionnaire is an 11-page form not including the cover page. On the bottom right corner of the cover page is where the interviewer records a unique interview identification number (Survey #). The Survey # allows connecting the on-site data to follow-up mailback questionnaire data.

On the top of page 1 there is information the interviewer fills out before the interview begins. The interviewer writes down their name, fills in the Location Code (each of the 200 survey sites is given a three-digit code), the type of interview site is recorded, the agency for which the study is being done (all will be recorded as NOAA here, but this field is maintained so if data is shared with the U.S. Forest Service to support their assessments of the supply and demand for recreation under the Resource Planning Act), the date of the interview (month, day and time), the type of day of the interview (weekday, weekend or holiday) and number of vehicles or intervening groups between interviews. This last item is used to look at cooperation rates.

Introduction and Qualifying Questions. These are the selection rules described above. Also once a visitor qualifies and agrees to be interviewed he/she is handed the "Yellow Card" called the Respondent Card and asked to read the Confidentiality Statement.

Trip Profile. The first section of the survey obtains information on the trip profile and contains 15 questions that address place of residence (Question 1); purpose of trip (Question 2); time of arrival in the Florida Keys (Question 3); time of departure or when ending the trip (Question 4); hours and/or miles of travel from residence to Florida Keys (Question 5); time spent visiting other sites on the trip (Question 6); was Florida Keys primary destination of trip (Question 7); distance Florida Keys is from primary destination of trip (Question 8); did travel to Florida Keys from a temporary location outside the Florida Keys (Question 9); will return to temporary residence after visit to Florida Keys (Question 10); distance from temporary residence to the Florida Keys (Question 11); have been to Florida Keys before (Question 12); year first visited Florida Keys (Question 13); number of visits to Florida Keys for outdoor recreation in the past 12 months (question 14); and number of days spent in Florida Keys during the past 12 months (question 15).

The trip profile information supports the travel cost model. The travel cost model relates the number of trips a respondent has taken to the Florida Keys over a 12-month period to the

estimated travel cost per trip and other factors (e.g. income, age, race/ethnicity, length of trip, substitute sites, etc.). The travel cost model is used to derive nonmarket economic use values for natural resource use in the Florida Keys (see Leeworthy and Bowker, 1997 for estimation of the travel cost model from the 1995-96 data). Answers to Question 1, 2, 3 (combined with question 4 to estimate length of trip), 13 and 14 can be used to test for differences between the CUSTOMER sample and the Auto and Air samples (Cruise Ship passengers are not included in the CUSTOMER sample because of their short stay and the length of the CUSTOMER survey). Questions 5 thru 11 provide the necessary information to adjust the travel cost model for multiple-destination bias. Question 2 makes use of the “Yellow Card” Section 1 to assist respondents in answering Question 2.

Activity Participation and Use. Questions 16 thru 19 obtain detailed information on activity participation and use by region for all members of the recreation party. The “White Card” or “Activities List” is handed to the respondent to assist them with answering the questions in this section. The map of the Florida Keys showing the five regions is also handed to the respondent. Number of days is only asked for those activities which have an “A” suffix on the activity number. This is done to reduce burden on respondents for activities where such information is not a high priority. Estimates of recreation participation by region can be used to test if “representative” samples were achieved in CUSTOMER versus the Auto and Air components of the Auto, Air and Cruise Ship Survey. The main objective in CUSTOMER is to get estimates of the intensity of use by activity and region as measured by number of days of use. The time available for the Auto, Air and Cruise Ship survey is too short to obtain this kind of detailed information.

Questions 20 thru 28 are focused on reef use both artificial and natural, separately. The focus here is limited to the activities that were undertaken during the current trip. The “Blue Card” or “Activities List for Reef Use” is used to help visitors with what activities are generally done on the reefs. Again the number of days and dives are only asked for those activities which have an “A” suffix on the activity number. Again this is done to lower burden on respondents for activities for which this information is not a high priority.

A check box is provided for each region on the top left corner of the area for recording answers. This box is checked when there was no reef use in the region. The questionnaire has also been designed for efficient coding by the interviewer. Questions 22 thru 28 are repeated over the recording matrixes for each region, so the interviewer doesn’t have to flip pages back and forth in the middle of the interview.

Questions 29 thru 31 focus on the respondents “main activity”. Question 29 asks which, if any, activity was the main reason for making the trip to the Florida Keys. This question is used as a screening question for answering questions 31 thru 38. Question 30 asks the respondent how many visits to the Florida Keys over the past 12 months were to do the main activity. And, Question 31 asks the respondent how many visits they made to any site (not just Florida Keys) for the main activity over the past 12 months.

The next set of questions (32 thru 38) are the “specialization” questions discussed in the Resident Survey above designed by researchers at the University of Massachusetts-Amherst, Human

Dimensions Program. The questions are only asked of those whose main activity was snorkeling, SCUBA diving or fishing. If one of these activities was not identified as the main activity in Question 29, then the interviewer skips to Question 39. For those who said that their main activity was snorkeling, SCUBA diving or fishing, the “Orange Card” was designed to help respondents answer the questions in this section. For questions 32 thru 35, the respondent simply reads a number corresponding to their answer to each question from the “Orange Card”. The same is true for each of the items in Questions 37 and 38.

Question 39 is used to obtain information on the number of people covered by the expenses the respondent made on the trip. This is used in the travel cost model to adjust for the number of people covered in the travel cost (See Leeworthy and Bowker, 1997 for an application to the 1995-96 data). Question 40 is also related to the travel cost model in addressing the value of time. Question 41 obtains information on all the modes of travel used on the trip to the Florida Keys. This question serves several purposes. First, it is used to segment the visitors into main type of access so comparisons can be made with the Auto and Air components of the Auto, air and Cruise Ship Survey for testing sample representativeness and for sample weighting. Second, the information is used in conjunction with the expenditure survey in the Auto, Air and Cruise Ship Survey to derive travel costs by different modes of travel (see Leeworthy and Bowker, 1997). Third, the TDC would like to know the various modes of travel people use on their trips to the Florida Keys.

Demographic Information. In this section information is obtained on demographic information with details on many items for up to eight people in the recreation party. Question 42 obtains information on the party size. Question 43 asks about the type of recreation party. Section 2 of the “Yellow Card” is used to assist the respondent. Question 44 asks about the respondent’s household. Again, the “Yellow Card”, Section 3 is used to assist respondents in answering this question. Question 45 asks about Household income before taxes. Again, the “Yellow Card”, Section 4 is used to help respondents answer the question. After Question 45, the respondent is asked to help the interviewer fill out the matrix on demographic characteristics for up to eight people in the recreation party. Demographic factors include age, sex, ethnicity, race, educational attainment, disability and employment status. Again, all these demographic factors can be used in various analyses, but also in checking sample representativeness.

On the final page of CUSTOMER On-site, there is a section for the interviewer to ask if the respondent will participate in a mailback survey. There are three mailback survey questionnaires. The first one includes the Knowledge, Attitudes & Perceptions of Sanctuary Management Strategies and Regulations and Nonmarket Economic Valuation of Reefs, the second is for the Global Climate Change/Coral Bleaching issue, the third is for Substitution and Management Alternatives using choice questions. These are the same questions as used in the Resident Survey. Each respondent will be asked to participate in two of the three mailback surveys. The respondent is told by completing and returning both questionnaires it will double their chance in the sweepstakes/lottery. Which pair of mailbacks a particular respondent will receive will alternate on different days. The objective will be to obtain sufficient sample sizes in each season for each questionnaire.



***Knowledge, Attitudes & Perceptions of Sanctuary Management Strategies and Regulations and Non-market Economic Valuation of Reefs Mailback Questionnaire.*** The questions used in each of the two modules of questions are the same as are included in the Resident Survey discussed above. The difference for the visitor survey is the combination of modules of questions. In the Resident Survey, nonmarket economic valuation of reefs was combined with the expenditure module. There is a direct connection with trip expenditures and the additional amount of expenditures people are asked to make in the choice questions. In the visitor application, we don't ask visitors to go through the details of providing their expenditures; we just ask them to think about what it cost them on their current trip. We are not sure if this will make any difference, since people should have a general idea of what their trip costs were and should be able to judge the amount in addition we are asking them to pay for the different reef protection programs.

An important difference between the resident and visitor surveys for the nonmarket economic valuation of reefs is the randomly assigned dollar amounts. The amounts are greater than those used for residents because of the much higher expenditures per person-trip by visitors. We use the same values used in the 2000-2001 study of reefs.

***Global Climate Change/Coral Bleaching.*** The same questions are used in both the stated preference choice questions and contingent behavior questions sections as in the Resident Survey. There are also four different versions as in the Resident Survey with each visitor asked six choice questions so that 24 different combinations of management strategies out of the total of 81 possible combinations of strategies are implemented. Randomly assigned dollar amounts in each choice question are done in the same manner as described in the Resident Survey.

The difference between the Visitor and Resident Surveys is that, in the Visitor Survey, the Importance-Satisfaction module of questions is used at the beginning of the mailback questionnaire. This is done for two reasons. First, importance and/or satisfaction ratings may be related to how people answer the choice questions. Second, the importance-satisfaction ratings provide another dimension to check if the CUSTOMER sample is yielding "representative" samples. This will be done by comparing importance and satisfaction scores from the CUSTOMER survey with the Auto and Air components of the Auto, Air and Cruise Ship Survey.

***Substitution and Management Alternatives (Choice Questions).*** Again, the same questions are used as in the Resident Survey for both the "Substitution" module of questions and the Management Alternatives (choice questions).

## **By Whom**

At this time we have not selected a contractor to implement the survey. Dr. Vernon R. (Bob) Leeworthy is the project leader and Leader of the Socioeconomic Research & Monitoring Program for the FKNMS. Bob will be the Contracting Officer's Technical Representative (COTR) on any contract to implement the survey. It hasn't been decided yet whether Bob will be involved in analysis and report writing or if all this will be done by contract. Hans Hoegh-Guldberg will be analyzing the data and developing reports for the Global Climate Change/Coral

Bleaching. Professor David Loomis leads the University of Massachusetts-Amherst, Human Dimensions Program and will be responsible for analysis and reports dealing with information designed by his group.

### **How Frequently**

This is a one-time application. The recreation/tourism study was recommended to be done approximately every ten years. Some sub-components, importance-satisfaction ratings, are recommended to be replicated every five years.

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

**Utility:** Completing the approximate 10-year replication of the study on recreation/tourism will demonstrate to the public that the FKNMS is living up to its commitments to implementing the recommendations for the Socioeconomic Research & Monitoring Program for the FKNMS. Completing of the study will also allow for the analysis of what some are calling “shifting baselines”. What is meant by “shifting baselines” has to do with what people want from the natural resources of the FKNMS. The study attempts to address this issue by tracking who comprises the local resident and visitor populations, what activities they are undertaking, the intensities of the activities (measured in person-days of activity), their importance/satisfaction ratings on key natural resource attributes, their knowledge, attitudes and perceptions of Sanctuary management strategies and regulations and how they value the natural resources in the FKNMS. By taking a decadal look at trends in these measurements, we will be able to investigate if there are fundamental changes in what people want from the natural resources in the FKNMS. Ultimately this information will feed the adaptive management process.

Education and outreach is an important management tool in the FKNMS. The information provided in this project will be an overwhelming boon to the Education and Outreach Program of the FKNMS. Knowledge of who are the users of the FKNMS, their knowledge, attitudes and perceptions of Sanctuary management strategies and regulations and, how users get their information are all important in designing effective education and outreach efforts.

Economic valuation information is important for supporting both public and private investments in the protection of the natural resources of the FKNMS and supporting damage assessments and restoration efforts. While benefit-cost analyses of public investments, damage assessments, and restoration efforts require net economic valuation measures, many local decision-makers are more concerned with the economic impact in terms of local sales/output, income and employment. So we provide this capability as well.

**Integrity:** Procedures have been established to protect the proprietary information provided by all respondents to all surveys. All personal identification information is removed from all databases to be sent to NOAA or distributed to the public. Each individual is assigned a database identification number in the database so the data from different portions of the survey can be linked for analysis. Personal identification information obtained to support awarding prizes in the sweepstakes/lottery is destroyed after the prizes have been awarded. Release of proprietary

information is further protected by the Freedom of Information Act (5 USC 522 (b) (4)) concerning trade secrets or proprietary information, such as commercial business and financial records.

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

*Objectivity:* All analyses and reports developed in this project will be peer reviewed before release to the public. This is the NOAA standard for socioeconomic information under the Information Quality Act. All survey modules of questions included in this project have all been through peer review as well. Most of the survey questions have been tested and analyzed in previous applications. New modules of questions have been peer reviewed.

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

No automated, electronic, mechanical, or other technological or other forms of information technology are being used. All surveys are either conducted face-to-face and recorded on paper forms or mail survey forms are used.

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

There are three major efforts either being planned or underway in Southeast Florida which address the socioeconomics of reef use; the study proposed here, the Florida Reef Resiliency Program, and the Southeast Florida Coral Reef Initiative. We have formed a steering committee with representatives from each of these studies. We have all agreed to harmonize our studies to avoid duplication, but most importantly to take consistent measurements when possible so as to support larger area assessments and to make comparisons across areas. Sample designs and questionnaires for all surveys are shared among projects. Dr. Vernon R. (Bob) Leeworthy is the Leader of the Socioeconomic Research & Monitoring Program for the FKNMS. One of his duties is to keep informed about what research is going on in the FKNMS. This project is a multiple group partnership for the purpose of integrating efforts and avoiding duplication.

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

The supply-side portions of this project require collection of information from Dive Shop Owners/Operators and from cruise ship lines. Cruise ship lines may not technically be small businesses but we treat them as such for purposes of this project. For both supply-side surveys, we have designed simple post-card surveys with postage paid self addressed post cards with a maximum of four questions.

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

NOAA and the managers of the FKNMS have agreed to include socioeconomic monitoring in the ecological monitoring program for the FKNMS. The information collection proposed here delivers on items identified by the user groups as necessary elements of a socioeconomic monitoring program. Many federal agencies that manage natural resources have been tasked by the National Academy of Sciences to adopt adaptive management practices. Adaptive management requires monitoring, both ecological and socioeconomic, to be able to assess what is happening to both the natural resources and the humans that depend upon those resources. The FKNMS has taken important steps along these lines and is living up to their compact with the stakeholders that have participated in developing the management plan for the FKNMS and have helped design the Socioeconomic Research and Monitoring Program. Not completing these data collections would leave NOAA and the FKNMS in violation of these agreements.

NOAA, the Monroe County Tourist Development Council and The Nature Conservancy are in the process of getting approved an interagency agreement which involves pooling resources across the three entities to conduct this project. Not being able to live up to this agreement would seriously jeopardize NOAA's ability to build public-private partnerships to accomplish NOAA missions.

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

Data collection will be consistent with OMB guidelines.

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

A Federal Register Notice (copy attached) solicited public comment on this collection. None was received.

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

The Monroe County Tourist Development Council (TDC) sales force arranges for the prizes for the sweepstakes/lottery. The sweepstakes/lottery prizes are provided by private businesses as part of their contribution to the project. This is done for the resident mail survey and the mailback portions of the visitor surveys. A local bank will operate the sweepstakes/lottery and will award all prizes. The actual gifts listed in the sweepstakes/lottery are from the 1995-96 study. The list on the last page of each mail-back questionnaire is a placeholder. Since private

businesses are providing and awarding the prizes, the actual prizes have not yet been determined, since the surveys aren't scheduled to begin until June 15, 2007. Neither NOAA nor the TDC is responsible for the prizes or the awarding of the prizes.

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

In the visitor surveys, we provide a "Confidentiality Statement" that we ask survey participants to read (On Green Card or Respondent Card of the Auto, Air and Cruise Ship Survey and the Yellow Card or Respondent Card of the CUSTOMER Survey). In the mailback surveys for the visitors and in the letters accompanying the mail surveys for residents, we inform survey participants of how we protect the confidentiality of their information.

All survey respondents are assigned unique database identification codes so data can be linked to follow-up mailback surveys and for quality analysis/quality control of the data. Any names, addresses or telephone numbers obtained for purposes of survey follow-up efforts to increase response rates or awarding prizes in the sweepstakes/lottery are eliminated from the databases after all survey follow-up efforts have ended and sweepstakes/lottery prizes have been awarded. This will be specified in the contract for implementation of the survey and development of project databases.

We protect the privacy of survey respondents and the extent of confidentiality is assured by exemption under the Freedom of Information Act (5 USC 522(b)(4)) concerning trade secrets or proprietary information, such as commercial business and financial records.

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

No questions included in any of the data collections proposed here would be classified as sensitive. Most are standard questions used elsewhere. All identifying information for an individual or business are considered sensitive to protect confidentiality and will not be included in any of the data bases for release to the public.

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

We currently estimate the number of respondents will be 15,686, responses will be between 23,537 and 25,498 and burden hours will be between 9,242 and 10,540 depending on mailback response rates (Table 3).

**Table 3. Burden Hour Calculations**

Survey	Completes	Respondent	Hours
<b>Visitor: Auto, Air &amp; Cruise Ship</b>			
On-site	4,250	4 minutes	283.33
Mailbacks	4,038 - 4,463	15 minutes	1,009.5 - 1,115.75
Expenditure (45% Response rate)	1,913	15 minutes	478.25
Satisfaction (50% Response rate)	2,125	15 minutes	531.25
Expenditure (50% Response rate)	2,125	15 minutes	531.25
Satisfaction (55% Response rate)	2,338	15 minutes	584.5
<b>Subtotal</b>	<b>8,288 – 8,713</b>		<b>1,293 - 1,399</b>
<b>Visitor: CUSTOMER</b>			
On-site	5,348	15 minutes	1,337
Mailbacks			1,604.34 - 1,796.34
KAP/Reef Valuation (45% Response rate)	1,203	20 minutes	401
Coral Bleaching (45% Response rate)	1,805	20 minutes	601.67
Substitution/Management Alternatives (45% Response rate)	1,805	20 minutes	601.67
KAP/Reef Valuation (50% Response rate)	1,337	20 minutes	459
Coral Bleaching (50% Response rate)	2,006	20 minutes	668.67
Substitution/Management Alternatives (50% Response rate)	2,006	20 minutes	668.67
<b>Subtotal</b>	<b>10,161 - 10,697</b>		<b>2,941 - 3,133</b>
<b>Resident Mail Survey</b>			
All four samples/versions (50% response rate)	5,000	1 hour	5,000
(60% Response Rate)	6,000	1 hour	6,000
<b>Subtotal</b>	<b>5,000 – 6,000</b>		
<b>Supply-side Surveys</b>			
Dive Shop Owners/Operators	68	5 minutes	5.7
Cruise Ships	20	5 minutes	1.7
<b>Subtotal</b>	<b>88</b>		<b>7.0</b>
<b>Total - All Project Surveys</b>	<b>23,537 – 25,498</b>		<b>9,243 - 10,539</b>

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

There will be no cost to respondents beyond burden hours.

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

Data collection, analysis and basic reports will take 2 to 3 years. Our “best” estimate of what we think it will cost to get these tasks completed is about \$541k. These costs are only the expected extramural costs for the data collection, analysis and basic reports. Not all the extramural costs

are borne by the Federal government. The Monroe County Tourist Development Council will provide \$65k and The Nature Conservancy will provide \$40k for a total non Federal contribution of \$105k of the \$541k. Thus, the total Federal share of the extramural costs is equal to \$436k.

Additional costs to the Federal government include the staff time of NOAA employees in developing and overseeing the interagency agreement with project partners; developing survey questionnaire, sample designs and support items; developing and overseeing contracts to conduct surveys, do analyses and develop reports; develop data documentation on CD-ROM; post project reports on NOAA web site in pdf; and travel to support setting up project with the community and project partners. The total other costs to the Federal government are estimated at \$26,700. So the total project costs to the Federal government are estimated at \$462,700 over a three year period. When annualized, the costs are estimated to be \$154, 233.

Total Project Cost to the Federal Government (Costs over three years):

Socioeconomic Monitoring Program – Florida Keys National Marine Sanctuary:  
recreation/Tourist Study

Contracts for Data Collectors.....\$436,000

NOAA Staff time in developing questionnaires, maps, interagency agreements and contracts:

- a. Development and oversight.....\$23,700
  - 1. GS-14 Economist 300 hours \* \$71/hour..... \$21,300
  - 2. GS-12 Economist 25 hours \* \$50/hour.....\$1,200
  - 3. Intern 80 hours \* \$15/hour.....\$1,200
- b. Travel.....\$3,000

Total Cost to Federal Government.....\$462,700

Annualized Cost to Federal Government (Total Project Costs to the Federal government divided by three years): \$154, 233.

**15. Explain the reasons for any program changes or adjustments reported in Items 13 or 14 of the OMB 83-I.**

This is a new program.

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

Similar reports to those developed in 1995-96 and 2000-2001 will be developed summarizing the results of the study. This includes separate reports and summaries for resident and visitor populations. Executive summaries, full reports and technical appendices (how it was done) will all be produced and posted on our web site in pdf. See our website for examples of 1995-96 work at <http://marineeconomics.noaa.gov/SocmonFK/Linking.html#reports>.

All reports will be peer reviewed per the NOAA standard under the Information Quality Act.

In addition to the above, some project results may be published in journals, since we have academic partners. Also, other project partners, such as the Monroe County Tourist Development Council (TDC) may have other special tabulations they want to produce over time beyond the summaries mentioned above. The TDC will be provided with all data and documentation on CD-ROM. This CD-ROM will also be made available to the general public, subject to any masking of the data required to protect privacy. We (NOAA) are not in control of what the TDC or others will publish.

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

OMB approval number and expiration date will be put on all questionnaires.

**18. Explain each exception to the certification statement identified in Item 19 of the OMB 83-I.**

No exceptions.

**B. COLLECTIONS OF INFORMATION EMPLOYING STATISTICAL METHODS**

**1. Describe (including a numerical estimate) the potential respondent universe and any sampling or other respondent selection method to be used. Data on the number of entities (e.g. establishments, State and local governmental units, households, or persons) in the universe and the corresponding sample are to be provided in tabular form. The tabulation must also include expected response rates for the collection as a whole. If the collection has been conducted before, provide the actual response rate achieved.**

**a. Resident Mail Survey**

In 1995-96, the Resident Survey was done using a combination telephone and mail survey. Basic demographics and participation in outdoor recreation in the Florida Keys was obtained by random digit dialing, which achieved a response rate of 66 percent. Detailed activity participation and use; expenditures, importance-satisfaction ratings; and environmental concern were obtained by a follow-up mail survey with a net response rate (telephone and mail) of 25 percent.

The current resident population of Monroe County is estimated at about 80,000 living in about 37,000 households. We plan to achieve at least 5,000 completed questionnaires out of the 37,000 households. This time a mail survey will be used by purchasing samples from either Survey Sampling, Inc. or Info USA and sending out a mail survey. The Dillman Method will be used with a pre-notification letter. A pre-notification letter will be sent out followed by a mailing with the full survey package. After two weeks, all those who have not responded will be



sent a post-card reminder. After one month, all those who have not responded will receive the full survey package. We expect to achieve between 50 and 60 percent response rates.

The resident survey, as explained in Part A, is done in three samples of 1,000 completes and one sample of 2,000 completes, assuming a 50% response rate or 6,000 completes assuming a 60% response rate. Within samples, there are different versions. Table 4 shows the different versions, number of mail outs planned and the expected number of returns per version at both the 50 and 60 percent response rates.

**Table 4. Resident Mail Survey: Expected Completes**

Survey Version	Response Rates <sup>2</sup>		
	# Mailed Out <sup>1</sup>	50%	60%
1	2,000	1,000	1,200
2a <sup>3</sup>	500	250	300
2b	500	250	300
2c	500	250	300
2d	500	250	300
3	2,000	1,000	1,200
4a <sup>4</sup>	667	333	400
4b	667	333	400
4c	667	333	400
4d	667	333	400
4e	667	333	400
4f	667	333	400
<b>Total</b>	<b>10,000</b>	<b>5,000</b>	<b>6,000</b>

1. Will purchase household mailing list from Sample Survey, Inc. or Info USA.
2. Assumed range of response rates using full Dillman Method plus pre-notification letter. Will send pre-notification letter followed by full survey. Two weeks later, for those who have not responded, a post-card reminder will be sent. After one month, for those who still have not responded, another full survey package will be sent.
3. The Global Climate Change/Coral Bleaching module of questions are included in Version 2 and there are four versions.
4. The Substitution/Management Alternatives module of questions are included in Version 4, which has six versions of the choice questions.

**b. Visitor Survey: Auto, Air and Cruise Ship Survey (Sample 1)**

The Auto, Air and Cruise Ship Survey (Sample 1) will be done the same way it was done in 1995-96 with only a few adjustments for changes in institutional structure (e.g. Marathon Airport now doesn't have commercial flights but has private planes). This survey is a stratified random survey with stratifications by season (summer and winter), type of day (weekday, weekend, and holiday), and mode of access (auto, air and cruise ship). There is an on-site survey and a

mailback survey. In the mailback survey, respondents are asked to participate in two mailbacks; the expenditure and satisfaction mailbacks.

We don't know a priori how to exactly stratify the sample since this requires knowing how many visitors there will be in each season. The project will estimate the number of person-trips and person-days of visitation by season and mode of access. See Leeworthy (1996) for how this was done in 1995-96. In recent years, the cruise ship portion of visitation has grown rapidly going over the one million mark in 2004. In 1995-96, there were 312 thousand cruise ship passengers. So cruise ship passengers have increased as a share of visitors. We have used a combination of the 1995-96 results and the increase in cruise ship passengers to arrive at a sampling stratification. The data will later be post weighted for estimates of the actual distribution. Table 5 shows the sampling stratifications for the on-site component of the survey and the expenditure and satisfaction mailback expected number of completes under different expected response rates.

Again, our definition of seasons is based on past research in South Florida. The summer season is defined as June through November and the winter season is defined as December through May. The summer season sampling will take place from mid-June through the end of August and the winter season sampling will take place from mid-January through the end of April.

The on-site sample expected number of completes is based on 1995-96 number of completions per sampling day/season/mode of access. About 40 days per season will be surveyed in the auto mode of access, with each day sampling four hours per day alternating between morning and afternoon sampling. Air surveys are done about 20 days during the summer season and 35 days during the winter season. Times of day will depend on flight schedules, which will be obtained from airport managers. Cruise Ships will also be done about 14 days during the summer season and 10 days during the winter season, but will depend on the schedule of port calls, which will be obtained from the Key West Port Authority. See Leeworthy (1996) for calendars of how days and times were chosen in 1995-96 study for all three modes of access.

Contingency planning is required for the auto survey for days delayed or cancelled due to rain. In addition, all surveying may end due to hurricane evacuation. This happened in 1995-96. Interviewers, who all have recreation vehicles and stay in campgrounds, had to be evacuated to a campground in central Florida. By law, all those in recreation vehicles must be the first to evacuate 24 hours before the storm is predicted to arrive. Make-up days are later scheduled.

In 1995-96, the expenditure mailback response rate was 37.9% in the summer season and 46% during the winter season, while the satisfaction mailback response rate was 47.1% in the summer season and 52.6% in the winter season. There was a learning effect in the 1995-96 study about how to improve mailback response rates from the summer to the winter survey. So we are basing our expected mailback response rates on the 1995-96 results and provide a range of results. Even though we hand both the expenditure and satisfaction mailbacks to the same people, response rates are always higher for the satisfaction mailback. We think we might be able to further narrow the difference by utilizing the short version of the expenditure mailback for those who are on day trips. We use a range of 45-50% for expenditure mailback response rates and 50-55% for the satisfaction mailback (Table 5).

**Table 5. Auto, Air and Cruise Ship Survey: Proposed Sampling (Expected Completes)**

Survey/Season	Mode of Access						Total
	Auto	Auto %	Air	Air%	Cruise Ship	Cruise Ship %	
<b>On-site Survey</b>							
Summer	1,280	68.1	300	16.0	300	16.0	1,880
Winter	1,720	72.6	350	14.8	300	12.7	2,370
<b>Subtotal</b>	<b>3,000</b>	<b>70.6</b>	<b>650</b>	<b>15.3</b>	<b>600</b>	<b>14.1</b>	<b>4,250</b>
<b>Expenditure Mail</b>							
			45 Percent Response Rate				
Summer	576		135		135		846
Winter	774		158		135		1,067
<b>Subtotal</b>	<b>1,350</b>		<b>293</b>		<b>270</b>		<b>1,913</b>
<b>Satisfaction Mail</b>							
			50 Percent Response Rate				
Summer	640		150		150		940
Winter	860		175		150		1,185
<b>Subtotal</b>	<b>1,500</b>		<b>325</b>		<b>300</b>		<b>2,125</b>
<b>Expenditure Mail</b>							
			50 Percent Response Rate				
Summer	640		150		150		940
Winter	860		175		150		1,185
<b>Subtotal</b>	<b>1,500</b>		<b>325</b>		<b>300</b>		<b>2,125</b>
<b>Satisfaction Mail</b>							
			55 Percent Response Rate				
Summer	704		165		165		1,034
Winter	946		193		165		1,304
<b>Subtotal</b>	<b>1,650</b>		<b>358</b>		<b>330</b>		<b>2,338</b>

### **c. Visitor CUSTOMER Survey (Sample 2)**

As described in Part A, the Visitor CUSTOMER Survey (Sample 2) is a stratified random sample with stratification across 200 sites and stratification done with use of local knowledge as in 1995-96. Data is post-sample weighted using Sample 1.

One of the main objectives of the CUSTOMER On-site Survey is to estimate the intensity of use (measured in person-days of activity) by activity, by season and region (five regions). In 1995-96, we utilized 12 interviewers, who completed 1,781 on-site interviews in the summer season and 2,809 interviews for the winter season for an annual total of 4,590 interviews. Based on the results of 1995-96 and the requirement to expand our estimates from four to five regions, we have planned to expand sample sizes to be able to reliably estimate days of activity for the five regions and seasons. To accomplish this we will expand the number of interviewers to 14. Table 6 shows our expected number of completes for the on-site survey to be 2,072 in the summer season and 3,276 in the winter season, for an annual total of 5,348.

In 1995-96, the CUSTOMER Survey had a mailback survey only during the winter season. This was done to achieve objectives of the University of Georgia's, Department of Applied Economics and was called the "Ecosystem Mailback Survey". In 1995-96, the "Ecosystem Mailback Survey" had a response rate of 53.5%. This time there are three mailbacks included in the CUSTOMER Survey for both seasons. Each of these was described in Part A. To achieve each project partner objectives, we determined what adequate sample sizes for each objective are, and then made sample allocations according to the following rules: Each respondent would be given two of the three mailbacks:

25% of the sample would be handed the KAP/Reef Valuation and Coral Bleaching mailback (N=601, assuming a 45% response rate).

25% of the sample would be handed the KAP/Reef Valuation and Substitution/Management Alternatives mailback (N=601, assuming a 45% response rate).

50% of the sample would be handed the Coral Bleaching and Substitution/Management Alternatives mailbacks.

So in total, 50% will receive the KAP/Reef Valuation for a total expected completed of 1,203 (assuming a 45% response rate); 75% will receive both the Coral Bleaching and Substitution/Management Alternatives mailback for a total expected completes of 1,804 for each mailback (assuming a 45% response rate). Given past experience, we might expect 50% response rates. Table 6 summarizes the expected completes under the two response rates.

**Table 6. CUSTOMER Survey Sampling (Expected Completes)**

<b>Survey/Season</b>		
<b>On-site Survey</b>		
Summer	2,072	
Winter	3,276	
<b>Total</b>	<b>5,348</b>	
	<i>Response Rates</i>	
	45%	50%
<b>Knowledge, Attitudes &amp; Perceptions/Reef Valuation<sup>1</sup> Mailback</b>		
Summer	466	518
Winter	737	819
<b>Total</b>	<b>1,203</b>	<b>1,337</b>
<b>Global Climate Change/Coral Bleaching Mailback<sup>1</sup></b>		
Summer	699	777
Winter	1,106	1,229
<b>Total</b>	<b>1,805</b>	<b>2,006</b>
<b>Substitution/Management Alternatives Mailback<sup>1</sup></b>		
Summer	699	777
Winter	1,106	1,229
<b>Total</b>	<b>1,805</b>	<b>2,006</b>

1. Each respondent is given two mailbacks. Half the sample gets the Knowledge, Attitudes, & Perceptions/Reef Valuation mailback and three-quarters of the sample get the Substitution/Management Alternatives mailback and the Global Climate Change/Coral Bleaching mailback. The Global Climate Change/Coral Bleaching mailback has four versions with sample size split equally across versions. The Substitution/Management Alternatives mailback has six versions equally split across the six versions.

**d. Supply-side Surveys**

*(1) Dive Shop Owners/Operators*

Under OMB Control Number 0648-0534, we are conducting a survey of Dive Shop Owners/Operators on their Knowledge, Attitudes & perceptions of Sanctuary Management Strategies and Regulations. We identified that there are currently 68 operations in the Florida Keys. The data collection is complete for that project and 65 of the 68 responded to the survey: a 95% response rate. We have designed a post card, four-question survey as a follow-up effort to this population. We expect a similar response rate. The President of the Keys Association of Dive Operators (KADO), Bob Holston, would like us to achieve 100% response rate (a Census) and is contacting all dive shops through out the Florida Keys and asking them to please participate.

## *(2) Cruise Ships*

We have never sampled the Cruise Ships themselves, only passengers of the ships that disembark the ships in Key West. Here we propose to ask a post-card, four question survey of each Cruise Ship business. The number of cruise ships and the number of cruise ship businesses are not necessarily the same, with the same company operating multiple ships that make a port call in Key West. We will work with the Key West Port Authority to contact all the cruise ship companies that have ships planning to make port calls over our study period. We expect this to be fewer than 20 companies that will receive the post card survey. We are expecting high response rates (over 90 percent).

**2. Describe the procedures for the collection, including: the statistical methodology for stratification and sample selection; the estimation procedure; the degree of accuracy needed for the purpose described in the justification; any unusual problems requiring specialized sampling procedures; and any use of periodic (less frequent than annual) data collection cycles to reduce burden.**

Sampling Procedures and Sample Selection: In Part A, Question 2, Section on “How”, sampling procedures and sample selection methods were described for each target population and survey of that population. In Part B, Question 1, sample stratifications were discussed for each survey. In Part A, Question 2, Section on “How”, we also described the special sampling stratification using local knowledge for the visitor CUSTOMER Survey.

Degree of Accuracy Needed: For all elements of the Resident and Visitor Surveys that are replicated from either the 1995-96 study or the 2000-2001 study, we have planned for sample sizes that exceed those achieved in previous studies that were successful, so we are confident estimates will be reliable for all of these project elements. For new project elements such as the Global Climate Change/Coral Bleaching, we are basing our selected sample sizes on other recent applications of the stated preference method used. Our planned sample sizes exceed those of most other applications so we are confident that we will be able to estimate values with acceptable statistical accuracy. For the new study on Substitution/Management Alternatives, the key aspect was sample size to support the choice questions. Dr. Chi-Ok Oh, Department of Parks, Recreation, and Tourism Management at Clemson University, designed the choice

experiment and says that a sample size of 1,100 to 1,200 would meet minimum requirements for this module of questions, using his 48 choice question approach across six versions of the survey, with each version containing 8 choice questions for each activity (fishing and diving). We were able to allocate a sample size of 2,000 for the resident population and 1,804 for the visitor population, thus ensuring that statistical accuracy required will be achieved.

Frequency of Data Collection: This is a one-time application. The recreation/tourism study was recommended to be done approximately every ten years. Some sub-components, importance-satisfaction ratings, are recommended to be replicated every five years. Estimates of reef use were done in the 2000-2001 study and the FKNMS asked if we could update these estimates since reef use is a high priority given the recent declines in live coral cover due to bleaching events and various diseases.

**3. Describe the methods used to maximize response rates and to deal with nonresponse. The accuracy and reliability of the information collected must be shown to be adequate for the intended uses. For collections based on sampling, a special justification must be provided if they will not yield "reliable" data that can be generalized to the universe studied.**

a. Resident Mail Surveys: We use pre-notification letters and the full Dillman Method for mail surveys. A pre-notification letter is first sent, followed by the full survey package. After two weeks, those who have not yet responded will receive a post-card reminder with a telephone number to call to get another copy of the survey. After one month, those who not yet responded will receive a full survey package. A sweepstakes/lottery is also set up as an incentive. This will be run by the private sector as part of their contribution to the project. Prizes have not yet been determined or who will run the sweepstakes/lottery, but it will most likely be a local bank that runs the sweepstakes/lottery. We believe that following the above procedures will yield response rates between 50 and 60 percent (Table 4). We will have full demographic profiles of respondents and will be able to test for nonresponse bias (see Leeworthy, 1996 for tests conducted for nonresponse bias and sample weighting used to adjust for minor biases).

b. Visitor On-site surveys; Auto, Air and Cruise Ship and CUSTOMER: In both the 1995-96 and 2000-2001 studies, we achieve between 90 and 95 percent response rates for the on-site surveys of visitors. One of the main reasons we believe we are so successful is our use of the Bicentennial Volunteers, Inc. (BVI) as our interviewers. The BVI interviewers are typically retired Tennessee Valley Authority (TVA) personnel that volunteer their time for public projects. A group of these volunteers have their own recreation vehicles (RVs) and we negotiate with private or government campgrounds to provide free campsites to our volunteers. The volunteers, being elderly people, do not intimidate any socioeconomic group. The fact that they can approach any group without intimidation leads to high cooperation rates. The response to first contact is crucial to survey research and the BVI volunteers are very successful. The volunteers also help out with ensuring that businesses that are selected as interview sites allow our interviewers to interview their customers. Some sites that considered their sites catering to high income/high profile visitors did not at first think their customers could be bothered by surveys. However, after meeting our BVI Interviewers, all businesses allowed us to interview their customers. We were in fact successful in turning the interviews into a value-added experience.

Many businesses and the Monroe County Tourist Development Council think the BVI interviewers are ambassadors for the Florida Keys.

We also believe the use of the BVI interviewers has increased our mailback response rates. Back in the mid 1980's we were using students to do the Public Area Recreation Visitor Surveys (PARVS). Because of quality problems, we switched to using the BVI in the late 1980s early 1990s. Not only did the quality of on-site interview data improve mailback response rates increased significantly.

c. Visitor Mailback Surveys; Auto, Air and Cruise Ship and CUSTOMER: In Tables 5 and 6, we show our expected response rates for the various mailback surveys in the two visitor surveys. Expected response rates are largely based on the experiences of 1995-96, but also the product of some learning from the 1995-96 experience. From the 1995-96 experience, we learned that there was some nonresponse bias in the expenditure mailback of the Auto, Air and Cruise Ship Survey. The bias came from day-trippers. Day-trippers, except Cruise Ship passengers, were not differentiated from other visitors as to type of mailback questionnaire they were given. This time we will provide a short version (the one the Cruise Ship passengers get) to day-trippers. We think this will improve response rates for this group and eliminate nonresponse bias from day-trippers.

As in 1995-96, we will obtain the names, addresses and telephone numbers from many of the visitors during the on-site interview so we can do follow-ups to increase response rates. The Monroe County Tourist Development Council (TDC) provides small gifts to hand out to visitors. They also provide a bookmark/brochure that explains the sweepstakes/lottery and the potential prizes visitors can win by returning their completed mailback questionnaires. If they return both questionnaires, visitors are told it doubles their chances of winning.

We are also able to analyze the data for nonresponse bias as was done in 1995-96 and adjust for nonresponse bias, if present, by sample weighting (see Leeworthy, 1996 for analyses of nonresponse bias for all mailbacks and sample weighting used to correct for any bias).

**4. Describe any tests of procedures or methods to be undertaken. Tests are encouraged as effective means to refine collections, but if ten or more test respondents are involved OMB must give prior approval.**

Most of the questionnaire modules are replications of past work and required no testing. Although, the Substitution/Management Alternatives modules are new in the Florida Keys, they have been used in many other places successfully and are merely adapted for application in the Florida Keys. The Global Climate Change/Coral Bleaching is also a new application in the Florida Keys, but the general methods have been used in tested elsewhere and we are confident in the design. The only aspect we would have liked to test is the range of randomly assigned dollar amounts. We believe that we can draw on our past experiences with willingness to pay in the Florida Keys (2000-2001 reef valuation study, see Johns et al, 2003a) to derive the range without expensive pre-testing.

**5. Provide the name and telephone number of individuals consulted on the statistical**



**aspects of the design, and the name of the agency unit, contractor(s), grantee(s), or other person(s) who will actually collect and/or analyze the information for the agency.**

Dr. Vernon R. (Bob) Leeworthy  
Leader, Coastal and Ocean Resource Economics Program and  
Leader, Socioeconomic Research & Monitoring Program FKNMS  
NOAA/NOS/Special Projects – N/MB7  
1305 East West Highway, SSMC4, 9<sup>th</sup> floor  
Silver Spring, MD 20910  
Telephone: (301) 713-3000 ext. 138  
Fax: (301) 713-4384  
E-mail: [Bob.Leeworthy@noaa.gov](mailto:Bob.Leeworthy@noaa.gov)

Dr. Hans Hoegh-Guldberg  
Economic Strategies Pty Ltd  
55 Whiteley Road, Oberon 2787 Australia  
Web: <http://economicstrategies.wordpress.com>  
Tel: +61 2 6336 0239 Mobile: 0419 220 377  
E-mail: [esi@lisp.com.au](mailto:esi@lisp.com.au)

Dr. Ove Hoegh-Guldberg (on sabbatical in Mexico can be reached through Hans)

Dr. David K. Loomis  
Human Dimensions Research Unit  
Department of Natural Resources Conservation  
University of Massachusetts Amherst  
Amherst, MA 01003  
Telephone: 413-545-6641  
Fax: 413-545-4358  
E-mail: [loomis@forwild.umass.edu](mailto:loomis@forwild.umass.edu)

Dr. Chi-Ok Oh  
Assistant Professor  
Dept. of Parks, Recreation and Tourism Management  
Clemson University  
Clemson, SC 29634-0735  
Telephone: 864-656-2005  
Fax: 864-656-2226  
E-mail: [chiokoh@clemson.edu](mailto:chiokoh@clemson.edu)

Dr. Robert Ditton  
Department of Wildlife and Fisheries Sciences  
Texas A&M University  
College Station, TX 77840-2258 USA  
(Voice) 979.845.9841  
(E-mail) (w) [r-ditton@neo.tamu.edu](mailto:r-ditton@neo.tamu.edu)

## References

- Brunson, M. W., & Shelby, B. 1993. "Recreation substitutability: A research agenda." Leisure Sciences, 15, 67-74.
- Bryan, H. 1977. "Leisure Value Systems and Recreational Specialization: The Case of Trout Fishermen." Journal of Leisure Research, 1: 174-187.
- English, Donald B. K., Warren Kriesel, Vernon R. Leeworthy, and Peter C. Wiley, 1996 . "Economic Contribution of Recreating Visitors to the Florida Keys/Key West." Athens, GA: USDA, Forest Service, Southern Forest Research Station; Athens, GA: The University of Georgia, Department of Agricultural and Applied Economics; and Silver Spring, MD: National Oceanic and Atmospheric Administration. 22 pp.  
<http://marineeconomics.noaa.gov/SocmonFK/publications/96-26.pdf>
- Dillman, D.A. 1978. Mail and Telephone Surveys: The Total Design Method. New York: John Wiley.
- Ditton, Robert B., Loomis, David K., and Choi, Seungdam. 1992. "Recreation Specialization: Re-conceptualization from a Social Worlds Perspective." Journal of Leisure Research, 24 (1): 33-51.
- Ditton, R. B. and Sutton, S.G. 2004. "Substitutability in Recreational Fishing." Human Dimensions of Wildlife 9: 87-102.
- Fisher, M.R. 1997. "Segmentation of the Angler Population by Catch, Participation, and Experience: A Management-oriented Application of Recreation Specialization." North American Journal of Fisheries Management, 17: 1-10.
- Florida Keys National Marine Sanctuary Draft Revised Management Plan. 2005. U.S. Department of Commerce, National Oceanic and Atmospheric Administration, National Ocean Service, National Marine Sanctuary Program, Florida Keys National Marine Sanctuary. Marathon, Florida, February 2005.

[http://www.fknms.nos.noaa.gov/regs/5yearreview/docs/fknms\\_mgt\\_plan.pdf](http://www.fknms.nos.noaa.gov/regs/5yearreview/docs/fknms_mgt_plan.pdf)

Florida Keys National Marine Sanctuary, Socioeconomic Research & Monitoring Program.  
<http://marineeconomics.noaa.gov/SocmonFK/keys.html>

Hendee, J. C., & Burdge, R. J. 1974. "The substitutability concept: Implications for recreation research and management." Journal of Leisure Research, 6, 155–162.

Iso-Ahola, S. E. 1980. *The Social Psychology of Leisure and Recreation*. Dubuque, IA: William C. Brown.

Johns, G. M., Leeworthy, V.R., Bell, F.W. and Bonn, M.A. 2003a. "Socioeconomic Study of Reefs in Southeast Florida." Final Report October 19,2001 as revised April 18, 2003 from Hazen and Sawyer to Broward County, Palm Beach County, Miami-Dade County, Monroe County, Florida Fish and Wildlife Commission and National Oceanic and Atmospheric Administration.  
<http://marineeconomics.noaa.gov/Reefs/02-01.pdf>

Johns, G. M., Leeworthy, V.R., Bell, F.W. and Bonn, M.A. 2003b. "Socioeconomic Study of Reefs in Southeast Florida, Technical Appendix." Final Report October 19,2001 as revised April 18, 2003 from Hazen and Sawyer to Broward County, Palm Beach County, Miami-Dade County, Monroe County, Florida Fish and Wildlife Commission and National Oceanic and Atmospheric Administration.  
<http://marineeconomics.noaa.gov/Reefs/PDF's/Tech/TechApp.pdf>

Layton, David F. and Brown, Gardner. 1998. "Heterogeneous Preferences Regarding Global Climate Change. Department of Environmental Science and Policy, University of California – Davis and Department of Economics, University of Washington, unpublished manuscript.

Leeworthy, Vernon R. 1996. "Technical Appendix: Sampling Methodologies and Estimation Methods Applied to the Florida Keys/Key West Visitor Surveys." Silver Spring, MD: National Oceanic and Atmospheric Administration. 170 pp.  
<http://marineeconomics.noaa.gov/SocmonFK/publications/97-29.pdf>

Leeworthy, Vernon R. and Bowker, J. Michael. 1997. "Nonmarket Economic User Values of the Florida Keys/Key West." Silver Spring, MD: National Oceanic and Atmospheric Administration and Athens, GA: U.S. Forest Service. 41pp.  
<http://marineeconomics.noaa.gov/SocmonFK/publications/97-30.pdf>

Leeworthy, Vernon R. and Wiley, Peter C. 1996a. "Visitor Profiles: Florida Keys/Key West." Silver Spring, MD: National Oceanic and Atmospheric Administration. 159pp.  
<http://marineeconomics.noaa.gov/SocmonFK/publications/96-25.pdf>

Leeworthy, Vernon R. and Wiley, Peter C. 1996b. "Importance and Satisfaction Ratings by Recreating Visitors to the Florida Keys/Key West". Silver Spring, MD: National Oceanic and Atmospheric Administration. 23pp.

<http://marineeconomics.noaa.gov/SocmonFK/publications/96-27.pdf>

- Leeworthy, Vernon R. and Wiley, Peter C. 1997a. "A Socioeconomic Analysis of the Recreation Activities of Monroe County Residents in the Florida Keys/Key West." Silver Spring, Maryland: National Oceanic and Atmospheric Administration. 49pp.  
<http://marineeconomics.noaa.gov/SocmonFK/publications/97-18.pdf>
- Leeworthy, Vernon R. and Wiley, Peter C. 1997b. "Technical Appendix: Sampling Methodologies and Estimation Methods Applied to the Survey of Monroe County Residents." Silver Spring, Maryland: National Oceanic and Atmospheric Administration. 58pp.  
<http://marineeconomics.noaa.gov/SocmonFK/publications/97-29.pdf>
- Leeworthy, Vernon R., Wiley, Peter C., and Hospital, Justin D. 2004. "Importance-Satisfaction Ratings Five-year Comparison, SPA & ER Use, and Socioeconomic and Ecological Monitoring Comparison of Results 1995-96 to 2000-01." Silver Spring, MD: National Oceanic and Atmospheric Administration. 59pp.  
<http://marineeconomics.noaa.gov/SocmonFK/impsat.pdf>
- Mendelsohn, R. and Neumann, J.E. (Eds). *The Impact of Climate Change on the United States Economy*. Cambridge University Press, Cambridge.
- Richardson, Robert B. and Loomis, John B. 2004. "Adaptive Recreation Planning and Climate Change: A Contingent Visitation Approach." *Ecological Economics*, 50: 83-99.
- Salz, Ronald J. and Loomis, David K. 2005. "Recreation Specialization and Anglers' Attitudes Towards Restricted Fishing Areas." *Human Dimensions of Wildlife*, 10: 187-199.
- Salz, Ronald J., Loomis, David K. and Finn, Kelly L. 2001. "Development and Validation of a Specialization Index and Testing of Specialization Theory." *Human Dimensions of Wildlife*, 6: 239-258.
- Shelby, B., & Vaske, J. J. 1991. "Resource and activity substitutes for recreational salmon fishing in New Zealand." *Leisure Sciences*, 13, 21- 32.
- Snow, R. 1980. "A structural analysis of recreation activity substitution." Unpublished doctoral dissertation, Texas A&M University, College Station.
- Vaske, J. J., and Donnelly, M. P. 1982. "Predicting attractive resource choices." In *Forest and River Recreation: Research Update (Miscellaneous Publication 18)*. (pp. 85-88). University of Minnesota Agricultural Station, St. Paul.
- Weigel, Russell H. and Weigel, Joan. 1978. "Environmental Concern: The Development of a Measure," *Environmental Behavior* 10 (1): 3-15.

## Overview of Questionnaires

- **Resident Mail Survey**
- **Visitor: Auto, Air and Cruise Ship Survey**
  - **On-site Survey**
  - **Expenditure Mailback**
  - **Satisfaction Mailback**
- **Visitor: CUSTOMER SURVEY**
  - **On-site Survey**
  - **Knowledge, Attitudes & Perceptions of Sanctuary Management Strategies and Regulations/Reef Valuation Mailback**
  - **Global Climate Change/Coral Bleaching Mailback**
  - **Substitution/Management Alternatives Mailback**
- **Supply-side Surveys**
  - **Dive Shop Owners/Operators – Post-card Survey**
  - **Cruise Ships – Post-card Survey**

## RESIDENT MAIL SURVEY

- **Sample 1/Version 1**
  - Questionnaire
  - Activities List (White Card)
  - Activities List – Reefs (Blue Card)
  - Map of Florida Keys (Five Regions)

Sample 1/Version 1 includes the core questions (Activity Participation and Use; Specialization; and Demographics); Trip Expenditures; Annual Vacation and Equipment Purchases; and Reef Valuation.

- **Sample 2/Version 2**
  - Questionnaire
  - Version 2a
  - Version 2b
  - Version 2c
  - Version 2d
  - Activities List, Activities List – Reefs and Map are the same as Sample 1/Version 1 and are not repeated here.

Sample 2/Version 2 has four sub-versions. The difference between versions is the choice questions for the Global Climate Change/Coral Bleaching Module. Each version has six choice questions, which are different combinations of management strategies. There are 24 different choice questions across the four sub-versions. This version includes the core questions; Satisfaction; Environmental Concern; and the Global Climate Change/Coral Bleaching.

- **Sample 3/Version 3**
  - Questionnaire
  - Activities List, Activities List – Reefs and Map are the same as Sample 1/Version 1 and are not repeated here.

Sample 3/Version 3 includes the core questions; and the Knowledge, Attitudes & Perceptions of Sanctuary Management Strategies and Regulations.

- **Sample 4/Version 4**
  - Questionnaire
  - Version 4a
  - Version 4b
  - Version 4c
  - Version 4d
  - Version 4e
  - Version 4f
  - Activities List, Activities List – Reefs and Map are the same as Sample 1/Version 1 and are not repeated here.

Sample 4/Version 4 has six sub-versions. The difference between versions is the choice questions for the Alternative Management Options Module. Each version has eight (8) choice questions for each of two activities (fishing and diving). Across the five sub-versions there are 48 different choice questions for each of the two activities. This version includes the core questions; Substitution; and Management Alternatives.



# *Monroe County Resident Survey*

**Your answers are voluntary and confidential.**

Your name will never be released to anyone unless otherwise required by law. After the completion of the project all materials identifying you as an individual will be destroyed.



This is a cooperative research project of the Monroe County Tourist Development Council and the National Oceanic and Atmospheric Administration. Public reporting burden for this collection of information is estimated to average 1 hour 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 this burden, to U.S. Department of Commerce, Clearance Officer, Office of Chief Information Officer, Rm. 6625, 14th and Constitution Avenue NW, Washington, DC 20230. Notwithstanding any other provisions of the law, no person is required to respond to, nor shall any person be subject to penalty for failure to comply with, a collection of information subject to requirements of the Paperwork Reduction Act, unless that collection of information displays a currently valid OMB Control Number.

## Resident Survey

1. Overall, how would you rate Monroe County as a place to live?

- a. Excellent
- b. Good
- c. Fair
- d. Poor

Please circle letter corresponding to your answer

2. There are many reasons that people choose to live where they do in Florida. What are the two most important reasons you chose to live in Monroe County?

- a. No special reason
- b. Born here
- c. Job or business
- d. Climate
- e. Environment
- f. Access to natural resources, such as natural settings and wildlife
- g. Opportunities for water activities, such as fishing or diving
- h. Low crime rate
- i. Cultural activities
- j. Retirement
- k. Some other reason (specify) \_\_\_\_\_

Please circle letters corresponding to the two most important reasons

3. In the past 12 months, have you done any outdoor recreation activities in the Florida Keys?

- a. Yes (Go to Part A)
- b. No (Go to Part G)

Please use the enclosed White Card-Activities List to see what we mean by outdoor recreation

**Part A: Outdoor recreation activities during the past 12 months in the Florida Keys**

Please use the enclosed Activities List and map to help you answer the questions in this section

- A1. Which of the activities on the enclosed Activities List did you or someone in your household do in the Florida Keys during the last 12 months?**
- A2. Pleas fill in the circle for each activity you, yourself did during the past 12 months in the Upper Keys, Islamorada, Marathon, Lower Keys and Key West?**
- A3. On how many different days did you, yourself participate in each activity in the Upper Keys, Islamorada, Marathon, Lower Keys and Key West?**

Only answer for those activities you listed with an A on the end of the activity number

- A4. How many others (excluding yourself) in your household did each activity in the Upper Keys, Islamorada, Marathon, Lower Keys and Key West?**

A1 Activity	Upper Keys			Islamorada			Marathon			Lower Keys			Key West		
	A2 Resp. days	A3 #	A4 #	A2 Resp. days	A3 #	A4 #	A2 Resp. days	A3 #	A4 #	A2 Resp. days	A3 #	A4 #	A2 Resp. days	A3 #	A4 #
_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____
_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____
_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____
_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____
_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____
_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____
_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____
_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____
_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____
_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____
_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____
_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____
_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____
_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____
_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____
_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____
_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____
_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____
_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____
_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____
_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____

**A5. What would you say is the most important activity you did in the Florida Keys?**

**Most Important Activity** \_\_\_\_\_ (Activity List Number)

**No Activity Most Important (fill in box)**

**A6. On how many different days did you participate in outdoor recreation activities outside the Florida Keys during the past 12 months?** \_\_\_\_\_ (# of days)

**Part B: Reef use in the Florida Keys during the past 12 months. Both artificial and natural reefs.**

Please use Blue Card with Activities List for reef use and map of the Florida Keys in answering Part B

- B1. Which activities did you or someone in your household do on either artificial or natural reefs during the past 12 months in the Upper Keys, Islamorada, Marathon, Lower Keys and Key West?**

If you did not do anything in a region, check the box indicating no reef use in the region

- B2. Please fill in the circle for each activity you, yourself, did during the past 12 months in the Upper Keys, Islamorada, Marathon, Lower Keys and Key West.**
- B3. How many others in your household did each activity on the reefs in the Upper Keys, Islamorada, Marathon, Lower Keys and Key West during the past 12 months?**
- B4. On how many different days did you, yourself, participate in each activity on the reefs in the Upper Keys, Islamorada, Marathon, Lower Keys and Key West during the past 12 months?**
- B5. On how many different days did you, yourself, participate in each activity on the artificial reefs in the Upper Keys, Islamorada, Marathon, Lower Keys and Key West during the past 12 months?**
- B6. On how many different days did you, yourself, participate in each activity on the natural reefs in the Upper Keys, Islamorada, Marathon, Lower Keys and Key West during the past 12 months?**

Note: If you did part of a day on an artificial reef and part of a day on a natural reef, count one whole day on each type of reef

- B7. How many different dives did you, yourself, make for each type of diving activity you did on the reefs in the Upper Keys, Islamorada, Marathon, Lower Keys and Key West during the past 12 months?**

Diving activities include all snorkeling and scuba diving activities on the Blue Card-Activities List (Reef)

A dive is defined as an entry and exit from the water to snorkel or scuba dive

- B8. How many different dives did you, yourself, make for each type of diving activity you did on the artificial reefs in the Upper Keys, Islamorada, Marathon, Lower Keys and Key West during the past 12 months?**
- B9. How many different dives did you, yourself, make for each type of diving activity you did on the natural reefs in the Upper Keys, Islamorada, Marathon, Lower Keys and Key West during the past 12 months?**

Please refer to Questions B1 - B9 when filling in the tables on the following two pages

There is one table for each of the five regions of the Florida Keys (Upper Keys, Islamorada, Marathon, Lower Keys and Key West)

No Reef Use

Upper Keys

B1	B2	B3	B4	B5	B6	B7	B8	B9
Activity	Resp.	# Others	Respondent # of days	# days artificial	# days natural	Respondent # dives	# dives artificial	# dives natural
_____	○	_____	_____	_____	_____	_____	_____	_____
_____	○	_____	_____	_____	_____	_____	_____	_____
_____	○	_____	_____	_____	_____	_____	_____	_____
_____	○	_____	_____	_____	_____	_____	_____	_____
_____	○	_____	_____	_____	_____	_____	_____	_____
_____	○	_____	_____	_____	_____	_____	_____	_____
_____	○	_____	_____	_____	_____	_____	_____	_____
_____	○	_____	_____	_____	_____	_____	_____	_____
_____	○	_____	_____	_____	_____	_____	_____	_____

No Reef Use

Islamorada

B1	B2	B3	B4	B5	B6	B7	B8	B9
Activity	Resp.	# Others	Respondent # of days	# days artificial	# days natural	Respondent # dives	# dives artificial	# dives natural
_____	○	_____	_____	_____	_____	_____	_____	_____
_____	○	_____	_____	_____	_____	_____	_____	_____
_____	○	_____	_____	_____	_____	_____	_____	_____
_____	○	_____	_____	_____	_____	_____	_____	_____
_____	○	_____	_____	_____	_____	_____	_____	_____
_____	○	_____	_____	_____	_____	_____	_____	_____
_____	○	_____	_____	_____	_____	_____	_____	_____
_____	○	_____	_____	_____	_____	_____	_____	_____
_____	○	_____	_____	_____	_____	_____	_____	_____

No Reef Use

Marathon

B1	B2	B3	B4	B5	B6	B7	B8	B9
Activity	Resp.	# Others	Respondent # of days	# days artificial	# days natural	Respondent # dives	# dives artificial	# dives natural
_____	○	_____	_____	_____	_____	_____	_____	_____
_____	○	_____	_____	_____	_____	_____	_____	_____
_____	○	_____	_____	_____	_____	_____	_____	_____
_____	○	_____	_____	_____	_____	_____	_____	_____
_____	○	_____	_____	_____	_____	_____	_____	_____
_____	○	_____	_____	_____	_____	_____	_____	_____
_____	○	_____	_____	_____	_____	_____	_____	_____
_____	○	_____	_____	_____	_____	_____	_____	_____
_____	○	_____	_____	_____	_____	_____	_____	_____

No Reef Use

Lower Keys

B1		B2	B3	B4	B5	B6	B7	B8
B9		#	Respondent	# days	# days	Respondent	# dives	# dives
Activity	Resp.	Others	# of days	artificial	natural	# dives	artificial	natural
_____	○	_____	_____	_____	_____	_____	_____	_____
_____	○	_____	_____	_____	_____	_____	_____	_____
_____	○	_____	_____	_____	_____	_____	_____	_____
_____	○	_____	_____	_____	_____	_____	_____	_____
_____	○	_____	_____	_____	_____	_____	_____	_____
_____	○	_____	_____	_____	_____	_____	_____	_____
_____	○	_____	_____	_____	_____	_____	_____	_____
_____	○	_____	_____	_____	_____	_____	_____	_____
_____	○	_____	_____	_____	_____	_____	_____	_____
_____	○	_____	_____	_____	_____	_____	_____	_____

No Reef Use

Key West

B1	B2	B3	B4	B5	B6	B7	B8	B9
Activity	Resp.	#	Respondent	# days	# days	Respondent	# dives	# dives
		Others	# of days	artificial	natural	# dives	artificial	natural
_____	○	_____	_____	_____	_____	_____	_____	_____
_____	○	_____	_____	_____	_____	_____	_____	_____
_____	○	_____	_____	_____	_____	_____	_____	_____
_____	○	_____	_____	_____	_____	_____	_____	_____
_____	○	_____	_____	_____	_____	_____	_____	_____
_____	○	_____	_____	_____	_____	_____	_____	_____
_____	○	_____	_____	_____	_____	_____	_____	_____
_____	○	_____	_____	_____	_____	_____	_____	_____
_____	○	_____	_____	_____	_____	_____	_____	_____
_____	○	_____	_____	_____	_____	_____	_____	_____

## Part C: Specialization

In this section, we are interested in learning more about your primary activity. Please answer the following questions based on the response you gave to QUESTION A5.

For the four questions below, please read the four choices and circle the one answer that best fits you for that question.

### C1. When I participate in my primary activity, I feel like:

- 1 a beginner. I don't really feel like I am part of the activity scene.
- 2 an occasional or irregular participant. Sometimes it is fun, entertaining or rewarding to do my activity.
- 3 a habitual and regular participant in the activity.
- 4 an insider to the sport. The activity is an important part of who I am.

### C2. During my activity, I can best be described as:

- 1 having very little understanding of the activity. I am often unsure about how to do certain things when I go.
- 2 having some understanding of the activity, but still in the process of learning more about the sport. I am becoming more familiar and comfortable with the activity.
- 3 being comfortable with the sport. I have a good understanding of what I can do, and how to do it.
- 4 a knowledgeable expert in the sport. I encourage, teach and enhance opportunities for others who are interested in the activity.

### C3. My relationships with others who do the activity are:

- 1 not established. I really don't know any other people who do the activity.
- 2 very limited. I know some others in the activity by sight and sometimes talk with them, but I don't know their names.
- 3 one of familiarity. I know the names of others who do the activity, and often speak with them.
- 4 close. I have personal and close relationships with others in the activity. These friendships often revolve around the activity.

### C4. My commitment to the activity is:

- 1 very slight. I have very little connection to the activity. I may or may not continue to participate in the sport in the future.
- 2 moderate. I will continue to do it as it is entertaining and provides the benefits I want.
- 3 fairly strong. I have a sense of being a member of the activity, and it is likely that I will continue to do it for a long time.
- 4 very strong. I am totally committed to the activity. I encourage others to participate in the sport and seek to ensure the activity continues into the future.

### C5. If you had to replace all of the equipment that you currently own for your primary activity with similar equipment, how much would it cost to replace?

\$ \_\_\_\_\_ AMOUNT TO REPLACE PRIMARY ACTIVITY EQUIPMENT



**C6. To what extent do you make use of the following for current information about your primary activity? Please circle number that indicates your extent of use for each source of information.**

	No Use	Almost no use	A little use	Some use	A lot of use
a. Talking with others who participate in the activity.....	1	2	3	4	5
b. Magazines.....	1	2	3	4	5
c. Government agency publications.....	1	2	3	4	5
d. Conservation organization publications.....	1	2	3	4	5
e. Newspapers.....	1	2	3	4	5
f. Diving shops/companies.....	1	2	3	4	5
g. Club meetings.....	1	2	3	4	5
h. Television.....	1	2	3	4	5
i. Radio.....	1	2	3	4	5
j. Internet.....	1	2	3	4	5

**C7. Below is a list of reasons why people engage in recreation activities. Please circle the number that indicates how important each item is to you as a reason for participating in your primary activity.**

	Not at all important	Slightly important	Moderately important	Very important	Extremely important
a. To be outdoors.....	1	2	3	4	5
b. For family recreation.....	1	2	3	4	5
c. To experience new and different things.....	1	2	3	4	5
d. For relaxation.....	1	2	3	4	5
e. To be close to the water.....	1	2	3	4	5
f. To get away from the demands of other people.....	1	2	3	4	5
g. To be with friends.....	1	2	3	4	5
h. To develop my skills.....	1	2	3	4	5
i. To get away from the regular routine.....	1	2	3	4	5
j. To experience adventure and excitement.....	1	2	3	4	5
k. To experience natural surroundings.....	1	2	3	4	5

**Part D: Your trip expenditures for your last trip in the Florida Keys to do outdoor recreation activities**

**D1. What activities did you do on your last trip or outing to do outdoor recreation in the Florida Keys?**

Please use White Card-Activities List
---------------------------------------

_____	_____	_____
_____	_____	_____

**D2. Where did you go on your last trip or outing to do outdoor recreation activities in the Florida Keys?**

_____	_____
closest city	closest Mile Marker

**D3. a. How far was the place you went from your place of residence? \_\_\_\_\_ Miles**

**b. If your last trip or outing involved use of a boat, how many miles from either your place of residence or from where you launched or store your boat to the place where you did the activity?**

\_\_\_\_\_ Miles       No Boat

**D4. How many days was your last trip or outing to do outdoor recreation activities in the Florida Keys?**

\_\_\_\_\_ Days

**D5. How many nights did you spend in a location away from home in the Florida Keys on your last trip or outing to do outdoor recreation in the Florida Keys?**

\_\_\_\_\_ Nights

**D6. How many people, including yourself, were you or someone in your household paying expenses for on your last trip or outing in the Florida Keys?**

\_\_\_\_\_ People

Please report your expenditures for each item listed to the nearest whole dollar. Put the total amount of money you spent on your last trip or outing in the Florida Keys in Column A.

EXAMPLE: Joe and Jane Smith, who live in Key Largo, drove to Key West and spent 2 nights in a Key West hotel at \$125 per night, or a total of \$250. The Smiths also spent \$200 on food and drink at restaurants and bars, \$30 on gas for their vehicle and \$400 for a charter boat for diving.

Expenditure	Column A: Amount spent in Florida Keys
LODGING, <u>PRIVATELY OWNED</u> (non-government) Hotel/motel/bed & breakfast/cabin, etc. Camping site (RV/tent/camper)	\$250 <hr/> \$0 <hr/>
FOOD & BEVERAGES Food and drinks consumed at restaurants and bars Beverages purchased at a store for carry-out Food purchased at a store for carry-out	\$200 <hr/> \$0 <hr/> \$0 <hr/>
TRANSPORTATION Gas & oil for auto/RV	\$30 <hr/>
SCUBA DIVING/SNORKELING Rental fee for equipment Charter/party boat, guide service	\$0 <hr/> \$400 <hr/>

Expenditure	Column A: Amount spent in Florida Keys
LODGING, <u>PUBLICLY OWNED</u> (government) Hotel/motel/bed & breakfast/cabin, etc. Camping site (RV/tent/camper)	 <hr/> <hr/>
LODGING, <u>PRIVATELY OWNED</u> (non-government) Hotel/motel/bed & breakfast/cabin, etc. Rental home, cottage, cabin, condo Camping site (RV/tent/camper)	 <hr/> <hr/> <hr/>
FOOD & BEVERAGES Food and drinks consumed at restaurants and bars Food and drinks purchased at stores for carry-out	 <hr/> <hr/>
TRANSPORTATION Rental automobile, motor home, trailer, motorcycle or other recreation vehicle Gas & oil for auto/RV Repair & service for auto/RV Parking fees & tolls Taxi fare Bus fare a) Package tour b) Any other bus fare Airline fare a) Package tour b) Any other airline fare	 <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/>

Expenditure	Column A: Amount spent in Florida Keys
<b>BOATING</b> Boat, jet ski, and wave runner rental Boat fuel and oil Boat repairs Boat launch fees Boat slip fees or marina fees (this trip only) Sailing charters or sunset cruises	 <hr/> <hr/> <hr/> <hr/> <hr/>
<b>FISHING</b> Cut bait Live bait Daily or special fishing permits Fishing lines, fly lines, fish nets, and minnow traps Charter/party boat/guide service	 <hr/> <hr/> <hr/> <hr/> <hr/>
<b>SCUBA DIVING/SNORKELING</b> Rental fee for equipment Charter/party boat/guide service	 <hr/> <hr/>
<b>SIGHTSEEING</b> Sightseeing tours Glass bottom boat rides Back country excursions, kayak tours Park entrance fees Admission to tourist, amusement, festivals and other commercial attractions	 <hr/> <hr/> <hr/> <hr/> <hr/>

Expenditure	Column A: Amount spent in Florida Keys
<p><b>OTHER ACTIVITY EXPENDITURES</b></p> <p>Rental fee for recreation equipment (bicycles, golf carts or others not listed above)</p> <p>Guide service, tour, or outfitters (not listed above, like parasailing)</p> <p>Admission to motion pictures, theaters, museums, etc.</p>	<p>_____</p> <p>_____</p> <p>_____</p>
<p><b>MISCELLANEOUS EXPENDITURES</b></p> <p>Film Purchases</p> <p>Film Developing</p> <p>Footware</p> <p>Clothing</p> <p>Souvenirs and gifts (not clothing)</p> <p>Barber, laundry and other personal services</p> <p>Telephone, xerox, fax and other business services</p> <p>Physician, dentist, and other medical services</p> <p>Other, specify _____</p> <p>_____</p>	<p>_____</p> <p>_____</p> <p>_____</p> <p>_____</p> <p>_____</p> <p>_____</p> <p>_____</p> <p>_____</p> <p>_____</p>

## Part E: Annual Vacation and Equipment Purchases

This section asks about how much money people spent on recreation equipment and boat storage or marina services not already included in Part D.

Column A should include the total amount of money spent by your household for each of the items in the last 12 months.

Column B should include the total amount of money spent by your household for each of the items in Broward, Miami-Dade or Monroe Counties (South Florida) in the past 12 months.

Column C should include the total amount of money spent by your household for each of the items in Monroe County (Florida Keys) in the past 12 months.

EXAMPLE: Joe and Jane Smith bought a boat for \$20,000 in Orlando 4 months ago. They also purchased a jet ski for \$12,000 from a dealer in Key Largo. Here is how they should report these expenditures.

Expenditure	Column A: Total Purchases in Past 12 Months	Column B: Purchases in South Florida	Column C: Purchases in Monroe County
BOATING EQUIPMENT New motorized boats or jet skis	\$32,000	\$12,000	\$12,000

Item	Column A: Total Purchases in Past 12 Months	Column B: Purchases in South Florida	Column C: Purchases in Monroe County
<b>MAJOR RECREATIONAL EQUIPMENT</b> E1. Diving or snorkeling equipment E2. Fishing rods and reels E3. Cameras and other photo gear E4. Binocular and other viewing equipment E5. Miscellaneous (boats, guns, skis, vehicles, etc.) Specify: _____ _____ _____	_____ _____ _____ _____ _____ _____ _____	_____ _____ _____ _____ _____ _____ _____	_____ _____ _____ _____ _____ _____ _____
<b>BOATING EQUIPMENT</b> E6. New motorized boats or jet skis E7. New nonmotorized boats (sailboats, row boats, canoes, etc.) E8. New boat engines E9. New boat accessories E10. New sails or rigging E11. New boat trailer E12. Boat storage and marina fees E13. Other boating expenses Describe: _____ _____ _____	_____ _____ _____ _____ _____ _____ _____ _____	_____ _____ _____ _____ _____ _____ _____ _____	_____ _____ _____ _____ _____ _____ _____ _____



## Part F: Value of Reefs

Local, state, and federal government agencies are considering different approaches to maintaining the health and condition of natural and artificial reefs in Monroe County/Florida Keys. One plan focuses on providing greater protection for natural reefs by maintaining water quality, limiting damage to *natural reefs* from anchoring, and preventing overuse of the natural reefs. A second plan focuses on protecting the *artificial reefs* by maintaining water quality, limiting damage to artificial reefs from anchoring, and preventing overuse of the artificial reefs.

Both of these plans will involve increased costs to local businesses that will ultimately be passed on to both residents and visitors in Monroe County/Florida Keys. We are doing this survey because the government agencies want to know whether you support one, both, or none of these plans and if you would be willing to incur higher costs to pay for these plans.

Please keep in mind that whether you support these plans or not would not have any effect on your ability to participate in any boating activity or other recreation in Monroe County/Florida Keys.

**F1.** Suppose there was a plan to maintain the health and condition of *natural reefs* in Monroe County/Florida Keys. First, consider your total costs for your last boating trip in Monroe County/Florida Keys including travel expenses, lodging, and all boating expenses. If your total costs for this trip would have been \$ \_\_\_ higher, would you have been willing to pay this amount to maintain the *natural reefs* in their existing condition?

YES (Go to F2.)       NO (Go to F1a.)

**F1a.** If you answered NO to the above question or you don't know or you refuse to answer the question, please circle the **one** letter that best explains your reason for saying no or don't know; or refusing to answer?

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

**F2.** Now suppose there was a plan to maintain the health and condition of *artificial reefs* in Monroe County/Florida Keys and that this was the only plan you were asked to consider. Think about your total costs for your last boating trip in Monroe County/Florida Keys again including travel expenses, lodging, and all boating expenses. If your total costs for this trip would have been \$ \_\_\_ higher, would you have been willing to pay this amount to maintain the *artificial reefs* in their existing condition?

YES (Go to F3.)       NO (Go to F2a.)

**F2a.** If you answered NO to the above question or you don't know or you refuse to answer the question, please circle the **one** letter that best explains your reason for saying no or don't know; or refusing to answer?

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

**F3.** Finally, suppose that both of these plans to maintain the existing condition of **natural and artificial reefs** in Monroe County/Florida Keys were put together into a combined program. Consider once again your total costs for your last boating trip in Monroe County/Florida Keys including travel expenses, lodging, and all boating expenses. If your total costs for this trip would have been \$ \_\_\_ higher, would you have been willing to pay this amount to maintain the **natural and artificial reefs** in their existing condition?

- YES (Go to Part G)     NO (Go to F3a.)

**F3a.** If you answered NO to the above question or you don't know or you refuse to answer the question, please circle the **one** letter that best explains your reason for saying no or don't know; or refusing to answer?

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

## Part G: Demographic Profile

In this final section, we need to know information about you and your household to make sure we have a representative sample of Monroe County residents.

Again, your privacy will be protected and any information identifying you or your household will not be revealed to anyone.

**G1. How many people in your household are permanent residents of Monroe County, Florida?**

\_\_\_\_\_ number of people

**G2. How many of these people are at least 16 years of age?** \_\_\_\_\_ number of people

**G3. What is the closest mile marker to your residence?** \_\_\_\_\_ mile marker number

**G4. Do you have access to the water from your residence?**  Yes  No

**G5. Do you own a boat?**  Yes  No

**G6. How many years have you lived in Monroe County?** \_\_\_\_\_ number of years

**G7. In what year were you born?** \_\_\_\_\_ year

**G8. Are you Hispanic, Latino, or of Spanish origin?**  Yes  No

**G9. What race do you consider yourself?**

Please circle one or more of the letter(s) that best describes you

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

**G10. What is the highest level of education that you have completed?**

Please circle the letter of the category that best describes you

- A 8th Grade or Less
- B 9th to 11th Grade
- C 12th Grade, High School Grad, GED
- D 13 to 15 Years (some college or vocational training)
- E College Graduate
- F Graduate School, Law School, Medical School

G11. What is your employment status?

Please circle the letter or letters of all those that apply

- |   |                    |   |                   |
|---|--------------------|---|-------------------|
| A | Unemployed         | E | Student           |
| B | Employed full-time | F | Homemaker         |
| C | Employed part-time | G | None of the above |
| D | Retired            |   | (specify) _____   |

G12. Do you work outside Monroe County?  Yes  No

G13. What is your zip code? \_\_\_\_\_

G14. What is your total household income, before taxes.

Please circle the letter corresponding to the category that best describes your household

- |   |                      |   |                        |
|---|----------------------|---|------------------------|
| A | Under \$5,000        | I | \$40,000 to \$44,999   |
| B | \$5,000 to \$9,999   | J | \$45,000 to \$49,999   |
| B | \$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 |   |                        |

## ACTIVITIES LIST

Number	<b>Activities Using Boats and Personal Watercraft</b>
	<b>Snorkeling</b>
100A	Snorkeling from charter/party boat (pay operation)
101A	Snorkeling from a rental boat
102A	Snorkeling from private boat (your boat or friend or relatives boat)
	<b>Scuba Diving</b>
200A	Scuba diving from charter/party boat (pay operation)
201A	Scuba diving from a rental boat
202A	Scuba diving from a private boat (your boat or friend or relatives boat)
	<b>Special Activities while Snorkeling or Scuba Diving</b>
300	Diving for lobsters
301	Underwater photography
302	Wreck diving
303	Spear fishing
	<b>Fishing – Offshore</b>
400A	Fishing from charter boat (pay operation, usually six persons or less) - offshore
401A	Fishing from party or head boat (pay operation, charge per person) - offshore
402A	Fishing from a rental boat – off shore
403A	Fishing from a private boat (your boat or friend or relatives boat) – offshore
	<b>Fishing – Flats or Back Country</b>
404A	Fishing from charter/party boat or guide (pay operation) – flats or back country
405A	Fishing from rental boat – flats or back country
406A	Fishing from a private boat (your boat or friend or relatives boat) – flats or back country
	<b>Other Fishing</b>
407A	Other fishing from charter boat (pay operation, usually six persons or less)
408A	Other fishing from party or head boat (pay operation, charge per person)
409A	Other fishing from a rental boat
410A	Other fishing from a private boat (your boat or friends or relatives boat)
	<b>Viewing Nature and Wildlife</b>
500A	Glass bottom boat rides (pay operation)
501A	Back country boat excursions (pay operation/guided service/NOT FISHING)
502A	Viewing nature and wildlife from private or rental boat
	<b>Personal Watercraft (jet skis, wave runners, etc.)</b>
600A	Personal watercraft – rental
601A	Personal watercraft – Private (your boat or friend or relatives boat)
	<b>Sailing</b>
700A	Sailing charter/party boat (pay operation)
701A	Sailing rental boat
702A	Sailing private boat (your boat or friend or relatives boat)
	<b>Other Activities NOT MENTIONED ABOVE (parasailing, hang gliding, water-skiing, sunset cruises)</b>
800A	Other activities from a charter/party boat (pay operation)
801A	Other activities from a rental boat
802A	Other activities from a private boat (your boat or friend or relatives boat)

----- OVER -----

## ACTIVITIES LIST

Number	<b>Other Water-Based Activities – NO BOATS</b>
--------	--

- 
- Snorkeling and Scuba Diving**
- 10A Snorkeling from shore  
11A Scuba diving from shore
- Special Activities while Diving from Shore**
- 12 Diving for lobsters  
13 Underwater photography
- 14A Fishing from shore (beach, bank, pier, bridge, jetty, dock)
- 15A Swimming at Beaches (not in pool)  
16A Swimming in Outdoor Pool  
17 Swimming with Dolphins  
18A Windsurfing, sail boarding or kite surfing

Number	<b>Land-Based Activities</b>
--------	------------------------------

- 
- Nature Study – Wildlife Observation – Photography**
- 19A Wildlife observation or wildlife photography  
20A Other nature study and observation  
21 Photography – Natural landscapes/scenery (not including wildlife)
- Camping – Backpacking – Hiking – Picnicking**
- 22 Backpacking  
23 Camping in developed campgrounds  
24 Camping in primitive campgrounds  
25 Day Hiking  
26 Attending ranger guided walk  
27 Self-guided nature or historic trail  
28 Picnicking
- Cultural, Historic and Tourist Attractions**
- 29A Visiting historic areas, sites, buildings or memorials  
30 Attending special events (fairs, festivals, ceremonies, etc.)  
31 Attending outdoor concerts, plays, or other outdoor performances  
32 Attending indoor concerts, plays, performances, or events  
33 Sight-seeing tours and tourist attractions (paid)  
34 Sight-seeing (not paid tours)  
35 Reading roadside exhibits or markers  
36A Visiting a museum, education facility, or information center  
37 Attending outdoor sports events (sailing or boat races; spectator at fishing tournament)
- Outdoor Sports**
- 38 Golf  
39 Tennis  
40 Participation in other outdoor sports and games
- Bicycling – Horseback Riding – Driving for Pleasure**
- 41 Bicycling  
42 Horseback riding  
43 Driving for Pleasure (mopeds, motorcycles)
- Beach Activities – Sunbathing**
- 44A All Beach Activities (other than swimming)  
45 Sunbathing (not at beach)
- Spa, Health & Wellness**
- 46 Spa Treatments (massage, esthetician services, body treatment)  
47 Fitness activities (fitness classes, visited gym/health center, personal trainer)  
48 Healthy cuisine (specialty dining for health or diet)

**ACTIVITIES LIST (REEFS)****Number      Activities Using Boats on Artificial and Natural Reefs****Snorkeling**

- 100A Snorkeling from charter/party boat (pay operation)  
 101A Snorkeling from a rental boat  
 102A Snorkeling from private boat (your boat or friend or relatives boat)

**Scuba Diving**

- 200A Scuba diving from charter/party boat (pay operation)  
 201A Scuba diving from a rental boat  
 202A Scuba diving from a private boat (your boat or friend or relatives boat)

**Special Activities while Snorkeling or Scuba Diving**

- 300 Diving for lobsters  
 301 Underwater photography  
 302 Wreck diving  
 303 Spear fishing

**Fishing on Artificial or Natural Reefs**

- 407A Other fishing from charter boat (pay operation, usually six persons or less)  
 408A Other fishing from party or head boat (pay operation, charge per person)  
 409A Other fishing from a rental boat  
 410A Other fishing from a private boat (your boat or friends or relatives boat)

**Viewing Nature and Wildlife**

- 500A Glass bottom boat rides (pay operation)  
 502A Viewing nature and wildlife from private or rental boat

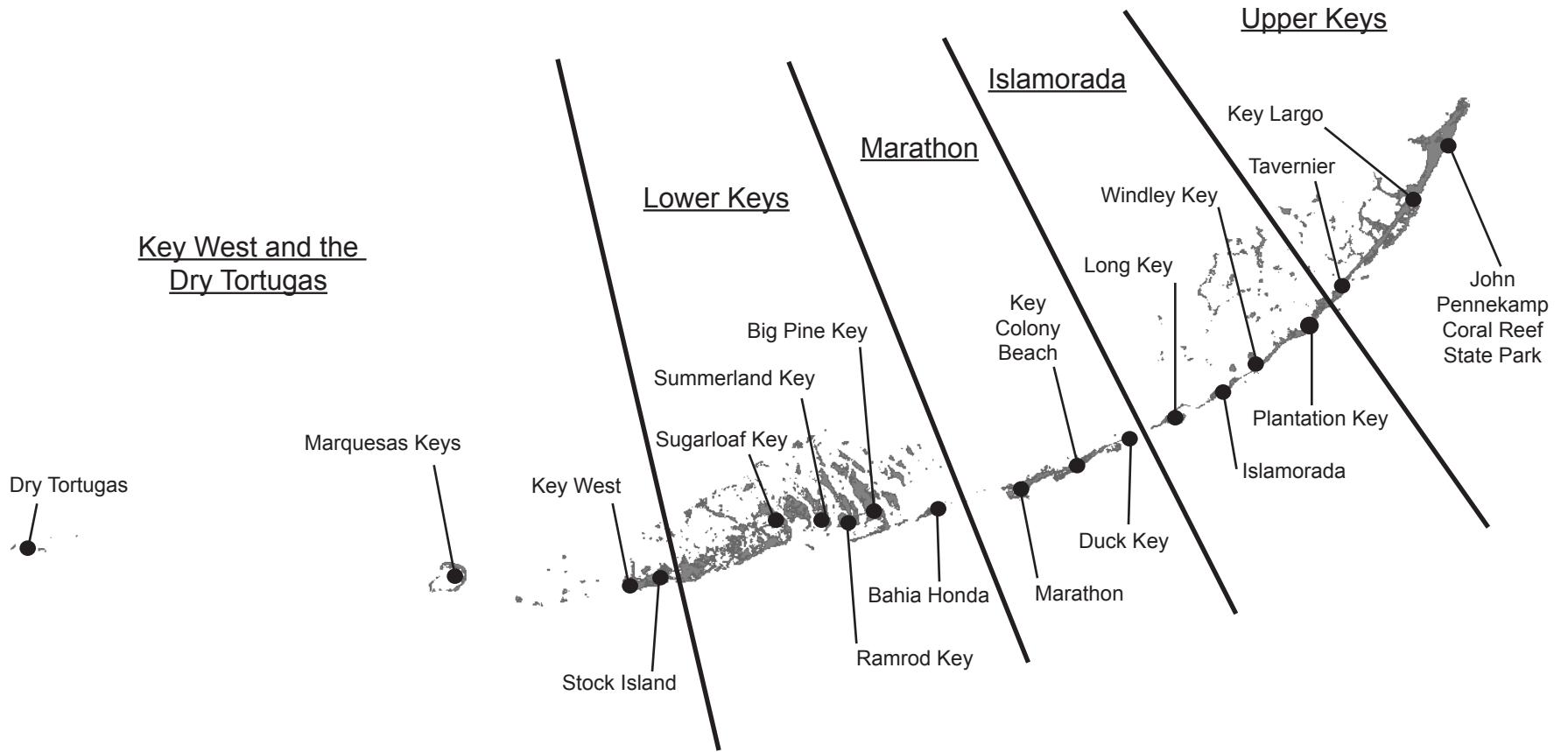
**Number      Other Water-Based Activities – NO BOATS – On Artificial or Natural Reefs****Snorkeling and Scuba Diving**

- 10A Snorkeling from shore  
 11A Scuba diving from shore

**Special Activities while Diving from Shore**

- 12 Diving for lobsters  
 13 Underwater photography

# The Florida Keys





# *Monroe County Resident Survey*

**Your answers are voluntary and confidential.**

Your name will never be released to anyone unless otherwise required by law. After the completion of the project all materials identifying you as an individual will be destroyed.

This is a cooperative research project of the Monroe County Tourist Development Council and the National Oceanic and Atmospheric Administration. Public reporting burden for this collection of information is estimated to average 1 hour including time for reviewing instructions, searching existing data sources, gathering and maintaining the data need, 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 this burden, to U.S. Department of Commerce, Clearance Officer, Office of Chief Information Officer, Rm. 6625, 14<sup>th</sup> and Constitution Avenue NW, Washington, DC 20230. Notwithstanding any other provisions of the law, no person is required to respond to, nor shall any person be subject to penalty for failure to comply with, a collection of information subject to requirements of the Paperwork Reduction Act, unless that collection of information displays a currently valid OMB Control Number.

## Resident Survey

1. Overall, how would you rate Monroe County as a place to live?

- a. Excellent
- b. Good
- c. Fair
- d. Poor

Please circle letter corresponding to your answer

2. There are many reasons that people choose to live where they do in Florida. What are the two most important reasons you chose to live in Monroe County?

- a. No special reason
- b. Born here
- c. Job or business
- d. Climate
- e. Environment
- f. Access to natural resources, such as natural settings and wildlife
- g. Opportunities for water activities, such as fishing or diving
- h. Low crime rate
- i. Cultural activities
- j. Retirement
- k. Some other reason (specify) \_\_\_\_\_

Please circle letters corresponding to the two most important reasons

3. In the past 12 months, have you done any outdoor recreation activities in the Florida Keys?

- a. Yes (Go to Part A)
- b. No (Go to Part G)

Please use the enclosed White Card-Activities List to see what we mean by outdoor recreation

**Part A: Outdoor recreation activities during the past 12 months in the Florida Keys**

Please use the enclosed Activities List and map to help you answer the questions in this section

- A1. Which of the activities on the enclosed Activities List did you or someone in your household do in the Florida Keys during the last 12 months?
- A2. Please fill in the circle for each activity you, yourself did during the past 12 months in the Upper Keys, Islamorada, Marathon, Lower Keys and Key West?
- A3. On how many different days did you, yourself participate in each activity in the Upper Keys, Islamorada, Marathon, Lower Keys and Key West?

Only answer for those activities you listed with an A on the end of the activity number

- A4. How many others (excluding yourself) in your household did each activity in the Upper Keys, Islamorada, Marathon, Lower Keys and Key West?

A1 Activity	Upper Keys			Islamorada			Marathon			Lower Keys			Key West		
	A2	A3	A4	A2	A3	A4	A2	A3	A4	A2	A3	A4	A2	A3	A4
	Resp. days	#	others	Resp. days	#	others	Resp. days	#	others	Resp. days	#	others	Resp. days	#	others
_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____
_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____
_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____
_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____
_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____
_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____
_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____
_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____
_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____
_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____
_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____
_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____
_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____
_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____
_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____
_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____
_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____
_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____
_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____
_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____
_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____
_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____
_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____
_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____
_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____

**A5. What would you say is the most important activity you did in the Florida Keys?**

**Most Important Activity** \_\_\_\_\_ (Activity List Number)

**No Activity Most Important (fill in box)**

**A6. On how many different days did you participate in outdoor recreation activities outside the Florida Keys during the past 12 months?** \_\_\_\_\_ (# of days)

**Part B: Reef use in the Florida Keys during the past 12 months. Both artificial and natural reefs.**

Please use Blue Card with Activities List for reef use and map of the Florida Keys in answering Part B

- B1. Which activities did you or someone in your household do on either artificial or natural reefs during the past 12 months in the Upper Keys, Islamorada, Marathon, Lower Keys and Key West?**

If you did not do anything in a region, check the box indicating no reef use in the region

- B2. Please fill in the circle for each activity you, yourself, did during the past 12 months in the Upper Keys, Islamorada, Marathon, Lower Keys and Key West.**
- B3. How many others in your household did each activity on the reefs in the Upper Keys, Islamorada, Marathon, Lower Keys and Key West during the past 12 months?**
- B4. On how many different days did you, yourself, participate in each activity on the reefs in the Upper Keys, Islamorada, Marathon, Lower Keys and Key West during the past 12 months?**
- B5. On how many different days did you, yourself, participate in each activity on the artificial reefs in the Upper Keys, Islamorada, Marathon, Lower Keys and Key West during the past 12 months?**
- B6. On how many different days did you, yourself, participate in each activity on the natural reefs in the Upper Keys, Islamorada, Marathon, Lower Keys and Key West during the past 12 months?**

Note: If you did part of a day on an artificial reef and part of a day on a natural reef, count one whole day on each type of reef

- B7. How many different dives did you, yourself, make for each type of diving activity you did on the reefs in the Upper Keys, Islamorada, Marathon, Lower Keys and Key West during the past 12 months?**

Diving activities include all snorkeling and scuba diving activities on the Blue Card-Activities List (Reef)

A dive is defined as an entry and exit from the water to snorkel or scuba dive

- B8. How many different dives did you, yourself, make for each type of diving activity you did on the artificial reefs in the Upper Keys, Islamorada, Marathon, Lower Keys and Key West during the past 12 months?**
- B9. How many different dives did you, yourself, make for each type of diving activity you did on the natural reefs in the Upper Keys, Islamorada, Marathon, Lower Keys and Key West during the past 12 months?**

Please refer to Questions B1 - B9 when filling in the tables on the following two pages

There is one table for each of the five regions of the Florida Keys (Upper Keys, Islamorada, Marathon, Lower Keys and Key West)

No Reef Use

Upper Keys

B1	B2	B3	B4	B5	B6	B7	B8	B9
Activity	Resp.	# Others	Respondent # of days	# days artificial	# days natural	Respondent # dives	# dives artificial	# dives natural
_____	○	_____	_____	_____	_____	_____	_____	_____
_____	○	_____	_____	_____	_____	_____	_____	_____
_____	○	_____	_____	_____	_____	_____	_____	_____
_____	○	_____	_____	_____	_____	_____	_____	_____
_____	○	_____	_____	_____	_____	_____	_____	_____
_____	○	_____	_____	_____	_____	_____	_____	_____
_____	○	_____	_____	_____	_____	_____	_____	_____
_____	○	_____	_____	_____	_____	_____	_____	_____
_____	○	_____	_____	_____	_____	_____	_____	_____

No Reef Use

Islamorada

B1	B2	B3	B4	B5	B6	B7	B8	B9
Activity	Resp.	# Others	Respondent # of days	# days artificial	# days natural	Respondent # dives	# dives artificial	# dives natural
_____	○	_____	_____	_____	_____	_____	_____	_____
_____	○	_____	_____	_____	_____	_____	_____	_____
_____	○	_____	_____	_____	_____	_____	_____	_____
_____	○	_____	_____	_____	_____	_____	_____	_____
_____	○	_____	_____	_____	_____	_____	_____	_____
_____	○	_____	_____	_____	_____	_____	_____	_____
_____	○	_____	_____	_____	_____	_____	_____	_____
_____	○	_____	_____	_____	_____	_____	_____	_____
_____	○	_____	_____	_____	_____	_____	_____	_____

No Reef Use

Marathon

B1	B2	B3	B4	B5	B6	B7	B8	B9
Activity	Resp.	# Others	Respondent # of days	# days artificial	# days natural	Respondent # dives	# dives artificial	# dives natural
_____	○	_____	_____	_____	_____	_____	_____	_____
_____	○	_____	_____	_____	_____	_____	_____	_____
_____	○	_____	_____	_____	_____	_____	_____	_____
_____	○	_____	_____	_____	_____	_____	_____	_____
_____	○	_____	_____	_____	_____	_____	_____	_____
_____	○	_____	_____	_____	_____	_____	_____	_____
_____	○	_____	_____	_____	_____	_____	_____	_____
_____	○	_____	_____	_____	_____	_____	_____	_____
_____	○	_____	_____	_____	_____	_____	_____	_____

No Reef Use

Lower Keys

B1 Activity	B2 Resp.	B3 # Others	B4 Respondent # of days	B5 # days artificial	B6 # days natural	B7 Respondent # dives	B8 # dives artificial	B9 # dives natural
_____	○	_____	_____	_____	_____	_____	_____	_____
_____	○	_____	_____	_____	_____	_____	_____	_____
_____	○	_____	_____	_____	_____	_____	_____	_____
_____	○	_____	_____	_____	_____	_____	_____	_____
_____	○	_____	_____	_____	_____	_____	_____	_____
_____	○	_____	_____	_____	_____	_____	_____	_____
_____	○	_____	_____	_____	_____	_____	_____	_____
_____	○	_____	_____	_____	_____	_____	_____	_____
_____	○	_____	_____	_____	_____	_____	_____	_____

No Reef Use

Key West

B1 Activity	B2 Resp.	B3 # Others	B4 Respondent # of days	B5 # days artificial	B6 # days natural	B7 Respondent # dives	B8 # dives artificial	B9 # dives natural
_____	○	_____	_____	_____	_____	_____	_____	_____
_____	○	_____	_____	_____	_____	_____	_____	_____
_____	○	_____	_____	_____	_____	_____	_____	_____
_____	○	_____	_____	_____	_____	_____	_____	_____
_____	○	_____	_____	_____	_____	_____	_____	_____
_____	○	_____	_____	_____	_____	_____	_____	_____
_____	○	_____	_____	_____	_____	_____	_____	_____
_____	○	_____	_____	_____	_____	_____	_____	_____
_____	○	_____	_____	_____	_____	_____	_____	_____



## Part C: Specialization

In this section, we are interested in learning more about your primary activity. Please answer the following questions based on the response you gave to QUESTION A5.

For the four questions below, please read the four choices and circle the one answer that best fits you for that question.

### C1. When I participate in my primary activity, I feel like:

- 1 a beginner. I don't really feel like I am part of the activity scene.
- 2 an occasional or irregular participant. Sometimes it is fun, entertaining or rewarding to do my activity.
- 3 a habitual and regular participant in the activity.
- 4 an insider to the sport. The activity is an important part of who I am.

### C2. During my activity, I can best be described as:

- 1 having very little understanding of the activity. I am often unsure about how to do certain things when I go.
- 2 having some understanding of the activity, but still in the process of learning more about the sport. I am becoming more familiar and comfortable with the activity.
- 3 being comfortable with the sport. I have a good understanding of what I can do, and how to do it.
- 4 a knowledgeable expert in the sport. I encourage, teach and enhance opportunities for others who are interested in the activity.

### C3. My relationships with others who do the activity are:

- 1 not established. I really don't know any other people who do the activity.
- 2 very limited. I know some others in the activity by sight and sometimes talk with them, but I don't know their names.
- 3 one of familiarity. I know the names of others who do the activity, and often speak with them.
- 4 close. I have personal and close relationships with others in the activity. These friendships often revolve around the activity.

### C4. My commitment to the activity is:

- 1 very slight. I have very little connection to the activity. I may or may not continue to participate in the sport in the future.
- 2 moderate. I will continue to do it as it is entertaining and provides the benefits I want.
- 3 fairly strong. I have a sense of being a member of the activity, and it is likely that I will continue to do it for a long time.
- 4 very strong. I am totally committed to the activity. I encourage others to participate in the sport and seek to ensure the activity continues into the future.

### C5. If you had to replace all of the equipment that you currently own for your primary activity with similar equipment, how much would it cost to replace?

\$ \_\_\_\_\_ AMOUNT TO REPLACE PRIMARY ACTIVITY EQUIPMENT

**C6. To what extent do you make use of the following for current information about your primary activity? Please circle number that indicates your extent of use for each source of information.**

	No Use	Almost no use	A little use	Some use	A lot of use
a. Talking with others who participate in the activity.....	1	2	3	4	5
b. Magazines.....	1	2	3	4	5
c. Government agency publications.....	1	2	3	4	5
d. Conservation organization publications.....	1	2	3	4	5
e. Newspapers.....	1	2	3	4	5
f. Diving shops/companies.....	1	2	3	4	5
g. Club meetings.....	1	2	3	4	5
h. Television.....	1	2	3	4	5
i. Radio.....	1	2	3	4	5
j. Internet.....	1	2	3	4	5

**C7. Below is a list of reasons why people engage in recreation activities. Please circle the number that indicates how important each item is to you as a reason for participating in your primary activity.**

	Not at all important	Slightly important	Moderately important	Very important	Extremely important
a. To be outdoors.....	1	2	3	4	5
b. For family recreation.....	1	2	3	4	5
c. To experience new and different things.....	1	2	3	4	5
d. For relaxation.....	1	2	3	4	5
e. To be close to the water.....	1	2	3	4	5
f. To get away from the demands of other people.....	1	2	3	4	5
g. To be with friends.....	1	2	3	4	5
h. To develop my skills.....	1	2	3	4	5
i. To get away from the regular routine.....	1	2	3	4	5
j. To experience adventure and excitement.....	1	2	3	4	5
k. To experience natural surroundings.....	1	2	3	4	5

## Part D: Importance and satisfaction with facilities, services, and natural resources in the Florida Keys

In this section we are interested in identifying the recreation site information which is important to you.

Please read each statement and rate the importance of each item as it contributes to an ideal recreation/tourism setting for the activities you did in the Florida Keys. If an item does not apply, indicate by circling 9 (NA). Likewise, if you don't know, circle 8 (DK).

**1 = Not Important (NI), 2 = Somewhat Important (SI), 3 = Important (I),  
4 = Very Important (VI), 5 = Extremely Important (EI), 8 = Don't Know (DK), or 9 = NA**

	NI	SI	I	VI	EI	DK	NA
	1	2	3	4	5	8	9
D1. Clear water (high visibility) .....	1	2	3	4	5	8	9
D2. Amount of living coral on reefs .....	1	2	3	4	5	8	9
D3. Public transportation .....	1	2	3	4	5	8	9
D4. Parking .....	1	2	3	4	5	8	9
D5. Many different kind of fish and sea life to view ..	1	2	3	4	5	8	9
D6. Many different kind of fish and sea life to catch ..	1	2	3	4	5	8	9
D7. Large numbers of fish .....	1	2	3	4	5	8	9
D8. Opportunity to view large wildlife: (manatees, whales, dolphins, sea turtles) .....	1	2	3	4	5	8	9
D9. Uncrowded conditions .....	1	2	3	4	5	8	9
D10. Maps, brochures, and other tourist information ..	1	2	3	4	5	8	9
D11. Boat ramps/launching facilities .....	1	2	3	4	5	8	9
D12. Marina facilities .....	1	2	3	4	5	8	9
D13. Directional signs, street signs, mile markers ...	1	2	3	4	5	8	9
D14. Condition of roads and streets .....	1	2	3	4	5	8	9
D15. Cleanliness of streets and sidewalks .....	1	2	3	4	5	8	9
D16. Condition of bike paths and sidewalks/walking paths .....	1	2	3	4	5	8	9
D17. Shoreline access .....	1	2	3	4	5	8	9
D18. Designated swimming/beach areas .....	1	2	3	4	5	8	9
D19. Quality of beaches .....	1	2	3	4	5	8	9
D20. Customer service and friendliness of people ...	1	2	3	4	5	8	9
D21. Historic preservation (historic landmarks, houses, etc.) .....	1	2	3	4	5	8	9
D22. Availability of public restrooms .....	1	2	3	4	5	8	9
D23. Value for the price .....	1	2	3	4	5	8	9
D24. Parks and specially protected areas .....	1	2	3	4	5	8	9
D25. Mooring buoys near coral reefs .....	1	2	3	4	5	8	9

On the previous page you indicated the importance of a list of items to your recreational/tourist experiences. Now read each of the items on this list and rate how satisfied you were with each at the places you did your activities in the Florida Keys. If an item does not apply, indicate by circling 9 (NA). Likewise, if you don't know, circle 8 (DK).

**1 = Terrible (T), 2 = Unhappy/Dissatisfied (UH), 3 = Mixed (M), 4 = Happy/Satisfied (H),  
5 = Delighted (D), 8 = Don't Know (DK), or 9 = NA**

	T	UH	M	H	D	DK	NA
	1	2	3	4	5	8	9
D26. Clear water (high visibility) . . . . .	1	2	3	4	5	8	9
D27. Amount of living coral on reefs . . . . .	1	2	3	4	5	8	9
D28. Public transportation . . . . .	1	2	3	4	5	8	9
D29. Parking . . . . .	1	2	3	4	5	8	9
D30. Many different kind of fish and sea life to view . .	1	2	3	4	5	8	9
D31. Many different kind of fish and sea life to catch .	1	2	3	4	5	8	9
D32. Large numbers of fish . . . . .	1	2	3	4	5	8	9
D33. Opportunity to view large wildlife: (manatees, whales, dolphins, sea turtles) . . . . .	1	2	3	4	5	8	9
D34. Uncrowded conditions . . . . .	1	2	3	4	5	8	9
D35. Maps, brochures, and other tourist information .	1	2	3	4	5	8	9
D36. Boat ramps/launching facilities . . . . .	1	2	3	4	5	8	9
D37. Marina facilities . . . . .	1	2	3	4	5	8	9
D38. Directional signs, street signs, mile markers . . . .	1	2	3	4	5	8	9
D39. Condition of roads and streets . . . . .	1	2	3	4	5	8	9
D40. Cleanliness of streets and sidewalks . . . . .	1	2	3	4	5	8	9
D41. Condition of bike paths and sidewalks/walking paths . . . . .	1	2	3	4	5	8	9
D42. Shoreline access . . . . .	1	2	3	4	5	8	9
D43. Designated swimming/beach areas . . . . .	1	2	3	4	5	8	9
D44. Quality of beaches . . . . .	1	2	3	4	5	8	9
D45. Customer service and friendliness of people . . . .	1	2	3	4	5	8	9
D46. Historic preservation (historic landmarks, houses, etc.) . . . . .	1	2	3	4	5	8	9
D47. Availability of public restrooms . . . . .	1	2	3	4	5	8	9
D48. Value for the price . . . . .	1	2	3	4	5	8	9
D49. Parks and specially protected areas . . . . .	1	2	3	4	5	8	9
D50. Mooring buoys near coral reefs . . . . .	1	2	3	4	5	8	9

D51. Had you lived-in or visited the Florida Keys more than five years ago?

Yes —————> Continue to question D52.

No —————> Skip to next page, Part E

Now read each of the items on this list and rate how satisfied you were with each when you were in the Florida Keys more than five years ago. If an item does not apply, indicate by circling 9 (NA). Likewise, if you don't know, circle 8 (DK).

1 = Terrible (T), 2 = Unhappy/Dissatisfied (UH), 3 = Mixed (M), 4 = Happy/Satisfied (H),  
5 = Delighted (D), 8 = Don't Know (DK), or 9 = NA

	T	UH	M	H	D	DK	NA
	1	2	3	4	5	8	9
D52. Clear water (high visibility) .....	1	2	3	4	5	8	9
D53. Amount of living coral on reefs .....	1	2	3	4	5	8	9
D54. Many different kind of fish and sea life to view ..	1	2	3	4	5	8	9
D55. Large numbers of fish .....	1	2	3	4	5	8	9
D56. Opportunity to view large wildlife: (manatees, whales, dolphins, sea turtles) .....	1	2	3	4	5	8	9
D57. Uncrowded conditions .....	1	2	3	4	5	8	9
D58. Condition of roads and streets .....	1	2	3	4	5	8	9
D59. Shoreline access .....	1	2	3	4	5	8	9
D60. Quality of beaches .....	1	2	3	4	5	8	9
D61. Customer service and friendliness of people ...	1	2	3	4	5	8	9
D62. Historic preservation (historic landmarks, houses, etc.) .....	1	2	3	4	5	8	9
D63. Parks and specially protected areas .....	1	2	3	4	5	8	9
D64. Mooring buoys near coral reefs .....	1	2	3	4	5	8	9

## Part E: Environmental Issues

In this section we are interested in learning about your feelings regarding various environmental issues. Below is a list of statements.

For each statement, please circle the response that best reflects your opinion about the statement.

1 = Strongly Agree (SA), 2 = Agree (A), 3 = Neutral (N), 4 = Disagree (D),  
5 = Strongly Disagree (SD), and 8 = Don't Know or No Opinion (DK)

	SA	A	N	D	SD	DK
	1	2	3	4	5	8
E1. The federal government will have to introduce harsh measures to halt pollution since few people will regulate themselves .....	1	2	3	4	5	8
E2. We should not worry about killing too many game animals because in the long run things will balance out .....	1	2	3	4	5	8
E3. I'd be willing to make personal sacrifices for the sake of slowing down pollution even though the immediate results might not seem significant .....	1	2	3	4	5	8
E4. Pollution is not personally affecting my life .....	1	2	3	4	5	8
E5. The benefits of modern consumer products are more important than the pollution that results from their production and use .....	1	2	3	4	5	8
E6. We must prevent any type of animal from becoming extinct, even if it means sacrificing some things for ourselves .....	1	2	3	4	5	8
E7. Courses focusing on the conservation of natural resources should be taught in the public schools .....	1	2	3	4	5	8
E8. Although there is continual contamination of our lakes, streams, and air, nature's purifying process will soon return them to normal .....	1	2	3	4	5	8
E9. Because the government has such good inspection and control agencies, it's very unlikely that pollution due to energy production will become excessive .....	1	2	3	4	5	8

For each statement, please circle the response that best reflects your opinion about the statement.

1 = Strongly Agree (SA), 2 = Agree (A), 3 = Neutral (N), 4 = Disagree (D),  
5 = Strongly Disagree (SD), and 8 = Don't Know or No Opinion (DK)

	SA	A	N	D	SD	DK
	1	2	3	4	5	8
E10. The government should provide each citizen with a list of agencies and organizations to which the citizen could report grievances concerning pollution .....	1	2	3	4	5	8
E11. Predators such as hawks, crows, skunks, and coyotes which prey on farmers' grain crops and poultry should be eliminated .....	1	2	3	4	5	8
E12. The currently active anti-pollution organizations are really more interested in disrupting society than they are in fighting pollution .....	1	2	3	4	5	8
E13. Even if public transportation was more efficient than it is, I would prefer to drive my car to work ..	1	2	3	4	5	8
E14. Industry is trying its best to develop effective anti-pollution technology .....	1	2	3	4	5	8
E15. If asked, I would contribute time, money, or both to an organization like the Sierra Club that works to improve the quality of the environment .....	1	2	3	4	5	8
E16. I would be willing to accept an increase in my family's expenses of \$100 next year to promote the wise use of natural resources .....	1	2	3	4	5	8

## Part F: Coral Reefs

Coral reefs are sensitive ecosystems. The Florida Keys, the world's third-largest barrier reef and the only coral reef system along the US mainland coast, is no exception. It has long been recognized that human use of coral reefs and adjacent coastal activities inflict strains on these systems. Non-local factors associated with global human use of the planet's resources add to the strain through their impact on air and sea temperatures.

The Florida Keys National Marine Sanctuary (FKNMS) was founded through a Federal Act to manage issues such as the above. It is managed cooperatively by the National Oceanic and Atmospheric Administration (NOAA) and the State of Florida, with significant input from local government, businesses, non-government organizations and the general public. Your views are valuable in the formulation of FKNMS action plans and management strategies.

In this section we have a few special issues questions we would like to ask you.

**F1. What do you think are the greatest threats to the reefs in the Florida Keys in the following list?** Please rank greatest threat=1, second-greatest threat=2, third-greatest threat=3, and so on for as many factors as you consider *important threats*. **Leave blank those you consider unimportant.**

- |   |                          |
|---|--------------------------|
| Spear fishers .....   | <input type="checkbox"/> |
| Scuba divers .....  | <input type="checkbox"/> |
| Urban development .....   | <input type="checkbox"/> |
| Ships and boats grounding on reefs, discharging pollutants..... | <input type="checkbox"/> |
| Hurricanes .....  | <input type="checkbox"/> |
| Solid waste disposal (sewage) .....                             | <input type="checkbox"/> |
| Climate change (global warming etc) .....                       | <input type="checkbox"/> |
| Stormwater and wastewater runoff .....                          | <input type="checkbox"/> |
| Overfishing by commercial and recreational fishers .....        | <input type="checkbox"/> |
| Number of tourists .....  | <input type="checkbox"/> |
| Chemical runoff (pesticides, herbicides, fertilizers) .....     | <input type="checkbox"/> |
| People collecting coral and live rock .....                     | <input type="checkbox"/> |

**F2. Any other important factors we have omitted from the list?**

If any, write in \_\_\_\_\_



**F3. What in your opinion should the Marine Sanctuary (FKNMS) do to reduce the main stress factors on the reef?**

Please rank your first recommendation=1, second=2, and so on for all recommendations you consider important. **Leave those blank that you consider unimportant.**

- Stringent control of pollutants to preserve water quality.....
- Enforced training/certification of scuba divers and snorkelers.....
- Prohibiting spear fishing.....
- Stronger shipping regulations.....
- Training, workshops and school programs.....
- Better management of waterways.....
- More no-catch fishing zones in the FKNMS.....

**F4. Do you have any other important recommendations on how FKNMS could reduce the main stress factors on the reef?**

If any, write in \_\_\_\_\_  
\_\_\_\_\_

- The main signs of coral stress are coral diseases and **coral bleaching**.
- The coral organism lives in a mutually dependent (symbiotic) relationship with tiny algae known as *zooxanthellae*. Their health is highly dependent on temperature and the coral expels them when the sea temperature gets above a certain level. This causes the coral to turn white and weaken, the phenomenon known as coral bleaching.
- There is general agreement among scientists that the world's climate is getting warmer and that this may cause large sections of the world's coral reefs to die.
- There is also a general consensus that control of other stress factors can make the coral organisms more resilient (able to resist and/or recover from stressful events).

**F5. Are you aware of coral bleaching and if so to what extent?**

- Highly aware
  - Conscious but not highly aware
  - Not aware (IF "Not aware", go to Question F7.)
- All other answers proceed to Question F6.

**F6. What in your opinion is the primary cause of coral bleaching?** *(Check one only)*

- Local factors exclusively
- Non-local factors such as global warming/climate change, exclusively
- Non-local factors aggravated by local factors
- Local factors aggravated by non-local factors
- I don't know

**F7. How important do you consider climate change to be for the world of the 21st century?**  
**Circle the number that corresponds to your answer.**

- |            |               |                    |           |                |                     |
|------------|---------------|--------------------|-----------|----------------|---------------------|
| Don't Know | Not Important | Somewhat Important | Important | Very Important | Extremely Important |
| dk         | 1             | 2                  | 3         | 4              | 5                   |

**F8. And how important do you consider climate change to be for the future of the coral reefs in the Florida Keys?**

- |            |               |                    |           |                |                     |
|------------|---------------|--------------------|-----------|----------------|---------------------|
| Don't Know | Not Important | Somewhat Important | Important | Very Important | Extremely Important |
| dk         | 1             | 2                  | 3         | 4              | 5                   |

The final part of this section explores a number of alternative management actions that might be applied to protect the Florida Keys. There is general agreement among scientists that the impact of these actions will be to reduce coral bleaching, but not to eliminate it.

- Coral reefs are affected by global and local forces.
- Global climate change and resulting rises in seawater temperatures are considered a major factor in coral bleaching.
- When corals bleach, the corals die and live coral cover is reduced.
- Scientists have found that more coral cover and complexity of corals is associated with more abundant and larger fish, and many different kinds of fish and sealife.
- Emissions of greenhouse gases are considered the main source of global climate change and coral bleaching.
- Water pollution can stress corals and make them more susceptible to disease or reduce their ability to recover from stressful events such as storms or bleaching events.
- Excess nutrients can lead to algal growth, which smothers the corals and kills them.

We present three global alternatives for coral health measured by the amount of live coral cover, before considering local management policies that could be applied to lessen the impact of each global scenario. In the absence of local management policies, living **coral cover** of comparable quality to what exists today is reduced by (a) a massive 95% in 20 years (by 2027) in the worst case scenario, (b) by 80% (intermediate case) or (c) by 50% (best case). Case (a) assumes that there is no further change in global strategies to reduce global warming, and that the average global temperature will increase by 6-8°C by the year 2100. In the intermediate case (b), the increase over the 21<sup>st</sup> century will be 4°C, and (c) using the most efficient policies nationally and internationally, there will be a 2°C increase in the average global temperature.

- Local forces also affect the health of coral reefs.
- Users can touch, step on, or drop their anchors on the corals.
- Fishermen can overfish a reef and remove fish species that eat algae that can smother and kill the corals.

## Local Management Strategies

There are four local strategies included in the FKNMS management plan designed to protect the health of the coral reefs. For each strategy, we present three levels of protection. The no change from current policy is always the low cost strategy.

1. **Education and outreach** are important activities in the FKNMS. The goal is to promote protection and sustainable use of Sanctuary reserves, and public understanding of the nature of marine sanctuaries. Activities include school programs, local community meetings, signage and exhibits in visitor centers, brochures, and TV and radio announcements. Team Ocean, a group of local volunteers, is provided with a FKNMS boat and fuel. They patrol the FKNMS and when they observe someone violating FKNMS rules and regulations, they educate them about how their activity harms the corals. Team Ocean and education and outreach staff also visit local businesses and distribute information on how users can better interact with corals to avoid damages. Education is also an integral element of other programs in the management plan and is considered a low-cost alternative to enforcement.

2. **Enforcement** includes a wide range of measures such as introducing no-anchor zones for vessels above a certain length, reinforcement of bans on spear fishing and touching corals, educating scuba divers and snorkelers about the reefs and enforcing reef protection, and restricting the use of personal vessels on or near the reef. It also involves the mooring buoy program set up around the restricted areas within the Sanctuary.

3. **Water quality** is a crucial issue as reflected by the FKNMS management plan: “Declining water quality continues to be a major concern for the Sanctuary.” Remedies include the development and implementation of wastewater and stormwater plans, efficient options to reduce loading of sediment, toxics and nutrients which damage water quality and the reef, targeting hot spots of industrial and commercial facilities, and reducing pollution from vessels and marinas. Improving water quality is a significantly higher-cost activity than the other items in this list.

4. **Zoning:** There are currently 24 no-take zones in the FKNMS. They cover less than five percent of FKNMS waters, but protect about 60% of the corals. Scientific monitoring of these zones has determined that coral health, fish abundance, size and diversity of fish and sea life have improved in protected areas versus non protected areas. The three levels of protection are (a) no change; or (b) 25% increase in coral cover protected, from 60% to 75%; or (c) 50% increase in coral cover protected, from 60% to 90%.

Reflecting current FKNMS management principles of running several parallel strategies, we have reduced these four policy options to two by combining education and outreach, enforcement, and water quality management into one group, with the options of (a) no change, (b) 5% increase in annual spending, and (c) 10% increase in annual spending. Zoning remains a separate strategy, with three possible levels of protection as shown above.

- A combination of global and local management strategies is required to save the health of the coral reefs.

- Scientists believe that global policies to minimize the increase in greenhouse gases are required to lower sea water temperatures from what they would otherwise have been, and so reduce coral bleaching.

- The more efficient the global strategy to reduce greenhouse gases, the more cost-efficient will be local management actions to protect the reef.

- If local forces are not addressed, the corals will not recover from coral bleaching when or if cooler waters return.

- Policies to reduce the increase in greenhouse gases will result in increased costs to your household through higher utility bills and the costs of products or services.

- Local management strategies will result in increased costs to your household if you are a resident or visitor to the Florida Keys. Costs will be passed on in terms of higher State and local taxes, local water/sewage bills and the costs of local goods and services purchased in the Florida Keys.

- We have worked with scientists and managers to estimate the approximate annual costs to your household for the different mixes of global and local management strategies which scientists think will deliver some protection to the corals. The costs to your household are stated in dollars per year.

Questions F9 - F14 contain six multiple-choice situations to which you are asked to state your preferences and provide a brief explanation for your choices. Each choice presents different mixes of global and local management strategies and has an estimated cost to your household. Each choice always includes the option of choosing the status quo or NO CHANGE (Alt A). This alternative will cost your household \$0, but will result in 95% reduction in the amount of live coral cover in 20 years, and local actions such as improving water quality and increasing the no-take areas will become much less efficient.

**Each choice will be similar to the following example.** Alt A is always the no-change situation as just explained. Alt B assumes an intermediate global policy for greenhouse gas reduction, and Alt C is based on a stronger and costlier global policy. In each Alt B and C case, different combinations of local management strategies have been designed which yield different coral cover outcomes at different costs to your household, giving you three choices.

We can't help you state your preferences, which depend on your own experience and attitudes. We don't know the extent of your concern about future climate change, how much value you put on the quality of the coral reefs relative to other attractions of the Florida Keys, and the main activities that attracted you there including fishing, boating, snorkeling, and land-based activities. So the example below is purely illustrative, and has nothing whatever to do with what you actually think. It's just an example to assist you in answering questions F9 - F14.

	<b>Alt A</b>	<b>Alt B</b>	<b>Alt C</b>
Global policy for reductions in greenhouse gases (compared with no change in policy as in Alt A.)	No change	Medium reductions	Large reductions
<b>Local Florida Keys Management Strategies</b>			
Added spending on water quality, education and outreach, and enforcement	No change	+10%	No change
Increase in no-take zoning of coral reef areas (percent of coral reefs protected)	No change (60%)	From 60% to 75%	From 60% to 90%
<b>Coral cover loss by 2027, Florida Keys</b>	<b>95%</b>	<b>75%</b>	<b>44%</b>
<b>Total annual cost to your household for global and local strategies</b>	<b>\$0</b>	<b>\$67</b>	<b>\$80</b>
Your most preferred alternative (check one)?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Your least preferred alternative (check one)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Please explain briefly why you made this choice (for example): “I like to fish, and clear water is important. But I would prefer to have more open area to fish on the reefs.”

Please note the following general assumptions when you make your choices:

- The most efficient local management strategy is centered on improving water quality, supplemented by efficient education and enforcement policies. This strategy is also the most expensive local strategy.
- Protecting the reef by increasing the area of no-take zones is also efficient but less so. This relatively low-cost option will reduce reef-fishing activities (but fishing opportunities may be unaffected or may even increase elsewhere in the FKNMS).
- The less efficient the global greenhouse gas strategy to control the rise in sea temperatures, the less efficient the local management strategies will also be.
- Making a choice to spend money on protecting the amount of living coral on the reefs will mean that you have less money to spend on other goods and services.

**F9.** Suppose you could only choose between the following three alternative combinations of global and local strategies, which would be your most preferred alternative and which would be your least preferred alternative?

	<b>Alt A</b>	<b>Alt B</b>	<b>Alt C</b>
Global policy for reductions in greenhouse gases (compared with no change in policy as in Alt A.)	No change	Medium reductions	Large reductions
<b>Local Florida Keys Management Strategies</b>			
Added spending on water quality, education and outreach, and enforcement	No change	+10%	No change
Increase in no-take zoning of coral reef areas (percent of coral reefs protected)	No change (60%)	No change (60%)	From 60% to 90%
<b>Coral cover loss by 2027, Florida Keys</b>	<b>95%</b>	<b>76%</b>	<b>44%</b>
<b>Total annual cost to your household for global and local strategies</b>	<b>\$0</b>	<b>\$65</b>	<b>\$80</b>
Your most preferred alternative (check one)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Your least preferred alternative (check one)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Please explain briefly why you made this choice (for example): \_\_\_\_\_

**F10.** Suppose you could only choose between the following three alternative combinations of global and local strategies, which would be your most preferred alternative and which would be your least preferred alternative?

	<b>Alt A</b>	<b>Alt B</b>	<b>Alt C</b>
Global policy for reductions in greenhouse gases (compared with no change in policy as in Alt A.)	No change	Medium reductions	Large reductions
<b>Local Florida Keys Management Strategies</b>			
Added spending on water quality, education and outreach, and enforcement	No change	No change	+10%
Increase in no-take zoning of coral reef areas (percent of coral reefs protected)	No change (60%)	From 60% to 90%	No change (60%)
<b>Coral cover loss by 2027, Florida Keys</b>	<b>95%</b>	<b>78%</b>	<b>40%</b>
<b>Total annual cost to your household for global and local strategies</b>	<b>\$0</b>	<b>\$30</b>	<b>\$115</b>
Your most preferred alternative (check one)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Your least preferred alternative (check one)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Please explain briefly why you made this choice (for example): \_\_\_\_\_

**F11.** Suppose you could only choose between the following three alternative combinations of global and local strategies, which would be your most preferred alternative and which would be your least preferred alternative?

	<b>Alt A</b>	<b>Alt B</b>	<b>Alt C</b>
Global policy for reductions in greenhouse gases (compared with no change in policy as in Alt A.)	No change	Medium reductions	Large reductions
<b>Local Florida Keys Management Strategies</b>			
Added spending on water quality, education and outreach, and enforcement	No change	+10%	+5%
Increase in no-take zoning of coral reef areas (percent of coral reefs protected)	No change (60%)	From 60% to 75%	From 60% to 75%
<b>Coral cover loss by 2027, Florida Keys</b>	<b>95%</b>	<b>75%</b>	<b>40%</b>
<b>Total annual cost to your household for global and local strategies</b>	<b>\$0</b>	<b>\$67</b>	<b>\$97</b>
Your most preferred alternative (check one)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Your least preferred alternative (check one)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Please explain briefly why you made this choice (for example): \_\_\_\_\_

**F12.** Suppose you could only choose between the following three alternative combinations of global and local strategies, which would be your most preferred alternative and which would be your least preferred alternative?

	<b>Alt A</b>	<b>Alt B</b>	<b>Alt C</b>
Global policy for reductions in greenhouse gases (compared with no change in policy as in Alt A.)	No change	Medium reductions	Large reductions
<b>Local Florida Keys Management Strategies</b>			
Added spending on water quality, education and outreach, and enforcement	No change	+10%	No change
Increase in no-take zoning of coral reef areas (percent of coral reefs protected)	No change (60%)	From 60% to 90%	From 60% to 90%
<b>Coral cover loss by 2027, Florida Keys</b>	<b>95%</b>	<b>76%</b>	<b>44%</b>
<b>Total annual cost to your household for global and local strategies</b>	<b>\$0</b>	<b>\$70</b>	<b>\$80</b>
Your most preferred alternative (check one)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Your least preferred alternative (check one)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Please explain briefly why you made this choice (for example): \_\_\_\_\_



**F13.** Suppose you could only choose between the following three alternative combinations of global and local strategies, which would be your most preferred alternative and which would be your least preferred alternative?

	<b>Alt A</b>	<b>Alt B</b>	<b>Alt C</b>
Global policy for reductions in greenhouse gases (compared with no change in policy as in Alt A.)	No change	Medium reductions	Large reductions
<b>Local Florida Keys Management Strategies</b>			
Added spending on water quality, education and outreach, and enforcement	No change	+10%	+5%
Increase in no-take zoning of coral reef areas (percent of coral reefs protected)	No change (60%)	From 60% to 90%	No change (60%)
<b>Coral cover loss by 2027, Florida Keys</b>	<b>95%</b>	<b>75%</b>	<b>44%</b>
<b>Total annual cost to your household for global and local strategies</b>	<b>\$0</b>	<b>\$70</b>	<b>\$95</b>
Your most preferred alternative (check one)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Your least preferred alternative (check one)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Please explain briefly why you made this choice (for example): \_\_\_\_\_

**F14.** Suppose you could only choose between the following three alternative combinations of global and local strategies, which would be your most preferred alternative and which would be your least preferred alternative?

	<b>Alt A</b>	<b>Alt B</b>	<b>Alt C</b>
Global policy for reductions in greenhouse gases (compared with no change in policy as in Alt A.)	No change	Medium reductions	Large reductions
<b>Local Florida Keys Management Strategies</b>			
Added spending on water quality, education and outreach, and enforcement	No change	No change	+10%
Increase in no-take zoning of coral reef areas (percent of coral reefs protected)	No change (60%)	From 60% to 75%	From 60% to 75%
<b>Coral cover loss by 2027, Florida Keys</b>	<b>95%</b>	<b>78%</b>	<b>36%</b>
<b>Total annual cost to your household for global and local strategies</b>	<b>\$0</b>	<b>\$27</b>	<b>\$117</b>
Your most preferred alternative (check one)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Your least preferred alternative (check one)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Please explain briefly why you made this choice (for example): \_\_\_\_\_

In Part A, you told us how many days you yourself participated in outdoor recreation activities during the past 12 months in the Florida Keys. You also told us how many days you participated in such activities outside the Florida Keys during the past 12 months (Part A, A6), if any.

**F15. Please confirm whether you did any outdoor recreation activities in the Florida Keys during the past 12 months:**

- Yes —————> Continue to question F16.  
 No —————> Skip to Part G.

**F16. Currently, 6% of the entire water area in the FKNMS is covered with living coral. If the living coral cover were only 3% (half the current cover), how would that affect the number of days you would spend on outdoor recreation activities in the Florida Keys during a 12-month period?**

- No change       \_\_\_\_ (#days less)       Would cease activities       Don't know

**F17. And how would this reduction in living coral cover affect the number of days you would spend on outdoor recreation activities outside the Florida Keys?**

- No change       \_\_\_\_ (#days more)       Don't know

**F18. If there were no living coral cover or 0% cover, how would that affect the number of days you would spend on outdoor recreation activities in the Florida Keys during a 12-month period?**

- No change       \_\_\_\_ (#days less)       Would cease activities       Don't know

**F19. And how would the disappearance of living coral cover affect the number of days you would spend on outdoor recreation activities outside the Florida Keys?**

- No change       \_\_\_\_ (#days more)       Don't know

[This page intentionally left blank. Proceed to next page.]

## Part G: Demographic Profile

In this final section, we need to know information about you and your household to make sure we have a representative sample of Monroe County residents.

Again, your privacy will be protected and any information identifying you or your household will not be revealed to anyone.

**G1. How many people in your household are permanent residents of Monroe County, Florida?**

\_\_\_\_\_ number of people

**G2. How many of these people are at least 16 years of age?** \_\_\_\_\_ number of people

**G3. What is the closest mile marker to your residence?** \_\_\_\_\_ mile marker number

**G4. Do you have access to the water from your residence?**  Yes  No

**G5. Do you own a boat?**  Yes  No

**G6. How many years have you lived in Monroe County?** \_\_\_\_\_ number of years

**G7. In what year were you born?** \_\_\_\_\_ year

**G8. Are you Spanish, Hispanic, or Latino?**  Yes  No

**G9. What race do you consider yourself?**

Please circle one or more of the letter(s) that best describes you

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

**G10. What is the highest level of education that you have completed?**

Please circle the letter of the category that best describes you

- A 8th Grade or Less
- B 9th to 11th Grade
- C 12th Grade, High School Grad, GED
- D 13 to 15 Years (some college or vocational training)
- E College Graduate
- F Graduate School, Law School, Medical School

G11. What is your employment status?

Please circle the letter or letters of all those that apply

- |   |                    |   |                   |
|---|--------------------|---|-------------------|
| A | Unemployed         | E | Student           |
| B | Employed full-time | F | Homemaker         |
| C | Employed part-time | G | None of the above |
| D | Retired            |   | (specify) _____   |

G12. Do you work outside Monroe County?  Yes  No

G13. What is your zip code? \_\_\_\_\_

G14. What is your total household income, before taxes.

Please circle the letter corresponding to the category that best describes your household

- |   |                      |   |                        |
|---|----------------------|---|------------------------|
| A | Under \$5,000        | I | \$40,000 to \$44,999   |
| B | \$5,000 to \$9,999   | J | \$45,000 to \$49,999   |
| B | \$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 |   |                        |

# *Monroe County Resident Survey*

**Your answers are voluntary and confidential.**

Your name will never be released to anyone unless otherwise required by law. After the completion of the project all materials identifying you as an individual will be destroyed.

This is a cooperative research project of the Monroe County Tourist Development Council and the National Oceanic and Atmospheric Administration. Public reporting burden for this collection of information is estimated to average 1 hour including time for reviewing instructions, searching existing data sources, gathering and maintaining the data need, 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 this burden, to U.S. Department of Commerce, Clearance Officer, Office of Chief Information Officer, Rm. 6625, 14<sup>th</sup> and Constitution Avenue NW, Washington, DC 20230. Notwithstanding any other provisions of the law, no person is required to respond to, nor shall any person be subject to penalty for failure to comply with, a collection of information subject to requirements of the Paperwork Reduction Act, unless that collection of information displays a currently valid OMB Control Number.

## Resident Survey

1. Overall, how would you rate Monroe County as a place to live?

- a. Excellent
- b. Good
- c. Fair
- d. Poor

Please circle letter corresponding to your answer

2. There are many reasons that people choose to live where they do in Florida. What are the two most important reasons you chose to live in Monroe County?

- a. No special reason
- b. Born here
- c. Job or business
- d. Climate
- e. Environment
- f. Access to natural resources, such as natural settings and wildlife
- g. Opportunities for water activities, such as fishing or diving
- h. Low crime rate
- i. Cultural activities
- j. Retirement
- k. Some other reason (specify) \_\_\_\_\_

Please circle letters corresponding to the two most important reasons

3. In the past 12 months, have you done any outdoor recreation activities in the Florida Keys?

- a. Yes (Go to Part A)
- b. No (Go to Part G)

Please use the enclosed White Card-Activities List to see what we mean by outdoor recreation



**Part A: Outdoor recreation activities during the past 12 months in the Florida Keys**

Please use the enclosed Activities List and map to help you answer the questions in this section

- A1. Which of the activities on the enclosed Activities List did you or someone in your household do in the Florida Keys during the last 12 months?**
- A2. Please fill in the circle for each activity you, yourself did during the past 12 months in the Upper Keys, Islamorada, Marathon, Lower Keys and Key West?**
- A3. On how many different days did you, yourself participate in each activity in the Upper Keys, Islamorada, Marathon, Lower Keys and Key West?**

Only answer for those activities you listed with an A on the end of the activity number

- A4. How many others (excluding yourself) in your household did each activity in the Upper Keys, Islamorada, Marathon, Lower Keys and Key West?**

A1 Activity	Upper Keys			Islamorada			Marathon			Lower Keys			Key West		
	A2	A3	A4	A2	A3	A4	A2	A3	A4	A2	A3	A4	A2	A3	A4
	Resp. days	#	#	Resp. days	#	#	Resp. days	#	#	Resp. days	#	#	Resp. days	#	#
_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____
_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____
_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____
_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____
_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____
_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____
_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____
_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____
_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____
_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____
_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____
_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____
_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____
_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____
_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____
_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____
_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____
_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____
_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____
_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____

**A5. What would you say is the most important activity you did in the Florida Keys?**

**Most Important Activity** \_\_\_\_\_ (Activity List Number)

**No Activity Most Important (fill in box)**

**A6. On how many different days did you participate in outdoor recreation activities outside the Florida Keys during the past 12 months?** \_\_\_\_\_ (# of days)

**Part B: Reef use in the Florida Keys during the past 12 months. Both artificial and natural reefs.**

Please use Blue Card with Activities List for reef use and map of the Florida Keys in answering Part B

- B1. Which activities did you or someone in your household do on either artificial or natural reefs during the past 12 months in the Upper Keys, Islamorada, Marathon, Lower Keys and Key West?**

If you did not do anything in a region, check the box indicating no reef use in the region

- B2. Please fill in the circle for each activity you, yourself, did during the past 12 months in the Upper Keys, Islamorada, Marathon, Lower Keys and Key West.**
- B3. How many others in your household did each activity on the reefs in the Upper Keys, Islamorada, Marathon, Lower Keys and Key West during the past 12 months?**
- B4. On how many different days did you, yourself, participate in each activity on the reefs in the Upper Keys, Islamorada, Marathon, Lower Keys and Key West during the past 12 months?**
- B5. On how many different days did you, yourself, participate in each activity on the artificial reefs in the Upper Keys, Islamorada, Marathon, Lower Keys and Key West during the past 12 months?**
- B6. On how many different days did you, yourself, participate in each activity on the natural reefs in the Upper Keys, Islamorada, Marathon, Lower Keys and Key West during the past 12 months?**

Note: If you did part of a day on an artificial reef and part of a day on a natural reef, count one whole day on each type of reef

- B7. How many different dives did you, yourself, make for each type of diving activity you did on the reefs in the Upper Keys, Islamorada, Marathon, Lower Keys and Key West during the past 12 months?**

Diving activities include all snorkeling and scuba diving activities on the Blue Card-Activities List (Reef)

A dive is defined as an entry and exit from the water to snorkel or scuba dive

- B8. How many different dives did you, yourself, make for each type of diving activity you did on the artificial reefs in the Upper Keys, Islamorada, Marathon, Lower Keys and Key West during the past 12 months?**
- B9. How many different dives did you, yourself, make for each type of diving activity you did on the natural reefs in the Upper Keys, Islamorada, Marathon, Lower Keys and Key West during the past 12 months?**

Please refer to Questions B1 - B9 when filling in the tables on the following two pages

There is one table for each of the five regions of the Florida Keys (Upper Keys, Islamorada, Marathon, Lower Keys and Key West)

No Reef Use

Upper Keys

B1	B2	B3	B4	B5	B6	B7	B8	B9
Activity	Resp.	# Others	Respondent # of days	# days artificial	# days natural	Respondent # dives	# dives artificial	# dives natural
_____	○	_____	_____	_____	_____	_____	_____	_____
_____	○	_____	_____	_____	_____	_____	_____	_____
_____	○	_____	_____	_____	_____	_____	_____	_____
_____	○	_____	_____	_____	_____	_____	_____	_____
_____	○	_____	_____	_____	_____	_____	_____	_____
_____	○	_____	_____	_____	_____	_____	_____	_____
_____	○	_____	_____	_____	_____	_____	_____	_____
_____	○	_____	_____	_____	_____	_____	_____	_____
_____	○	_____	_____	_____	_____	_____	_____	_____

No Reef Use

Islamorada

B1	B2	B3	B4	B5	B6	B7	B8	B9
Activity	Resp.	# Others	Respondent # of days	# days artificial	# days natural	Respondent # dives	# dives artificial	# dives natural
_____	○	_____	_____	_____	_____	_____	_____	_____
_____	○	_____	_____	_____	_____	_____	_____	_____
_____	○	_____	_____	_____	_____	_____	_____	_____
_____	○	_____	_____	_____	_____	_____	_____	_____
_____	○	_____	_____	_____	_____	_____	_____	_____
_____	○	_____	_____	_____	_____	_____	_____	_____
_____	○	_____	_____	_____	_____	_____	_____	_____
_____	○	_____	_____	_____	_____	_____	_____	_____
_____	○	_____	_____	_____	_____	_____	_____	_____

No Reef Use

Marathon

B1	B2	B3	B4	B5	B6	B7	B8	B9
Activity	Resp.	# Others	Respondent # of days	# days artificial	# days natural	Respondent # dives	# dives artificial	# dives natural
_____	○	_____	_____	_____	_____	_____	_____	_____
_____	○	_____	_____	_____	_____	_____	_____	_____
_____	○	_____	_____	_____	_____	_____	_____	_____
_____	○	_____	_____	_____	_____	_____	_____	_____
_____	○	_____	_____	_____	_____	_____	_____	_____
_____	○	_____	_____	_____	_____	_____	_____	_____
_____	○	_____	_____	_____	_____	_____	_____	_____
_____	○	_____	_____	_____	_____	_____	_____	_____
_____	○	_____	_____	_____	_____	_____	_____	_____

No Reef Use

Lower Keys

B1	B2	B3	B4	B5	B6	B7	B8	B9
Activity	Resp.	# Others	Respondent # of days	# days artificial	# days natural	Respondent # dives	# dives artificial	# dives natural
_____	○	_____	_____	_____	_____	_____	_____	_____
_____	○	_____	_____	_____	_____	_____	_____	_____
_____	○	_____	_____	_____	_____	_____	_____	_____
_____	○	_____	_____	_____	_____	_____	_____	_____
_____	○	_____	_____	_____	_____	_____	_____	_____
_____	○	_____	_____	_____	_____	_____	_____	_____
_____	○	_____	_____	_____	_____	_____	_____	_____
_____	○	_____	_____	_____	_____	_____	_____	_____
_____	○	_____	_____	_____	_____	_____	_____	_____

No Reef Use

Key West

B1	B2	B3	B4	B5	B6	B7	B8	B9
Activity	Resp.	# Others	Respondent # of days	# days artificial	# days natural	Respondent # dives	# dives artificial	# dives natural
_____	○	_____	_____	_____	_____	_____	_____	_____
_____	○	_____	_____	_____	_____	_____	_____	_____
_____	○	_____	_____	_____	_____	_____	_____	_____
_____	○	_____	_____	_____	_____	_____	_____	_____
_____	○	_____	_____	_____	_____	_____	_____	_____
_____	○	_____	_____	_____	_____	_____	_____	_____
_____	○	_____	_____	_____	_____	_____	_____	_____
_____	○	_____	_____	_____	_____	_____	_____	_____
_____	○	_____	_____	_____	_____	_____	_____	_____

## Part C: Specialization

In this section, we are interested in learning more about your primary activity. Please answer the following questions based on the response you gave to QUESTION A5.

For the four questions below, please read the four choices and circle the one answer that best fits you for that question.

### C1. When I participate in my primary activity, I feel like:

- 1 a beginner. I don't really feel like I am part of the activity scene.
- 2 an occasional or irregular participant. Sometimes it is fun, entertaining or rewarding to do my activity.
- 3 a habitual and regular participant in the activity.
- 4 an insider to the sport. The activity is an important part of who I am.

### C2. During my activity, I can best be described as:

- 1 having very little understanding of the activity. I am often unsure about how to do certain things when I go.
- 2 having some understanding of the activity, but still in the process of learning more about the sport. I am becoming more familiar and comfortable with the activity.
- 3 being comfortable with the sport. I have a good understanding of what I can do, and how to do it.
- 4 a knowledgeable expert in the sport. I encourage, teach and enhance opportunities for others who are interested in the activity.

### C3. My relationships with others who do the activity are:

- 1 not established. I really don't know any other people who do the activity.
- 2 very limited. I know some others in the activity by sight and sometimes talk with them, but I don't know their names.
- 3 one of familiarity. I know the names of others who do the activity, and often speak with them.
- 4 close. I have personal and close relationships with others in the activity. These friendships often revolve around the activity.

### C4. My commitment to the activity is:

- 1 very slight. I have very little connection to the activity. I may or may not continue to participate in the sport in the future.
- 2 moderate. I will continue to do it as it is entertaining and provides the benefits I want.
- 3 fairly strong. I have a sense of being a member of the activity, and it is likely that I will continue to do it for a long time.
- 4 very strong. I am totally committed to the activity. I encourage others to participate in the sport and seek to ensure the activity continues into the future.

### C5. If you had to replace all of the equipment that you currently own for your primary activity with similar equipment, how much would it cost to replace?

\$ \_\_\_\_\_ AMOUNT TO REPLACE PRIMARY ACTIVITY EQUIPMENT

**C6. To what extent do you make use of the following for current information about your primary activity? Please circle number that indicates your extent of use for each source of information.**

	No Use	Almost no use	A little use	Some use	A lot of use
a. Talking with others who participate in the activity.....	1	2	3	4	5
b. Magazines.....	1	2	3	4	5
c. Government agency publications.....	1	2	3	4	5
d. Conservation organization publications.....	1	2	3	4	5
e. Newspapers.....	1	2	3	4	5
f. Diving shops/companies.....	1	2	3	4	5
g. Club meetings.....	1	2	3	4	5
h. Television.....	1	2	3	4	5
i. Radio.....	1	2	3	4	5
j. Internet.....	1	2	3	4	5

**C7. Below is a list of reasons why people engage in recreation activities. Please circle the number that indicates how important each item is to you as a reason for participating in your primary activity.**

	Not at all important	Slightly important	Moderately important	Very important	Extremely important
a. To be outdoors.....	1	2	3	4	5
b. For family recreation.....	1	2	3	4	5
c. To experience new and different things.....	1	2	3	4	5
d. For relaxation.....	1	2	3	4	5
e. To be close to the water.....	1	2	3	4	5
f. To get away from the demands of other people.....	1	2	3	4	5
g. To be with friends.....	1	2	3	4	5
h. To develop my skills.....	1	2	3	4	5
i. To get away from the regular routine.....	1	2	3	4	5
j. To experience adventure and excitement.....	1	2	3	4	5
k. To experience natural surroundings.....	1	2	3	4	5

## Part D: Importance and satisfaction with facilities, services, and natural resources in the Florida Keys

In this section we are interested in identifying the recreation site information which is important to you.

Please read each statement and rate the importance of each item as it contributes to an ideal recreation/tourism setting for the activities you did in the Florida Keys. If an item does not apply, indicate by circling 9 (NA). Likewise, if you don't know, circle 8 (DK).

**1 = Not Important (NI), 2 = Somewhat Important (SI), 3 = Important (I),  
4 = Very Important (VI), 5 = Extremely Important (EI), 8 = Don't Know (DK), or 9 = NA**

	NI	SI	I	VI	EI	DK	NA
	1	2	3	4	5	8	9
D1. Clear water (high visibility) .....	1	2	3	4	5	8	9
D2. Amount of living coral on reefs .....	1	2	3	4	5	8	9
D3. Public transportation .....	1	2	3	4	5	8	9
D4. Parking .....	1	2	3	4	5	8	9
D5. Many different kind of fish and sea life to view ..	1	2	3	4	5	8	9
D6. Many different kind of fish and sea life to catch ..	1	2	3	4	5	8	9
D7. Large numbers of fish .....	1	2	3	4	5	8	9
D8. Opportunity to view large wildlife: (manatees, whales, dolphins, sea turtles) .....	1	2	3	4	5	8	9
D9. Uncrowded conditions .....	1	2	3	4	5	8	9
D10. Maps, brochures, and other tourist information ..	1	2	3	4	5	8	9
D11. Boat ramps/launching facilities .....	1	2	3	4	5	8	9
D12. Marina facilities .....	1	2	3	4	5	8	9
D13. Directional signs, street signs, mile markers ....	1	2	3	4	5	8	9
D14. Condition of roads and streets .....	1	2	3	4	5	8	9
D15. Cleanliness of streets and sidewalks .....	1	2	3	4	5	8	9
D16. Condition of bike paths and sidewalks/walking paths .....	1	2	3	4	5	8	9
D17. Shoreline access .....	1	2	3	4	5	8	9
D18. Designated swimming/beach areas .....	1	2	3	4	5	8	9
D19. Quality of beaches .....	1	2	3	4	5	8	9
D20. Customer service and friendliness of people ....	1	2	3	4	5	8	9
D21. Historic preservation (historic landmarks, houses, etc.) .....	1	2	3	4	5	8	9
D22. Availability of public restrooms .....	1	2	3	4	5	8	9
D23. Value for the price .....	1	2	3	4	5	8	9
D24. Parks and specially protected areas .....	1	2	3	4	5	8	9
D25. Mooring buoys near coral reefs .....	1	2	3	4	5	8	9



On the previous page you indicated the importance of a list of items to your recreational/tourist experiences. Now read each of the items on this list and rate how satisfied you were with each at the places you did your activities in the Florida Keys. If an item does not apply, indicate by circling 9 (NA). Likewise, if you don't know, circle 8 (DK).

**1 = Terrible (T), 2 = Unhappy/Dissatisfied (UH), 3 = Mixed (M), 4 = Happy/Satisfied (H),  
5 = Delighted (D), 8 = Don't Know (DK), or 9 = NA**

	T	UH	M	H	D	DK	NA
	1	2	3	4	5	8	9
D26. Clear water (high visibility) . . . . .	1	2	3	4	5	8	9
D27. Amount of living coral on reefs . . . . .	1	2	3	4	5	8	9
D28. Public transportation . . . . .	1	2	3	4	5	8	9
D29. Parking . . . . .	1	2	3	4	5	8	9
D30. Many different kind of fish and sea life to view . .	1	2	3	4	5	8	9
D31. Many different kind of fish and sea life to catch .	1	2	3	4	5	8	9
D32. Large numbers of fish . . . . .	1	2	3	4	5	8	9
D33. Opportunity to view large wildlife: (manatees, whales, dolphins, sea turtles) . . . . .	1	2	3	4	5	8	9
D34. Uncrowded conditions . . . . .	1	2	3	4	5	8	9
D35. Maps, brochures, and other tourist information .	1	2	3	4	5	8	9
D36. Boat ramps/launching facilities . . . . .	1	2	3	4	5	8	9
D37. Marina facilities . . . . .	1	2	3	4	5	8	9
D38. Directional signs, street signs, mile markers . . . .	1	2	3	4	5	8	9
D39. Condition of roads and streets . . . . .	1	2	3	4	5	8	9
D40. Cleanliness of streets and sidewalks . . . . .	1	2	3	4	5	8	9
D41. Condition of bike paths and sidewalks/walking paths . . . . .	1	2	3	4	5	8	9
D42. Shoreline access . . . . .	1	2	3	4	5	8	9
D43. Designated swimming/beach areas . . . . .	1	2	3	4	5	8	9
D44. Quality of beaches . . . . .	1	2	3	4	5	8	9
D45. Customer service and friendliness of people . . .	1	2	3	4	5	8	9
D46. Historic preservation (historic landmarks, houses, etc.) . . . . .	1	2	3	4	5	8	9
D47. Availability of public restrooms . . . . .	1	2	3	4	5	8	9
D48. Value for the price . . . . .	1	2	3	4	5	8	9
D49. Parks and specially protected areas . . . . .	1	2	3	4	5	8	9
D50. Mooring buoys near coral reefs . . . . .	1	2	3	4	5	8	9

D51. Had you lived-in or visited the Florida Keys more than five years ago?

Yes —————> Continue to question D52.

No —————> Skip to next page, Part E

Now read each of the items on this list and rate how satisfied you were with each when you were in the Florida Keys more than five years ago. If an item does not apply, indicate by circling 9 (NA). Likewise, if you don't know, circle 8 (DK).

1 = Terrible (T), 2 = Unhappy/Dissatisfied (UH), 3 = Mixed (M), 4 = Happy/Satisfied (H),  
5 = Delighted (D), 8 = Don't Know (DK), or 9 = NA

	T	UH	M	H	D	DK	NA
	1	2	3	4	5	8	9
D52. Clear water (high visibility) .....	1	2	3	4	5	8	9
D53. Amount of living coral on reefs .....	1	2	3	4	5	8	9
D54. Many different kind of fish and sea life to view ..	1	2	3	4	5	8	9
D55. Large numbers of fish .....	1	2	3	4	5	8	9
D56. Opportunity to view large wildlife: (manatees, whales, dolphins, sea turtles) .....	1	2	3	4	5	8	9
D57. Uncrowded conditions .....	1	2	3	4	5	8	9
D58. Condition of roads and streets .....	1	2	3	4	5	8	9
D59. Shoreline access .....	1	2	3	4	5	8	9
D60. Quality of beaches .....	1	2	3	4	5	8	9
D61. Customer service and friendliness of people ...	1	2	3	4	5	8	9
D62. Historic preservation (historic landmarks, houses, etc.) .....	1	2	3	4	5	8	9
D63. Parks and specially protected areas .....	1	2	3	4	5	8	9
D64. Mooring buoys near coral reefs .....	1	2	3	4	5	8	9

## Part E: Environmental Issues

In this section we are interested in learning about your feelings regarding various environmental issues. Below is a list of statements.

For each statement, please circle the response that best reflects your opinion about the statement.

1 = Strongly Agree (SA), 2 = Agree (A), 3 = Neutral (N), 4 = Disagree (D),  
5 = Strongly Disagree (SD), and 8 = Don't Know or No Opinion (DK)

	SA	A	N	D	SD	DK
	1	2	3	4	5	8
E1. The federal government will have to introduce harsh measures to halt pollution since few people will regulate themselves .....	1	2	3	4	5	8
E2. We should not worry about killing too many game animals because in the long run things will balance out .....	1	2	3	4	5	8
E3. I'd be willing to make personal sacrifices for the sake of slowing down pollution even though the immediate results might not seem significant .....	1	2	3	4	5	8
E4. Pollution is not personally affecting my life .....	1	2	3	4	5	8
E5. The benefits of modern consumer products are more important than the pollution that results from their production and use .....	1	2	3	4	5	8
E6. We must prevent any type of animal from becoming extinct, even if it means sacrificing some things for ourselves .....	1	2	3	4	5	8
E7. Courses focusing on the conservation of natural resources should be taught in the public schools .....	1	2	3	4	5	8
E8. Although there is continual contamination of our lakes, streams, and air, nature's purifying process will soon return them to normal .....	1	2	3	4	5	8
E9. Because the government has such good inspection and control agencies, it's very unlikely that pollution due to energy production will become excessive .....	1	2	3	4	5	8

For each statement, please circle the response that best reflects your opinion about the statement.

1 = Strongly Agree (SA), 2 = Agree (A), 3 = Neutral (N), 4 = Disagree (D),  
5 = Strongly Disagree (SD), and 8 = Don't Know or No Opinion (DK)

	SA	A	N	D	SD	DK
	1	2	3	4	5	8
E10. The government should provide each citizen with a list of agencies and organizations to which the citizen could report grievances concerning pollution .....	1	2	3	4	5	8
E11. Predators such as hawks, crows, skunks, and coyotes which prey on farmers' grain crops and poultry should be eliminated .....	1	2	3	4	5	8
E12. The currently active anti-pollution organizations are really more interested in disrupting society than they are in fighting pollution .....	1	2	3	4	5	8
E13. Even if public transportation was more efficient than it is, I would prefer to drive my car to work ..	1	2	3	4	5	8
E14. Industry is trying its best to develop effective anti-pollution technology .....	1	2	3	4	5	8
E15. If asked, I would contribute time, money, or both to an organization like the Sierra Club that works to improve the quality of the environment .....	1	2	3	4	5	8
E16. I would be willing to accept an increase in my family's expenses of \$100 next year to promote the wise use of natural resources .....	1	2	3	4	5	8

## Part F: Coral Reefs

Coral reefs are sensitive ecosystems. The Florida Keys, the world's third-largest barrier reef and the only coral reef system along the US mainland coast, is no exception. It has long been recognized that human use of coral reefs and adjacent coastal activities inflict strains on these systems. Non-local factors associated with global human use of the planet's resources add to the strain through their impact on air and sea temperatures.

The Florida Keys National Marine Sanctuary (FKNMS) was founded through a Federal Act to manage issues such as the above. It is managed cooperatively by the National Oceanic and Atmospheric Administration (NOAA) and the State of Florida, with significant input from local government, businesses, non-government organizations and the general public. Your views are valuable in the formulation of FKNMS action plans and management strategies.

In this section we have a few special issues questions we would like to ask you.

**F1. What do you think are the greatest threats to the reefs in the Florida Keys in the following list?** Please rank greatest threat=1, second-greatest threat=2, third-greatest threat=3, and so on for as many factors as you consider *important threats*. **Leave blank those you consider unimportant.**

- |   |                          |
|---|--------------------------|
| Spear fishers .....   | <input type="checkbox"/> |
| Scuba divers .....  | <input type="checkbox"/> |
| Urban development .....   | <input type="checkbox"/> |
| Ships and boats grounding on reefs, discharging pollutants..... | <input type="checkbox"/> |
| Hurricanes .....  | <input type="checkbox"/> |
| Solid waste disposal (sewage) .....                             | <input type="checkbox"/> |
| Climate change (global warming etc) .....                       | <input type="checkbox"/> |
| Stormwater and wastewater runoff .....                          | <input type="checkbox"/> |
| Overfishing by commercial and recreational fishers .....        | <input type="checkbox"/> |
| Number of tourists .....  | <input type="checkbox"/> |
| Chemical runoff (pesticides, herbicides, fertilizers) .....     | <input type="checkbox"/> |
| People collecting coral and live rock .....                     | <input type="checkbox"/> |

**F2. Any other important factors we have omitted from the list?**

If any, write in \_\_\_\_\_

**F3. What in your opinion should the Marine Sanctuary (FKNMS) do to reduce the main stress factors on the reef?**

Please rank your first recommendation=1, second=2, and so on for all recommendations you consider important. **Leave those blank that you consider unimportant.**

- Stringent control of pollutants to preserve water quality.....
- Enforced training/certification of scuba divers and snorkelers.....
- Prohibiting spear fishing.....
- Stronger shipping regulations.....
- Training, workshops and school programs.....
- Better management of waterways.....
- More no-catch fishing zones in the FKNMS.....

**F4. Do you have any other important recommendations on how FKNMS could reduce the main stress factors on the reef?**

If any, write in \_\_\_\_\_  
\_\_\_\_\_

- The main signs of coral stress are coral diseases and **coral bleaching**.
- The coral organism lives in a mutually dependent (symbiotic) relationship with tiny algae known as *zooxanthellae*. Their health is highly dependent on temperature and the coral expels them when the sea temperature gets above a certain level. This causes the coral to turn white and weaken, the phenomenon known as coral bleaching.
- There is general agreement among scientists that the world's climate is getting warmer and that this may cause large sections of the world's coral reefs to die.
- There is also a general consensus that control of other stress factors can make the coral organisms more resilient (able to resist and/or recover from stressful events).

**F5. Are you aware of coral bleaching and if so to what extent?**

- Highly aware
  - Conscious but not highly aware
  - Not aware (IF "Not aware", go to Question F7.)
- All other answers proceed to Question F6.

**F6. What in your opinion is the primary cause of coral bleaching?** *(Check one only)*

- Local factors exclusively
- Non-local factors such as global warming/climate change, exclusively
- Non-local factors aggravated by local factors
- Local factors aggravated by non-local factors
- I don't know

**F7. How important do you consider climate change to be for the world of the 21st century?**  
**Circle the number that corresponds to your answer.**

- |            |               |                    |           |                |                     |
|------------|---------------|--------------------|-----------|----------------|---------------------|
| Don't Know | Not Important | Somewhat Important | Important | Very Important | Extremely Important |
| dk         | 1             | 2                  | 3         | 4              | 5                   |

**F8. And how important do you consider climate change to be for the future of the coral reefs in the Florida Keys?**

- |            |               |                    |           |                |                     |
|------------|---------------|--------------------|-----------|----------------|---------------------|
| Don't Know | Not Important | Somewhat Important | Important | Very Important | Extremely Important |
| dk         | 1             | 2                  | 3         | 4              | 5                   |

The final part of this section explores a number of alternative management actions that might be applied to protect the Florida Keys. There is general agreement among scientists that the impact of these actions will be to reduce coral bleaching, but not to eliminate it.

- Coral reefs are affected by global and local forces.
- Global climate change and resulting rises in seawater temperatures are considered a major factor in coral bleaching.
- When corals bleach, the corals die and live coral cover is reduced.
- Scientists have found that more coral cover and complexity of corals is associated with more abundant and larger fish, and many different kinds of fish and sealife.
- Emissions of greenhouse gases are considered the main source of global climate change and coral bleaching.
- Water pollution can stress corals and make them more susceptible to disease or reduce their ability to recover from stressful events such as storms or bleaching events.
- Excess nutrients can lead to algal growth, which smothers the corals and kills them.

We present three global alternatives for coral health measured by the amount of live coral cover, before considering local management policies that could be applied to lessen the impact of each global scenario. In the absence of local management policies, living **coral cover** of comparable quality to what exists today is reduced by (a) a massive 95% in 20 years (by 2027) in the worst case scenario, (b) by 80% (intermediate case) or (c) by 50% (best case). Case (a) assumes that there is no further change in global strategies to reduce global warming, and that the average global temperature will increase by 6-8°C by the year 2100. In the intermediate case (b), the increase over the 21<sup>st</sup> century will be 4°C, and (c) using the most efficient policies nationally and internationally, there will be a 2°C increase in the average global temperature.

- Local forces also affect the health of coral reefs.
- Users can touch, step on, or drop their anchors on the corals.
- Fishermen can overfish a reef and remove fish species that eat algae that can smother and kill the corals.



## Local Management Strategies

There are four local strategies included in the FKNMS management plan designed to protect the health of the coral reefs. For each strategy, we present three levels of protection. The no change from current policy is always the low cost strategy.

1. **Education and outreach** are important activities in the FKNMS. The goal is to promote protection and sustainable use of Sanctuary reserves, and public understanding of the nature of marine sanctuaries. Activities include school programs, local community meetings, signage and exhibits in visitor centers, brochures, and TV and radio announcements. Team Ocean, a group of local volunteers, is provided with a FKNMS boat and fuel. They patrol the FKNMS and when they observe someone violating FKNMS rules and regulations, they educate them about how their activity harms the corals. Team Ocean and education and outreach staff also visit local businesses and distribute information on how users can better interact with corals to avoid damages. Education is also an integral element of other programs in the management plan and is considered a low-cost alternative to enforcement.

2. **Enforcement** includes a wide range of measures such as introducing no-anchor zones for vessels above a certain length, reinforcement of bans on spear fishing and touching corals, educating scuba divers and snorkelers about the reefs and enforcing reef protection, and restricting the use of personal vessels on or near the reef. It also involves the mooring buoy program set up around the restricted areas within the Sanctuary.

3. **Water quality** is a crucial issue as reflected by the FKNMS management plan: “Declining water quality continues to be a major concern for the Sanctuary.” Remedies include the development and implementation of wastewater and stormwater plans, efficient options to reduce loading of sediment, toxics and nutrients which damage water quality and the reef, targeting hot spots of industrial and commercial facilities, and reducing pollution from vessels and marinas. Improving water quality is a significantly higher-cost activity than the other items in this list.

4. **Zoning:** There are currently 24 no-take zones in the FKNMS. They cover less than five percent of FKNMS waters, but protect about 60% of the corals. Scientific monitoring of these zones has determined that coral health, fish abundance, size and diversity of fish and sea life have improved in protected areas versus non protected areas. The three levels of protection are (a) no change; or (b) 25% increase in coral cover protected, from 60% to 75%; or (c) 50% increase in coral cover protected, from 60% to 90%.

Reflecting current FKNMS management principles of running several parallel strategies, we have reduced these four policy options to two by combining education and outreach, enforcement, and water quality management into one group, with the options of (a) no change, (b) 5% increase in annual spending, and (c) 10% increase in annual spending. Zoning remains a separate strategy, with three possible levels of protection as shown above.

- A combination of global and local management strategies is required to save the health of the coral reefs.

- Scientists believe that global policies to minimize the increase in greenhouse gases are required to lower sea water temperatures from what they would otherwise have been, and so reduce coral bleaching.

- The more efficient the global strategy to reduce greenhouse gases, the more cost-efficient will be local management actions to protect the reef.

- If local forces are not addressed, the corals will not recover from coral bleaching when or if cooler waters return.

- Policies to reduce the increase in greenhouse gases will result in increased costs to your household through higher utility bills and the costs of products or services.

- Local management strategies will result in increased costs to your household if you are a resident or visitor to the Florida Keys. Costs will be passed on in terms of higher State and local taxes, local water/sewage bills and the costs of local goods and services purchased in the Florida Keys.

- We have worked with scientists and managers to estimate the approximate annual costs to your household for the different mixes of global and local management strategies which scientists think will deliver some protection to the corals. The costs to your household are stated in dollars per year.

Questions F9 - F14 contain six multiple-choice situations to which you are asked to state your preferences and provide a brief explanation for your choices. Each choice presents different mixes of global and local management strategies and has an estimated cost to your household. Each choice always includes the option of choosing the status quo or NO CHANGE (Alt A). This alternative will cost your household \$0, but will result in 95% reduction in the amount of live coral cover in 20 years, and local actions such as improving water quality and increasing the no-take areas will become much less efficient.

**Each choice will be similar to the following example.** Alt A is always the no-change situation as just explained. Alt B assumes an intermediate global policy for greenhouse gas reduction, and Alt C is based on a stronger and costlier global policy. In each Alt B and C case, different combinations of local management strategies have been designed which yield different coral cover outcomes at different costs to your household, giving you three choices.

We can't help you state your preferences, which depend on your own experience and attitudes. We don't know the extent of your concern about future climate change, how much value you put on the quality of the coral reefs relative to other attractions of the Florida Keys, and the main activities that attracted you there including fishing, boating, snorkeling, and land-based activities. So the example below is purely illustrative, and has nothing whatever to do with what you actually think. It's just an example to assist you in answering questions F9 - F14.

	<b>Alt A</b>	<b>Alt B</b>	<b>Alt C</b>
Global policy for reductions in greenhouse gases (compared with no change in policy as in Alt A.)	No change	Medium reductions	Large reductions
<b>Local Florida Keys Management Strategies</b>			
Added spending on water quality, education and outreach, and enforcement	No change	+10%	No change
Increase in no-take zoning of coral reef areas (percent of coral reefs protected)	No change (60%)	From 60% to 75%	From 60% to 90%
<b>Coral cover loss by 2027, Florida Keys</b>	<b>95%</b>	<b>75%</b>	<b>44%</b>
<b>Total annual cost to your household for global and local strategies</b>	<b>\$0</b>	<b>\$134</b>	<b>\$160</b>
Your most preferred alternative (check one)?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Your least preferred alternative (check one)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Please explain briefly why you made this choice (for example): “I like to fish, and clear water is important. But I would prefer to have more open area to fish on the reefs.”

Please note the following general assumptions when you make your choices:

- The most efficient local management strategy is centered on improving water quality, supplemented by efficient education and enforcement policies. This strategy is also the most expensive local strategy.
- Protecting the reef by increasing the area of no-take zones is also efficient but less so. This relatively low-cost option will reduce reef-fishing activities (but fishing opportunities may be unaffected or may even increase elsewhere in the FKNMS).
- The less efficient the global greenhouse gas strategy to control the rise in sea temperatures, the less efficient the local management strategies will also be.
- Making a choice to spend money on protecting the amount of living coral on the reefs will mean that you have less money to spend on other goods and services.

**F9.** Suppose you could only choose between the following three alternative combinations of global and local strategies, which would be your most preferred alternative and which would be your least preferred alternative?

	<b>Alt A</b>	<b>Alt B</b>	<b>Alt C</b>
Global policy for reductions in greenhouse gases (compared with no change in policy as in Alt A.)	No change	Medium reductions	Large reductions
<b>Local Florida Keys Management Strategies</b>			
Added spending on water quality, education and outreach, and enforcement	No change	+5%	+5%
Increase in no-take zoning of coral reef areas (percent of coral reefs protected)	No change (60%)	From 60% to 75%	From 60% to 75%
<b>Coral cover loss by 2027, Florida Keys</b>	<b>95%</b>	<b>77%</b>	<b>40%</b>
<b>Total annual cost to your household for global and local strategies</b>	<b>\$0</b>	<b>\$94</b>	<b>\$194</b>
Your most preferred alternative (check one)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Your least preferred alternative (check one)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Please explain briefly why you made this choice (for example): \_\_\_\_\_

**F10.** Suppose you could only choose between the following three alternative combinations of global and local strategies, which would be your most preferred alternative and which would be your least preferred alternative?

	<b>Alt A</b>	<b>Alt B</b>	<b>Alt C</b>
Global policy for reductions in greenhouse gases (compared with no change in policy as in Alt A.)	No change	Medium reductions	Large reductions
<b>Local Florida Keys Management Strategies</b>			
Added spending on water quality, education and outreach, and enforcement	No change	+5%	+5%
Increase in no-take zoning of coral reef areas (percent of coral reefs protected)	No change (60%)	No change (60%)	From 60% to 75%
<b>Coral cover loss by 2027, Florida Keys</b>	<b>95%</b>	<b>78%</b>	<b>40%</b>
<b>Total annual cost to your household for global and local strategies</b>	<b>\$0</b>	<b>\$90</b>	<b>\$194</b>
Your most preferred alternative (check one)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Your least preferred alternative (check one)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Please explain briefly why you made this choice (for example): \_\_\_\_\_

**F11.** Suppose you could only choose between the following three alternative combinations of global and local strategies, which would be your most preferred alternative and which would be your least preferred alternative?

	<b>Alt A</b>	<b>Alt B</b>	<b>Alt C</b>
Global policy for reductions in greenhouse gases (compared with no change in policy as in Alt A.)	No change	Medium reductions	Large reductions
<b>Local Florida Keys Management Strategies</b>			
Added spending on water quality, education and outreach, and enforcement	No change	+10%	+5%
Increase in no-take zoning of coral reef areas (percent of coral reefs protected)	No change (60%)	No change (60%)	From 60% to 90%
<b>Coral cover loss by 2027, Florida Keys</b>	<b>95%</b>	<b>76%</b>	<b>38%</b>
<b>Total annual cost to your household for global and local strategies</b>	<b>\$0</b>	<b>\$130</b>	<b>\$200</b>
Your most preferred alternative (check one)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Your least preferred alternative (check one)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Please explain briefly why you made this choice (for example): \_\_\_\_\_

**F12.** Suppose you could only choose between the following three alternative combinations of global and local strategies, which would be your most preferred alternative and which would be your least preferred alternative?

	<b>Alt A</b>	<b>Alt B</b>	<b>Alt C</b>
Global policy for reductions in greenhouse gases (compared with no change in policy as in Alt A.)	No change	Medium reductions	Large reductions
<b>Local Florida Keys Management Strategies</b>			
Added spending on water quality, education and outreach, and enforcement	No change	+10%	+5%
Increase in no-take zoning of coral reef areas (percent of coral reefs protected)	No change (60%)	No change (60%)	From 60% to 75%
<b>Coral cover loss by 2027, Florida Keys</b>	<b>95%</b>	<b>76%</b>	<b>40%</b>
<b>Total annual cost to your household for global and local strategies</b>	<b>\$0</b>	<b>\$130</b>	<b>\$194</b>
Your most preferred alternative (check one)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Your least preferred alternative (check one)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Please explain briefly why you made this choice (for example): \_\_\_\_\_

**F13.** Suppose you could only choose between the following three alternative combinations of global and local strategies, which would be your most preferred alternative and which would be your least preferred alternative?

	<b>Alt A</b>	<b>Alt B</b>	<b>Alt C</b>
Global policy for reductions in greenhouse gases (compared with no change in policy as in Alt A.)	No change	Medium reductions	Large reductions
<b>Local Florida Keys Management Strategies</b>			
Added spending on water quality, education and outreach, and enforcement	No change	+5%	+5%
Increase in no-take zoning of coral reef areas (percent of coral reefs protected)	No change (60%)	No change (60%)	From 60% to 90%
<b>Coral cover loss by 2027, Florida Keys</b>	<b>95%</b>	<b>78%</b>	<b>38%</b>
<b>Total annual cost to your household for global and local strategies</b>	<b>\$0</b>	<b>\$90</b>	<b>\$200</b>
Your most preferred alternative (check one)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Your least preferred alternative (check one)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Please explain briefly why you made this choice (for example): \_\_\_\_\_

**F14.** Suppose you could only choose between the following three alternative combinations of global and local strategies, which would be your most preferred alternative and which would be your least preferred alternative?

	<b>Alt A</b>	<b>Alt B</b>	<b>Alt C</b>
Global policy for reductions in greenhouse gases (compared with no change in policy as in Alt A.)	No change	Medium reductions	Large reductions
<b>Local Florida Keys Management Strategies</b>			
Added spending on water quality, education and outreach, and enforcement	No change	+5%	+10%
Increase in no-take zoning of coral reef areas (percent of coral reefs protected)	No change (60%)	From 60% to 75%	No change (60%)
<b>Coral cover loss by 2027, Florida Keys</b>	<b>95%</b>	<b>77%</b>	<b>40%</b>
<b>Total annual cost to your household for global and local strategies</b>	<b>\$0</b>	<b>\$94</b>	<b>\$230</b>
Your most preferred alternative (check one)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Your least preferred alternative (check one)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Please explain briefly why you made this choice (for example): \_\_\_\_\_

In Part A, you told us how many days you yourself participated in outdoor recreation activities during the past 12 months in the Florida Keys. You also told us how many days you participated in such activities outside the Florida Keys during the past 12 months (Part A, A6), if any.

**F15. Please confirm whether you did any outdoor recreation activities in the Florida Keys during the past 12 months:**

- Yes —————> Continue to question F16.  
 No —————> Skip to Part G.

**F16. Currently, 6% of the entire water area in the FKNMS is covered with living coral. If the living coral cover were only 3% (half the current cover), how would that affect the number of days you would spend on outdoor recreation activities in the Florida Keys during a 12-month period?**

- No change       \_\_\_\_ (#days less)       Would cease activities       Don't know

**F17. And how would this reduction in living coral cover affect the number of days you would spend on outdoor recreation activities outside the Florida Keys?**

- No change       \_\_\_\_ (#days more)       Don't know

**F18. If there were no living coral cover or 0% cover, how would that affect the number of days you would spend on outdoor recreation activities in the Florida Keys during a 12-month period?**

- No change       \_\_\_\_ (#days less)       Would cease activities       Don't know

**F19. And how would the disappearance of living coral cover affect the number of days you would spend on outdoor recreation activities outside the Florida Keys?**

- No change       \_\_\_\_ (#days more)       Don't know

[This page intentionally left blank. Proceed to next page.]



## Part G: Demographic Profile

In this final section, we need to know information about you and your household to make sure we have a representative sample of Monroe County residents.

Again, your privacy will be protected and any information identifying you or your household will not be revealed to anyone.

**G1. How many people in your household are permanent residents of Monroe County, Florida?**

\_\_\_\_\_ number of people

**G2. How many of these people are at least 16 years of age?** \_\_\_\_\_ number of people

**G3. What is the closest mile marker to your residence?** \_\_\_\_\_ mile marker number

**G4. Do you have access to the water from your residence?**  Yes  No

**G5. Do you own a boat?**  Yes  No

**G6. How many years have you lived in Monroe County?** \_\_\_\_\_ number of years

**G7. In what year were you born?** \_\_\_\_\_ year

**G8. Are you Spanish, Hispanic, or Latino?**  Yes  No

**G9. What race do you consider yourself?**

Please circle one or more of the letter(s) that best describes you

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

**G10. What is the highest level of education that you have completed?**

Please circle the letter of the category that best describes you

- A 8th Grade or Less
- B 9th to 11th Grade
- C 12th Grade, High School Grad, GED
- D 13 to 15 Years (some college or vocational training)
- E College Graduate
- F Graduate School, Law School, Medical School

G11. What is your employment status?

Please circle the letter or letters of all those that apply

- |   |                    |   |                   |
|---|--------------------|---|-------------------|
| A | Unemployed         | E | Student           |
| B | Employed full-time | F | Homemaker         |
| C | Employed part-time | G | None of the above |
| D | Retired            |   | (specify) _____   |

G12. Do you work outside Monroe County?  Yes  No

G13. What is your zip code? \_\_\_\_\_

G14. What is your total household income, before taxes.

Please circle the letter corresponding to the category that best describes your household

- |   |                      |   |                        |
|---|----------------------|---|------------------------|
| A | Under \$5,000        | I | \$40,000 to \$44,999   |
| B | \$5,000 to \$9,999   | J | \$45,000 to \$49,999   |
| B | \$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 |   |                        |

# *Monroe County Resident Survey*

**Your answers are voluntary and confidential.**

Your name will never be released to anyone unless otherwise required by law. After the completion of the project all materials identifying you as an individual will be destroyed.

This is a cooperative research project of the Monroe County Tourist Development Council and the National Oceanic and Atmospheric Administration. Public reporting burden for this collection of information is estimated to average 1 hour including time for reviewing instructions, searching existing data sources, gathering and maintaining the data need, 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 this burden, to U.S. Department of Commerce, Clearance Officer, Office of Chief Information Officer, Rm. 6625, 14<sup>th</sup> and Constitution Avenue NW, Washington, DC 20230. Notwithstanding any other provisions of the law, no person is required to respond to, nor shall any person be subject to penalty for failure to comply with, a collection of information subject to requirements of the Paperwork Reduction Act, unless that collection of information displays a currently valid OMB Control Number.

## Resident Survey

1. Overall, how would you rate Monroe County as a place to live?

- a. Excellent
- b. Good
- c. Fair
- d. Poor

Please circle letter corresponding to your answer

2. There are many reasons that people choose to live where they do in Florida. What are the two most important reasons you chose to live in Monroe County?

- a. No special reason
- b. Born here
- c. Job or business
- d. Climate
- e. Environment
- f. Access to natural resources, such as natural settings and wildlife
- g. Opportunities for water activities, such as fishing or diving
- h. Low crime rate
- i. Cultural activities
- j. Retirement
- k. Some other reason (specify) \_\_\_\_\_

Please circle letters corresponding to the two most important reasons

3. In the past 12 months, have you done any outdoor recreation activities in the Florida Keys?

- a. Yes (Go to Part A)
- b. No (Go to Part G)

Please use the enclosed White Card-Activities List to see what we mean by outdoor recreation

**Part A: Outdoor recreation activities during the past 12 months in the Florida Keys**

Please use the enclosed Activities List and map to help you answer the questions in this section

- A1. Which of the activities on the enclosed Activities List did you or someone in your household do in the Florida Keys during the last 12 months?**
- A2. Pleas fill in the circle for each activity you, yourself did during the past 12 months in the Upper Keys, Islamorada, Marathon, Lower Keys and Key West?**
- A3. On how many different days did you, yourself participate in each activity in the Upper Keys, Islamorada, Marathon, Lower Keys and Key West?**

Only answer for those activities you listed with an A on the end of the activity number

- A4. How many others (excluding yourself) in your household did each activity in the Upper Keys, Islamorada, Marathon, Lower Keys and Key West?**

A1 Activity	Upper Keys			Islamorada			Marathon			Lower Keys			Key West		
	A2 Resp. days	A3 #	A4 #	A2 Resp. days	A3 #	A4 #	A2 Resp. days	A3 #	A4 #	A2 Resp. days	A3 #	A4 #	A2 Resp. days	A3 #	A4 #
_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____
_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____
_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____
_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____
_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____
_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____
_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____
_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____
_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____
_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____
_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____
_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____
_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____
_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____
_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____
_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____
_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____
_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____
_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____
_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____
_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____
_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____
_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____
_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____

**A5. What would you say is the most important activity you did in the Florida Keys?**

**Most Important Activity** \_\_\_\_\_ (Activity List Number)

**No Activity Most Important (fill in box)**

**A6. On how many different days did you participate in outdoor recreation activities outside the Florida Keys during the past 12 months?** \_\_\_\_\_ (# of days)

**Part B: Reef use in the Florida Keys during the past 12 months. Both artificial and natural reefs.**

Please use Blue Card with Activities List for reef use and map of the Florida Keys in answering Part B

- B1. Which activities did you or someone in your household do on either artificial or natural reefs during the past 12 months in the Upper Keys, Islamorada, Marathon, Lower Keys and Key West?**

If you did not do anything in a region, check the box indicating no reef use in the region

- B2. Please fill in the circle for each activity you, yourself, did during the past 12 months in the Upper Keys, Islamorada, Marathon, Lower Keys and Key West.**
- B3. How many others in your household did each activity on the reefs in the Upper Keys, Islamorada, Marathon, Lower Keys and Key West during the past 12 months?**
- B4. On how many different days did you, yourself, participate in each activity on the reefs in the Upper Keys, Islamorada, Marathon, Lower Keys and Key West during the past 12 months?**
- B5. On how many different days did you, yourself, participate in each activity on the artificial reefs in the Upper Keys, Islamorada, Marathon, Lower Keys and Key West during the past 12 months?**
- B6. On how many different days did you, yourself, participate in each activity on the natural reefs in the Upper Keys, Islamorada, Marathon, Lower Keys and Key West during the past 12 months?**

Note: If you did part of a day on an artificial reef and part of a day on a natural reef, count one whole day on each type of reef

- B7. How many different dives did you, yourself, make for each type of diving activity you did on the reefs in the Upper Keys, Islamorada, Marathon, Lower Keys and Key West during the past 12 months?**

Diving activities include all snorkeling and scuba diving activities on the Blue Card-Activities List (Reef)

A dive is defined as an entry and exit from the water to snorkel or scuba dive

- B8. How many different dives did you, yourself, make for each type of diving activity you did on the artificial reefs in the Upper Keys, Islamorada, Marathon, Lower Keys and Key West during the past 12 months?**
- B9. How many different dives did you, yourself, make for each type of diving activity you did on the natural reefs in the Upper Keys, Islamorada, Marathon, Lower Keys and Key West during the past 12 months?**

Please refer to Questions B1 - B9 when filling in the tables on the following two pages

There is one table for each of the five regions of the Florida Keys (Upper Keys, Islamorada, Marathon, Lower Keys and Key West)



No Reef Use

Upper Keys

B1	B2	B3	B4	B5	B6	B7	B8	B9
Activity	Resp.	# Others	Respondent # of days	# days artificial	# days natural	Respondent # dives	# dives artificial	# dives natural
_____	○	_____	_____	_____	_____	_____	_____	_____
_____	○	_____	_____	_____	_____	_____	_____	_____
_____	○	_____	_____	_____	_____	_____	_____	_____
_____	○	_____	_____	_____	_____	_____	_____	_____
_____	○	_____	_____	_____	_____	_____	_____	_____
_____	○	_____	_____	_____	_____	_____	_____	_____
_____	○	_____	_____	_____	_____	_____	_____	_____
_____	○	_____	_____	_____	_____	_____	_____	_____
_____	○	_____	_____	_____	_____	_____	_____	_____

No Reef Use

Islamorada

B1	B2	B3	B4	B5	B6	B7	B8	B9
Activity	Resp.	# Others	Respondent # of days	# days artificial	# days natural	Respondent # dives	# dives artificial	# dives natural
_____	○	_____	_____	_____	_____	_____	_____	_____
_____	○	_____	_____	_____	_____	_____	_____	_____
_____	○	_____	_____	_____	_____	_____	_____	_____
_____	○	_____	_____	_____	_____	_____	_____	_____
_____	○	_____	_____	_____	_____	_____	_____	_____
_____	○	_____	_____	_____	_____	_____	_____	_____
_____	○	_____	_____	_____	_____	_____	_____	_____
_____	○	_____	_____	_____	_____	_____	_____	_____
_____	○	_____	_____	_____	_____	_____	_____	_____

No Reef Use

Marathon

B1	B2	B3	B4	B5	B6	B7	B8	B9
Activity	Resp.	# Others	Respondent # of days	# days artificial	# days natural	Respondent # dives	# dives artificial	# dives natural
_____	○	_____	_____	_____	_____	_____	_____	_____
_____	○	_____	_____	_____	_____	_____	_____	_____
_____	○	_____	_____	_____	_____	_____	_____	_____
_____	○	_____	_____	_____	_____	_____	_____	_____
_____	○	_____	_____	_____	_____	_____	_____	_____
_____	○	_____	_____	_____	_____	_____	_____	_____
_____	○	_____	_____	_____	_____	_____	_____	_____
_____	○	_____	_____	_____	_____	_____	_____	_____
_____	○	_____	_____	_____	_____	_____	_____	_____

No Reef Use

Lower Keys

B1	B2	B3	B4	B5	B6	B7	B8	B9
Activity	Resp.	# Others	Respondent # of days	# days artificial	# days natural	Respondent # dives	# dives artificial	# dives natural
_____	○	_____	_____	_____	_____	_____	_____	_____
_____	○	_____	_____	_____	_____	_____	_____	_____
_____	○	_____	_____	_____	_____	_____	_____	_____
_____	○	_____	_____	_____	_____	_____	_____	_____
_____	○	_____	_____	_____	_____	_____	_____	_____
_____	○	_____	_____	_____	_____	_____	_____	_____
_____	○	_____	_____	_____	_____	_____	_____	_____
_____	○	_____	_____	_____	_____	_____	_____	_____
_____	○	_____	_____	_____	_____	_____	_____	_____

No Reef Use

Key West

B1	B2	B3	B4	B5	B6	B7	B8	B9
Activity	Resp.	# Others	Respondent # of days	# days artificial	# days natural	Respondent # dives	# dives artificial	# dives natural
_____	○	_____	_____	_____	_____	_____	_____	_____
_____	○	_____	_____	_____	_____	_____	_____	_____
_____	○	_____	_____	_____	_____	_____	_____	_____
_____	○	_____	_____	_____	_____	_____	_____	_____
_____	○	_____	_____	_____	_____	_____	_____	_____
_____	○	_____	_____	_____	_____	_____	_____	_____
_____	○	_____	_____	_____	_____	_____	_____	_____
_____	○	_____	_____	_____	_____	_____	_____	_____
_____	○	_____	_____	_____	_____	_____	_____	_____

## Part C: Specialization

In this section, we are interested in learning more about your primary activity. Please answer the following questions based on the response you gave to QUESTION A5.

For the four questions below, please read the four choices and circle the one answer that best fits you for that question.

### C1. When I participate in my primary activity, I feel like:

- 1 a beginner. I don't really feel like I am part of the activity scene.
- 2 an occasional or irregular participant. Sometimes it is fun, entertaining or rewarding to do my activity.
- 3 a habitual and regular participant in the activity.
- 4 an insider to the sport. The activity is an important part of who I am.

### C2. During my activity, I can best be described as:

- 1 having very little understanding of the activity. I am often unsure about how to do certain things when I go.
- 2 having some understanding of the activity, but still in the process of learning more about the sport. I am becoming more familiar and comfortable with the activity.
- 3 being comfortable with the sport. I have a good understanding of what I can do, and how to do it.
- 4 a knowledgeable expert in the sport. I encourage, teach and enhance opportunities for others who are interested in the activity.

### C3. My relationships with others who do the activity are:

- 1 not established. I really don't know any other people who do the activity.
- 2 very limited. I know some others in the activity by sight and sometimes talk with them, but I don't know their names.
- 3 one of familiarity. I know the names of others who do the activity, and often speak with them.
- 4 close. I have personal and close relationships with others in the activity. These friendships often revolve around the activity.

### C4. My commitment to the activity is:

- 1 very slight. I have very little connection to the activity. I may or may not continue to participate in the sport in the future.
- 2 moderate. I will continue to do it as it is entertaining and provides the benefits I want.
- 3 fairly strong. I have a sense of being a member of the activity, and it is likely that I will continue to do it for a long time.
- 4 very strong. I am totally committed to the activity. I encourage others to participate in the sport and seek to ensure the activity continues into the future.

### C5. If you had to replace all of the equipment that you currently own for your primary activity with similar equipment, how much would it cost to replace?

\$ \_\_\_\_\_ AMOUNT TO REPLACE PRIMARY ACTIVITY EQUIPMENT

**C6. To what extent do you make use of the following for current information about your primary activity? Please circle number that indicates your extent of use for each source of information.**

	No Use	Almost no use	A little use	Some use	A lot of use
a. Talking with others who participate in the activity.....	1	2	3	4	5
b. Magazines.....	1	2	3	4	5
c. Government agency publications.....	1	2	3	4	5
d. Conservation organization publications.....	1	2	3	4	5
e. Newspapers.....	1	2	3	4	5
f. Diving shops/companies.....	1	2	3	4	5
g. Club meetings.....	1	2	3	4	5
h. Television.....	1	2	3	4	5
i. Radio.....	1	2	3	4	5
j. Internet.....	1	2	3	4	5

**C7. Below is a list of reasons why people engage in recreation activities. Please circle the number that indicates how important each item is to you as a reason for participating in your primary activity.**

	Not at all important	Slightly important	Moderately important	Very important	Extremely important
a. To be outdoors.....	1	2	3	4	5
b. For family recreation.....	1	2	3	4	5
c. To experience new and different things.....	1	2	3	4	5
d. For relaxation.....	1	2	3	4	5
e. To be close to the water.....	1	2	3	4	5
f. To get away from the demands of other people.....	1	2	3	4	5
g. To be with friends.....	1	2	3	4	5
h. To develop my skills.....	1	2	3	4	5
i. To get away from the regular routine.....	1	2	3	4	5
j. To experience adventure and excitement.....	1	2	3	4	5
k. To experience natural surroundings.....	1	2	3	4	5

## Part D: Importance and satisfaction with facilities, services, and natural resources in the Florida Keys

In this section we are interested in identifying the recreation site information which is important to you.

Please read each statement and rate the importance of each item as it contributes to an ideal recreation/tourism setting for the activities you did in the Florida Keys. If an item does not apply, indicate by circling 9 (NA). Likewise, if you don't know, circle 8 (DK).

**1 = Not Important (NI), 2 = Somewhat Important (SI), 3 = Important (I),  
4 = Very Important (VI), 5 = Extremely Important (EI), 8 = Don't Know (DK), or 9 = NA**

	NI	SI	I	VI	EI	DK	NA
	1	2	3	4	5	8	9
D1. Clear water (high visibility) .....	1	2	3	4	5	8	9
D2. Amount of living coral on reefs .....	1	2	3	4	5	8	9
D3. Public transportation .....	1	2	3	4	5	8	9
D4. Parking .....	1	2	3	4	5	8	9
D5. Many different kind of fish and sea life to view ..	1	2	3	4	5	8	9
D6. Many different kind of fish and sea life to catch ..	1	2	3	4	5	8	9
D7. Large numbers of fish .....	1	2	3	4	5	8	9
D8. Opportunity to view large wildlife: (manatees, whales, dolphins, sea turtles) .....	1	2	3	4	5	8	9
D9. Uncrowded conditions .....	1	2	3	4	5	8	9
D10. Maps, brochures, and other tourist information ..	1	2	3	4	5	8	9
D11. Boat ramps/launching facilities .....	1	2	3	4	5	8	9
D12. Marina facilities .....	1	2	3	4	5	8	9
D13. Directional signs, street signs, mile markers ....	1	2	3	4	5	8	9
D14. Condition of roads and streets .....	1	2	3	4	5	8	9
D15. Cleanliness of streets and sidewalks .....	1	2	3	4	5	8	9
D16. Condition of bike paths and sidewalks/walking paths .....	1	2	3	4	5	8	9
D17. Shoreline access .....	1	2	3	4	5	8	9
D18. Designated swimming/beach areas .....	1	2	3	4	5	8	9
D19. Quality of beaches .....	1	2	3	4	5	8	9
D20. Customer service and friendliness of people ....	1	2	3	4	5	8	9
D21. Historic preservation (historic landmarks, houses, etc.) .....	1	2	3	4	5	8	9
D22. Availability of public restrooms .....	1	2	3	4	5	8	9
D23. Value for the price .....	1	2	3	4	5	8	9
D24. Parks and specially protected areas .....	1	2	3	4	5	8	9
D25. Mooring buoys near coral reefs .....	1	2	3	4	5	8	9

On the previous page you indicated the importance of a list of items to your recreational/tourist experiences. Now read each of the items on this list and rate how satisfied you were with each at the places you did your activities in the Florida Keys. If an item does not apply, indicate by circling 9 (NA). Likewise, if you don't know, circle 8 (DK).

**1 = Terrible (T), 2 = Unhappy/Dissatisfied (UH), 3 = Mixed (M), 4 = Happy/Satisfied (H),  
5 = Delighted (D), 8 = Don't Know (DK), or 9 = NA**

	T	UH	M	H	D	DK	NA
	1	2	3	4	5	8	9
D26. Clear water (high visibility) . . . . .	1	2	3	4	5	8	9
D27. Amount of living coral on reefs . . . . .	1	2	3	4	5	8	9
D28. Public transportation . . . . .	1	2	3	4	5	8	9
D29. Parking . . . . .	1	2	3	4	5	8	9
D30. Many different kind of fish and sea life to view . .	1	2	3	4	5	8	9
D31. Many different kind of fish and sea life to catch .	1	2	3	4	5	8	9
D32. Large numbers of fish . . . . .	1	2	3	4	5	8	9
D33. Opportunity to view large wildlife: (manatees, whales, dolphins, sea turtles) . . . . .	1	2	3	4	5	8	9
D34. Uncrowded conditions . . . . .	1	2	3	4	5	8	9
D35. Maps, brochures, and other tourist information .	1	2	3	4	5	8	9
D36. Boat ramps/launching facilities . . . . .	1	2	3	4	5	8	9
D37. Marina facilities . . . . .	1	2	3	4	5	8	9
D38. Directional signs, street signs, mile markers . . . .	1	2	3	4	5	8	9
D39. Condition of roads and streets . . . . .	1	2	3	4	5	8	9
D40. Cleanliness of streets and sidewalks . . . . .	1	2	3	4	5	8	9
D41. Condition of bike paths and sidewalks/walking paths . . . . .	1	2	3	4	5	8	9
D42. Shoreline access . . . . .	1	2	3	4	5	8	9
D43. Designated swimming/beach areas . . . . .	1	2	3	4	5	8	9
D44. Quality of beaches . . . . .	1	2	3	4	5	8	9
D45. Customer service and friendliness of people . . . .	1	2	3	4	5	8	9
D46. Historic preservation (historic landmarks, houses, etc.) . . . . .	1	2	3	4	5	8	9
D47. Availability of public restrooms . . . . .	1	2	3	4	5	8	9
D48. Value for the price . . . . .	1	2	3	4	5	8	9
D49. Parks and specially protected areas . . . . .	1	2	3	4	5	8	9
D50. Mooring buoys near coral reefs . . . . .	1	2	3	4	5	8	9

D51. Had you lived-in or visited the Florida Keys more than five years ago?

Yes —————> Continue to question D52.

No —————> Skip to next page, Part E

Now read each of the items on this list and rate how satisfied you were with each when you were in the Florida Keys more than five years ago. If an item does not apply, indicate by circling 9 (NA). Likewise, if you don't know, circle 8 (DK).

1 = Terrible (T), 2 = Unhappy/Dissatisfied (UH), 3 = Mixed (M), 4 = Happy/Satisfied (H),  
5 = Delighted (D), 8 = Don't Know (DK), or 9 = NA

	T	UH	M	H	D	DK	NA
	1	2	3	4	5	8	9
D52. Clear water (high visibility) .....	1	2	3	4	5	8	9
D53. Amount of living coral on reefs .....	1	2	3	4	5	8	9
D54. Many different kind of fish and sea life to view ..	1	2	3	4	5	8	9
D55. Large numbers of fish .....	1	2	3	4	5	8	9
D56. Opportunity to view large wildlife: (manatees, whales, dolphins, sea turtles) .....	1	2	3	4	5	8	9
D57. Uncrowded conditions .....	1	2	3	4	5	8	9
D58. Condition of roads and streets .....	1	2	3	4	5	8	9
D59. Shoreline access .....	1	2	3	4	5	8	9
D60. Quality of beaches .....	1	2	3	4	5	8	9
D61. Customer service and friendliness of people ...	1	2	3	4	5	8	9
D62. Historic preservation (historic landmarks, houses, etc.) .....	1	2	3	4	5	8	9
D63. Parks and specially protected areas .....	1	2	3	4	5	8	9
D64. Mooring buoys near coral reefs .....	1	2	3	4	5	8	9

## Part E: Environmental Issues

In this section we are interested in learning about your feelings regarding various environmental issues. Below is a list of statements.

For each statement, please circle the response that best reflects your opinion about the statement.

1 = Strongly Agree (SA), 2 = Agree (A), 3 = Neutral (N), 4 = Disagree (D),  
5 = Strongly Disagree (SD), and 8 = Don't Know or No Opinion (DK)

	SA	A	N	D	SD	DK
	1	2	3	4	5	8
E1. The federal government will have to introduce harsh measures to halt pollution since few people will regulate themselves .....	1	2	3	4	5	8
E2. We should not worry about killing too many game animals because in the long run things will balance out .....	1	2	3	4	5	8
E3. I'd be willing to make personal sacrifices for the sake of slowing down pollution even though the immediate results might not seem significant .....	1	2	3	4	5	8
E4. Pollution is not personally affecting my life .....	1	2	3	4	5	8
E5. The benefits of modern consumer products are more important than the pollution that results from their production and use .....	1	2	3	4	5	8
E6. We must prevent any type of animal from becoming extinct, even if it means sacrificing some things for ourselves .....	1	2	3	4	5	8
E7. Courses focusing on the conservation of natural resources should be taught in the public schools .....	1	2	3	4	5	8
E8. Although there is continual contamination of our lakes, streams, and air, nature's purifying process will soon return them to normal .....	1	2	3	4	5	8
E9. Because the government has such good inspection and control agencies, it's very unlikely that pollution due to energy production will become excessive .....	1	2	3	4	5	8



For each statement, please circle the response that best reflects your opinion about the statement.

1 = Strongly Agree (SA), 2 = Agree (A), 3 = Neutral (N), 4 = Disagree (D),  
5 = Strongly Disagree (SD), and 8 = Don't Know or No Opinion (DK)

	SA	A	N	D	SD	DK
	1	2	3	4	5	8
E10. The government should provide each citizen with a list of agencies and organizations to which the citizen could report grievances concerning pollution .....	1	2	3	4	5	8
E11. Predators such as hawks, crows, skunks, and coyotes which prey on farmers' grain crops and poultry should be eliminated .....	1	2	3	4	5	8
E12. The currently active anti-pollution organizations are really more interested in disrupting society than they are in fighting pollution .....	1	2	3	4	5	8
E13. Even if public transportation was more efficient than it is, I would prefer to drive my car to work ..	1	2	3	4	5	8
E14. Industry is trying its best to develop effective anti-pollution technology .....	1	2	3	4	5	8
E15. If asked, I would contribute time, money, or both to an organization like the Sierra Club that works to improve the quality of the environment .....	1	2	3	4	5	8
E16. I would be willing to accept an increase in my family's expenses of \$100 next year to promote the wise use of natural resources .....	1	2	3	4	5	8

## Part F: Coral Reefs

Coral reefs are sensitive ecosystems. The Florida Keys, the world's third-largest barrier reef and the only coral reef system along the US mainland coast, is no exception. It has long been recognized that human use of coral reefs and adjacent coastal activities inflict strains on these systems. Non-local factors associated with global human use of the planet's resources add to the strain through their impact on air and sea temperatures.

The Florida Keys National Marine Sanctuary (FKNMS) was founded through a Federal Act to manage issues such as the above. It is managed cooperatively by the National Oceanic and Atmospheric Administration (NOAA) and the State of Florida, with significant input from local government, businesses, non-government organizations and the general public. Your views are valuable in the formulation of FKNMS action plans and management strategies.

In this section we have a few special issues questions we would like to ask you.

**F1. What do you think are the greatest threats to the reefs in the Florida Keys in the following list?** Please rank greatest threat=1, second-greatest threat=2, third-greatest threat=3, and so on for as many factors as you consider *important threats*. **Leave blank those you consider unimportant.**

- |   |                          |
|---|--------------------------|
| Spear fishers .....   | <input type="checkbox"/> |
| Scuba divers .....  | <input type="checkbox"/> |
| Urban development .....   | <input type="checkbox"/> |
| Ships and boats grounding on reefs, discharging pollutants..... | <input type="checkbox"/> |
| Hurricanes .....  | <input type="checkbox"/> |
| Solid waste disposal (sewage) .....                             | <input type="checkbox"/> |
| Climate change (global warming etc) .....                       | <input type="checkbox"/> |
| Stormwater and wastewater runoff .....                          | <input type="checkbox"/> |
| Overfishing by commercial and recreational fishers .....        | <input type="checkbox"/> |
| Number of tourists .....  | <input type="checkbox"/> |
| Chemical runoff (pesticides, herbicides, fertilizers) .....     | <input type="checkbox"/> |
| People collecting coral and live rock .....                     | <input type="checkbox"/> |

**F2. Any other important factors we have omitted from the list?**

If any, write in \_\_\_\_\_

**F3. What in your opinion should the Marine Sanctuary (FKNMS) do to reduce the main stress factors on the reef?**

Please rank your first recommendation=1, second=2, and so on for all recommendations you consider important. **Leave those blank that you consider unimportant.**

- Stringent control of pollutants to preserve water quality.....
- Enforced training/certification of scuba divers and snorkelers.....
- Prohibiting spear fishing.....
- Stronger shipping regulations.....
- Training, workshops and school programs.....
- Better management of waterways.....
- More no-catch fishing zones in the FKNMS.....

**F4. Do you have any other important recommendations on how FKNMS could reduce the main stress factors on the reef?**

If any, write in \_\_\_\_\_  
\_\_\_\_\_

- The main signs of coral stress are coral diseases and **coral bleaching**.
- The coral organism lives in a mutually dependent (symbiotic) relationship with tiny algae known as *zooxanthellae*. Their health is highly dependent on temperature and the coral expels them when the sea temperature gets above a certain level. This causes the coral to turn white and weaken, the phenomenon known as coral bleaching.
- There is general agreement among scientists that the world's climate is getting warmer and that this may cause large sections of the world's coral reefs to die.
- There is also a general consensus that control of other stress factors can make the coral organisms more resilient (able to resist and/or recover from stressful events).

**F5. Are you aware of coral bleaching and if so to what extent?**

- Highly aware
- Conscious but not highly aware
- Not aware (IF "Not aware", go to Question F7.)  
All other answers proceed to Question F6.

**F6. What in your opinion is the primary cause of coral bleaching?** *(Check one only)*

- Local factors exclusively
- Non-local factors such as global warming/climate change, exclusively
- Non-local factors aggravated by local factors
- Local factors aggravated by non-local factors
- I don't know

**F7. How important do you consider climate change to be for the world of the 21st century?**  
Circle the number that corresponds to your answer.

- |                   |                      |                           |                  |                       |                            |
|-------------------|----------------------|---------------------------|------------------|-----------------------|----------------------------|
| <i>Don't Know</i> | <i>Not Important</i> | <i>Somewhat Important</i> | <i>Important</i> | <i>Very Important</i> | <i>Extremely Important</i> |
| dk                | 1                    | 2                         | 3                | 4                     | 5                          |

**F8. And how important do you consider climate change to be for the future of the coral reefs in the Florida Keys?**

- |                   |                      |                           |                  |                       |                            |
|-------------------|----------------------|---------------------------|------------------|-----------------------|----------------------------|
| <i>Don't Know</i> | <i>Not Important</i> | <i>Somewhat Important</i> | <i>Important</i> | <i>Very Important</i> | <i>Extremely Important</i> |
| dk                | 1                    | 2                         | 3                | 4                     | 5                          |

The final part of this section explores a number of alternative management actions that might be applied to protect the Florida Keys. There is general agreement among scientists that the impact of these actions will be to reduce coral bleaching, but not to eliminate it.

- Coral reefs are affected by global and local forces.
- Global climate change and resulting rises in seawater temperatures are considered a major factor in coral bleaching.
- When corals bleach, the corals die and live coral cover is reduced.
- Scientists have found that more coral cover and complexity of corals is associated with more abundant and larger fish, and many different kinds of fish and sealife.
- Emissions of greenhouse gases are considered the main source of global climate change and coral bleaching.
- Water pollution can stress corals and make them more susceptible to disease or reduce their ability to recover from stressful events such as storms or bleaching events.
- Excess nutrients can lead to algal growth, which smothers the corals and kills them.

We present three global alternatives for coral health measured by the amount of live coral cover, before considering local management policies that could be applied to lessen the impact of each global scenario. In the absence of local management policies, living **coral cover** of comparable quality to what exists today is reduced by (a) a massive 95% in 20 years (by 2027) in the worst case scenario, (b) by 80% (intermediate case) or (c) by 50% (best case). Case (a) assumes that there is no further change in global strategies to reduce global warming, and that the average global temperature will increase by 6-8°C by the year 2100. In the intermediate case (b), the increase over the 21<sup>st</sup> century will be 4°C, and (c) using the most efficient policies nationally and internationally, there will be a 2°C increase in the average global temperature.

- Local forces also affect the health of coral reefs.
- Users can touch, step on, or drop their anchors on the corals.
- Fishermen can overfish a reef and remove fish species that eat algae that can smother and kill the corals.

## Local Management Strategies

There are four local strategies included in the FKNMS management plan designed to protect the health of the coral reefs. For each strategy, we present three levels of protection. The no change from current policy is always the low cost strategy.

1. **Education and outreach** are important activities in the FKNMS. The goal is to promote protection and sustainable use of Sanctuary reserves, and public understanding of the nature of marine sanctuaries. Activities include school programs, local community meetings, signage and exhibits in visitor centers, brochures, and TV and radio announcements. Team Ocean, a group of local volunteers, is provided with a FKNMS boat and fuel. They patrol the FKNMS and when they observe someone violating FKNMS rules and regulations, they educate them about how their activity harms the corals. Team Ocean and education and outreach staff also visit local businesses and distribute information on how users can better interact with corals to avoid damages. Education is also an integral element of other programs in the management plan and is considered a low-cost alternative to enforcement.

2. **Enforcement** includes a wide range of measures such as introducing no-anchor zones for vessels above a certain length, reinforcement of bans on spear fishing and touching corals, educating scuba divers and snorkelers about the reefs and enforcing reef protection, and restricting the use of personal vessels on or near the reef. It also involves the mooring buoy program set up around the restricted areas within the Sanctuary.

3. **Water quality** is a crucial issue as reflected by the FKNMS management plan: “Declining water quality continues to be a major concern for the Sanctuary.” Remedies include the development and implementation of wastewater and stormwater plans, efficient options to reduce loading of sediment, toxics and nutrients which damage water quality and the reef, targeting hot spots of industrial and commercial facilities, and reducing pollution from vessels and marinas. Improving water quality is a significantly higher-cost activity than the other items in this list.

4. **Zoning:** There are currently 24 no-take zones in the FKNMS. They cover less than five percent of FKNMS waters, but protect about 60% of the corals. Scientific monitoring of these zones has determined that coral health, fish abundance, size and diversity of fish and sea life have improved in protected areas versus non protected areas. The three levels of protection are (a) no change; or (b) 25% increase in coral cover protected, from 60% to 75%; or (c) 50% increase in coral cover protected, from 60% to 90%.

Reflecting current FKNMS management principles of running several parallel strategies, we have reduced these four policy options to two by combining education and outreach, enforcement, and water quality management into one group, with the options of (a) no change, (b) 5% increase in annual spending, and (c) 10% increase in annual spending. Zoning remains a separate strategy, with three possible levels of protection as shown above.

- A combination of global and local management strategies is required to save the health of the coral reefs.

- Scientists believe that global policies to minimize the increase in greenhouse gases are required to lower sea water temperatures from what they would otherwise have been, and so reduce coral bleaching.

- The more efficient the global strategy to reduce greenhouse gases, the more cost-efficient will be local management actions to protect the reef.

- If local forces are not addressed, the corals will not recover from coral bleaching when or if cooler waters return.

- Policies to reduce the increase in greenhouse gases will result in increased costs to your household through higher utility bills and the costs of products or services.

- Local management strategies will result in increased costs to your household if you are a resident or visitor to the Florida Keys. Costs will be passed on in terms of higher State and local taxes, local water/sewage bills and the costs of local goods and services purchased in the Florida Keys.

- We have worked with scientists and managers to estimate the approximate annual costs to your household for the different mixes of global and local management strategies which scientists think will deliver some protection to the corals. The costs to your household are stated in dollars per year.

Questions F9 - F14 contain six multiple-choice situations to which you are asked to state your preferences and provide a brief explanation for your choices. Each choice presents different mixes of global and local management strategies and has an estimated cost to your household. Each choice always includes the option of choosing the status quo or NO CHANGE (Alt A). This alternative will cost your household \$0, but will result in 95% reduction in the amount of live coral cover in 20 years, and local actions such as improving water quality and increasing the no-take areas will become much less efficient.

**Each choice will be similar to the following example.** Alt A is always the no-change situation as just explained. Alt B assumes an intermediate global policy for greenhouse gas reduction, and Alt C is based on a stronger and costlier global policy. In each Alt B and C case, different combinations of local management strategies have been designed which yield different coral cover outcomes at different costs to your household, giving you three choices.

We can't help you state your preferences, which depend on your own experience and attitudes. We don't know the extent of your concern about future climate change, how much value you put on the quality of the coral reefs relative to other attractions of the Florida Keys, and the main activities that attracted you there including fishing, boating, snorkeling, and land-based activities. So the example below is purely illustrative, and has nothing whatever to do with what you actually think. It's just an example to assist you in answering questions F9 - F14.

	<b>Alt A</b>	<b>Alt B</b>	<b>Alt C</b>
Global policy for reductions in greenhouse gases (compared with no change in policy as in Alt A.)	No change	Medium reductions	Large reductions
<b>Local Florida Keys Management Strategies</b>			
Added spending on water quality, education and outreach, and enforcement	No change	+10%	No change
Increase in no-take zoning of coral reef areas (percent of coral reefs protected)	No change (60%)	From 60% to 75%	From 60% to 90%
<b>Coral cover loss by 2027, Florida Keys</b>	<b>95%</b>	<b>75%</b>	<b>44%</b>
<b>Total annual cost to your household for global and local strategies</b>	<b>\$0</b>	<b>\$201</b>	<b>\$240</b>
Your most preferred alternative (check one)?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Your least preferred alternative (check one)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Please explain briefly why you made this choice (for example): “I like to fish, and clear water is important. But I would prefer to have more open area to fish on the reefs.”

Please note the following general assumptions when you make your choices:

- The most efficient local management strategy is centered on improving water quality, supplemented by efficient education and enforcement policies. This strategy is also the most expensive local strategy.
- Protecting the reef by increasing the area of no-take zones is also efficient but less so. This relatively low-cost option will reduce reef-fishing activities (but fishing opportunities may be unaffected or may even increase elsewhere in the FKNMS).
- The less efficient the global greenhouse gas strategy to control the rise in sea temperatures, the less efficient the local management strategies will also be.
- Making a choice to spend money on protecting the amount of living coral on the reefs will mean that you have less money to spend on other goods and services.



**F9.** Suppose you could only choose between the following three alternative combinations of global and local strategies, which would be your most preferred alternative and which would be your least preferred alternative?

	<b>Alt A</b>	<b>Alt B</b>	<b>Alt C</b>
Global policy for reductions in greenhouse gases (compared with no change in policy as in Alt A.)	No change	Medium reductions	Large reductions
<b>Local Florida Keys Management Strategies</b>			
Added spending on water quality, education and outreach, and enforcement	No change	+10%	+5%
Increase in no-take zoning of coral reef areas (percent of coral reefs protected)	No change (60%)	From 60% to 75%	No change (60%)
<b>Coral cover loss by 2027, Florida Keys</b>	<b>95%</b>	<b>75%</b>	<b>44%</b>
<b>Total annual cost to your household for global and local strategies</b>	<b>\$0</b>	<b>\$201</b>	<b>\$285</b>
Your most preferred alternative (check one)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Your least preferred alternative (check one)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Please explain briefly why you made this choice (for example): \_\_\_\_\_

**F10.** Suppose you could only choose between the following three alternative combinations of global and local strategies, which would be your most preferred alternative and which would be your least preferred alternative?

	<b>Alt A</b>	<b>Alt B</b>	<b>Alt C</b>
Global policy for reductions in greenhouse gases (compared with no change in policy as in Alt A.)	No change	Medium reductions	Large reductions
<b>Local Florida Keys Management Strategies</b>			
Added spending on water quality, education and outreach, and enforcement	No change	No change	+5%
Increase in no-take zoning of coral reef areas (percent of coral reefs protected)	No change (60%)	No change (60%)	From 60% to 75%
<b>Coral cover loss by 2027, Florida Keys</b>	<b>95%</b>	<b>80%</b>	<b>40%</b>
<b>Total annual cost to your household for global and local strategies</b>	<b>\$0</b>	<b>\$75</b>	<b>\$291</b>
Your most preferred alternative (check one)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Your least preferred alternative (check one)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Please explain briefly why you made this choice (for example): \_\_\_\_\_

**F11.** Suppose you could only choose between the following three alternative combinations of global and local strategies, which would be your most preferred alternative and which would be your least preferred alternative?

	<b>Alt A</b>	<b>Alt B</b>	<b>Alt C</b>
Global policy for reductions in greenhouse gases (compared with no change in policy as in Alt A.)	No change	Medium reductions	Large reductions
<b>Local Florida Keys Management Strategies</b>			
Added spending on water quality, education and outreach, and enforcement	No change	+10%	+10%
Increase in no-take zoning of coral reef areas (percent of coral reefs protected)	No change (60%)	From 60% to 75%	From 60% to 90%
<b>Coral cover loss by 2027, Florida Keys</b>	<b>95%</b>	<b>75%</b>	<b>34%</b>
<b>Total annual cost to your household for global and local strategies</b>	<b>\$0</b>	<b>\$201</b>	<b>\$360</b>
Your most preferred alternative (check one)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Your least preferred alternative (check one)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Please explain briefly why you made this choice (for example): \_\_\_\_\_

**F12.** Suppose you could only choose between the following three alternative combinations of global and local strategies, which would be your most preferred alternative and which would be your least preferred alternative?

	<b>Alt A</b>	<b>Alt B</b>	<b>Alt C</b>
Global policy for reductions in greenhouse gases (compared with no change in policy as in Alt A.)	No change	Medium reductions	Large reductions
<b>Local Florida Keys Management Strategies</b>			
Added spending on water quality, education and outreach, and enforcement	No change	+5%	+10%
Increase in no-take zoning of coral reef areas (percent of coral reefs protected)	No change (60%)	No change (60%)	No change (60%)
<b>Coral cover loss by 2027, Florida Keys</b>	<b>95%</b>	<b>78%</b>	<b>40%</b>
<b>Total annual cost to your household for global and local strategies</b>	<b>\$0</b>	<b>\$135</b>	<b>\$345</b>
Your most preferred alternative (check one)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Your least preferred alternative (check one)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Please explain briefly why you made this choice (for example): \_\_\_\_\_

**F13.** Suppose you could only choose between the following three alternative combinations of global and local strategies, which would be your most preferred alternative and which would be your least preferred alternative?

	<b>Alt A</b>	<b>Alt B</b>	<b>Alt C</b>
Global policy for reductions in greenhouse gases (compared with no change in policy as in Alt A.)	No change	Medium reductions	Large reductions
<b>Local Florida Keys Management Strategies</b>			
Added spending on water quality, education and outreach, and enforcement	No change	No change	No change
Increase in no-take zoning of coral reef areas (percent of coral reefs protected)	No change (60%)	From 60% to 75%	From 60% to 90%
<b>Coral cover loss by 2027, Florida Keys</b>	<b>95%</b>	<b>79%</b>	<b>44%</b>
<b>Total annual cost to your household for global and local strategies</b>	<b>\$0</b>	<b>\$81</b>	<b>\$240</b>
Your most preferred alternative (check one)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Your least preferred alternative (check one)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Please explain briefly why you made this choice (for example): \_\_\_\_\_

**F14.** Suppose you could only choose between the following three alternative combinations of global and local strategies, which would be your most preferred alternative and which would be your least preferred alternative?

	<b>Alt A</b>	<b>Alt B</b>	<b>Alt C</b>
Global policy for reductions in greenhouse gases (compared with no change in policy as in Alt A.)	No change	Medium reductions	Large reductions
<b>Local Florida Keys Management Strategies</b>			
Added spending on water quality, education and outreach, and enforcement	No change	+10%	No change
Increase in no-take zoning of coral reef areas (percent of coral reefs protected)	No change (60%)	From 60% to 75%	From 60% to 90%
<b>Coral cover loss by 2027, Florida Keys</b>	<b>95%</b>	<b>75%</b>	<b>44%</b>
<b>Total annual cost to your household for global and local strategies</b>	<b>\$0</b>	<b>\$201</b>	<b>\$240</b>
Your most preferred alternative (check one)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Your least preferred alternative (check one)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Please explain briefly why you made this choice (for example): \_\_\_\_\_

In Part A, you told us how many days you yourself participated in outdoor recreation activities during the past 12 months in the Florida Keys. You also told us how many days you participated in such activities outside the Florida Keys during the past 12 months (Part A, A6), if any.

**F15. Please confirm whether you did any outdoor recreation activities in the Florida Keys during the past 12 months:**

- Yes —————> Continue to question F16.  
 No —————> Skip to Part G.

**F16. Currently, 6% of the entire water area in the FKNMS is covered with living coral. If the living coral cover were only 3% (half the current cover), how would that affect the number of days you would spend on outdoor recreation activities in the Florida Keys during a 12-month period?**

- No change       \_\_\_\_ (#days less)       Would cease activities       Don't know

**F17. And how would this reduction in living coral cover affect the number of days you would spend on outdoor recreation activities outside the Florida Keys?**

- No change       \_\_\_\_ (#days more)       Don't know

**F18. If there were no living coral cover or 0% cover, how would that affect the number of days you would spend on outdoor recreation activities in the Florida Keys during a 12-month period?**

- No change       \_\_\_\_ (#days less)       Would cease activities       Don't know

**F19. And how would the disappearance of living coral cover affect the number of days you would spend on outdoor recreation activities outside the Florida Keys?**

- No change       \_\_\_\_ (#days more)       Don't know

[This page intentionally left blank. Proceed to next page.]

## Part G: Demographic Profile

In this final section, we need to know information about you and your household to make sure we have a representative sample of Monroe County residents.

Again, your privacy will be protected and any information identifying you or your household will not be revealed to anyone.

**G1. How many people in your household are permanent residents of Monroe County, Florida?**

\_\_\_\_\_ number of people

**G2. How many of these people are at least 16 years of age?** \_\_\_\_\_ number of people

**G3. What is the closest mile marker to your residence?** \_\_\_\_\_ mile marker number

**G4. Do you have access to the water from your residence?**  Yes  No

**G5. Do you own a boat?**  Yes  No

**G6. How many years have you lived in Monroe County?** \_\_\_\_\_ number of years

**G7. In what year were you born?** \_\_\_\_\_ year

**G8. Are you Spanish, Hispanic, or Latino?**  Yes  No

**G9. What race do you consider yourself?**

Please circle one or more of the letter(s) that best describes you

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

**G10. What is the highest level of education that you have completed?**

Please circle the letter of the category that best describes you

- A 8th Grade or Less
- B 9th to 11th Grade
- C 12th Grade, High School Grad, GED
- D 13 to 15 Years (some college or vocational training)
- E College Graduate
- F Graduate School, Law School, Medical School

G11. What is your employment status?

Please circle the letter or letters of all those that apply

- |   |                    |   |                   |
|---|--------------------|---|-------------------|
| A | Unemployed         | E | Student           |
| B | Employed full-time | F | Homemaker         |
| C | Employed part-time | G | None of the above |
| D | Retired            |   | (specify) _____   |

G12. Do you work outside Monroe County?  Yes  No

G13. What is your zip code? \_\_\_\_\_

G14. What is your total household income, before taxes.

Please circle the letter corresponding to the category that best describes your household

- |   |                      |   |                        |
|---|----------------------|---|------------------------|
| A | Under \$5,000        | I | \$40,000 to \$44,999   |
| B | \$5,000 to \$9,999   | J | \$45,000 to \$49,999   |
| B | \$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 |   |                        |

# *Monroe County Resident Survey*

**Your answers are voluntary and confidential.**

Your name will never be released to anyone unless otherwise required by law. After the completion of the project all materials identifying you as an individual will be destroyed.



This is a cooperative research project of the Monroe County Tourist Development Council and the National Oceanic and Atmospheric Administration. Public reporting burden for this collection of information is estimated to average 1 hour including time for reviewing instructions, searching existing data sources, gathering and maintaining the data need, 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 this burden, to U.S. Department of Commerce, Clearance Officer, Office of Chief Information Officer, Rm. 6625, 14<sup>th</sup> and Constitution Avenue NW, Washington, DC 20230. Notwithstanding any other provisions of the law, no person is required to respond to, nor shall any person be subject to penalty for failure to comply with, a collection of information subject to requirements of the Paperwork Reduction Act, unless that collection of information displays a currently valid OMB Control Number.

## Resident Survey

1. Overall, how would you rate Monroe County as a place to live?

- a. Excellent
- b. Good
- c. Fair
- d. Poor

Please circle letter corresponding to your answer

2. There are many reasons that people choose to live where they do in Florida. What are the two most important reasons you chose to live in Monroe County?

- a. No special reason
- b. Born here
- c. Job or business
- d. Climate
- e. Environment
- f. Access to natural resources, such as natural settings and wildlife
- g. Opportunities for water activities, such as fishing or diving
- h. Low crime rate
- i. Cultural activities
- j. Retirement
- k. Some other reason (specify) \_\_\_\_\_

Please circle letters corresponding to the two most important reasons

3. In the past 12 months, have you done any outdoor recreation activities in the Florida Keys?

- a. Yes (Go to Part A)
- b. No (Go to Part G)

Please use the enclosed White Card-Activities List to see what we mean by outdoor recreation

**Part A: Outdoor recreation activities during the past 12 months in the Florida Keys**

Please use the enclosed Activities List and map to help you answer the questions in this section

- A1. Which of the activities on the enclosed Activities List did you or someone in your household do in the Florida Keys during the last 12 months?**
- A2. Pleas fill in the circle for each activity you, yourself did during the past 12 months in the Upper Keys, Islamorada, Marathon, Lower Keys and Key West?**
- A3. On how many different days did you, yourself participate in each activity in the Upper Keys, Islamorada, Marathon, Lower Keys and Key West?**

Only answer for those activities you listed with an A on the end of the activity number

- A4. How many others (excluding yourself) in your household did each activity in the Upper Keys, Islamorada, Marathon, Lower Keys and Key West?**

A1 Activity	Upper Keys			Islamorada			Marathon			Lower Keys			Key West		
	A2	A3	A4	A2	A3	A4	A2	A3	A4	A2	A3	A4	A2	A3	A4
	Resp. days	#	#	Resp. days	#	#	Resp. days	#	#	Resp. days	#	#	Resp. days	#	#
_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____
_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____
_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____
_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____
_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____
_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____
_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____
_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____
_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____
_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____
_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____
_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____
_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____
_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____
_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____
_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____
_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____
_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____
_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____
_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____
_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____
_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____
_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____
_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____

**A5. What would you say is the most important activity you did in the Florida Keys?**

**Most Important Activity** \_\_\_\_\_ (Activity List Number)

**No Activity Most Important (fill in box)**

**A6. On how many different days did you participate in outdoor recreation activities outside the Florida Keys during the past 12 months?** \_\_\_\_\_ (# of days)

**Part B: Reef use in the Florida Keys during the past 12 months. Both artificial and natural reefs.**

Please use Blue Card with Activities List for reef use and map of the Florida Keys in answering Part B

- B1. Which activities did you or someone in your household do on either artificial or natural reefs during the past 12 months in the Upper Keys, Islamorada, Marathon, Lower Keys and Key West?**

If you did not do anything in a region, check the box indicating no reef use in the region

- B2. Please fill in the circle for each activity you, yourself, did during the past 12 months in the Upper Keys, Islamorada, Marathon, Lower Keys and Key West.**
- B3. How many others in your household did each activity on the reefs in the Upper Keys, Islamorada, Marathon, Lower Keys and Key West during the past 12 months?**
- B4. On how many different days did you, yourself, participate in each activity on the reefs in the Upper Keys, Islamorada, Marathon, Lower Keys and Key West during the past 12 months?**
- B5. On how many different days did you, yourself, participate in each activity on the artificial reefs in the Upper Keys, Islamorada, Marathon, Lower Keys and Key West during the past 12 months?**
- B6. On how many different days did you, yourself, participate in each activity on the natural reefs in the Upper Keys, Islamorada, Marathon, Lower Keys and Key West during the past 12 months?**

Note: If you did part of a day on an artificial reef and part of a day on a natural reef, count one whole day on each type of reef

- B7. How many different dives did you, yourself, make for each type of diving activity you did on the reefs in the Upper Keys, Islamorada, Marathon, Lower Keys and Key West during the past 12 months?**

Diving activities include all snorkeling and scuba diving activities on the Blue Card-Activities List (Reef)

A dive is defined as an entry and exit from the water to snorkel or scuba dive

- B8. How many different dives did you, yourself, make for each type of diving activity you did on the artificial reefs in the Upper Keys, Islamorada, Marathon, Lower Keys and Key West during the past 12 months?**
- B9. How many different dives did you, yourself, make for each type of diving activity you did on the natural reefs in the Upper Keys, Islamorada, Marathon, Lower Keys and Key West during the past 12 months?**

Please refer to Questions B1 - B9 when filling in the tables on the following two pages

There is one table for each of the five regions of the Florida Keys (Upper Keys, Islamorada, Marathon, Lower Keys and Key West)

No Reef Use

Upper Keys

B1	B2	B3	B4	B5	B6	B7	B8	B9
Activity	Resp.	# Others	Respondent # of days	# days artificial	# days natural	Respondent # dives	# dives artificial	# dives natural
_____	○	_____	_____	_____	_____	_____	_____	_____
_____	○	_____	_____	_____	_____	_____	_____	_____
_____	○	_____	_____	_____	_____	_____	_____	_____
_____	○	_____	_____	_____	_____	_____	_____	_____
_____	○	_____	_____	_____	_____	_____	_____	_____
_____	○	_____	_____	_____	_____	_____	_____	_____
_____	○	_____	_____	_____	_____	_____	_____	_____
_____	○	_____	_____	_____	_____	_____	_____	_____
_____	○	_____	_____	_____	_____	_____	_____	_____

No Reef Use

Islamorada

B1	B2	B3	B4	B5	B6	B7	B8	B9
Activity	Resp.	# Others	Respondent # of days	# days artificial	# days natural	Respondent # dives	# dives artificial	# dives natural
_____	○	_____	_____	_____	_____	_____	_____	_____
_____	○	_____	_____	_____	_____	_____	_____	_____
_____	○	_____	_____	_____	_____	_____	_____	_____
_____	○	_____	_____	_____	_____	_____	_____	_____
_____	○	_____	_____	_____	_____	_____	_____	_____
_____	○	_____	_____	_____	_____	_____	_____	_____
_____	○	_____	_____	_____	_____	_____	_____	_____
_____	○	_____	_____	_____	_____	_____	_____	_____
_____	○	_____	_____	_____	_____	_____	_____	_____

No Reef Use

Marathon

B1	B2	B3	B4	B5	B6	B7	B8	B9
Activity	Resp.	# Others	Respondent # of days	# days artificial	# days natural	Respondent # dives	# dives artificial	# dives natural
_____	○	_____	_____	_____	_____	_____	_____	_____
_____	○	_____	_____	_____	_____	_____	_____	_____
_____	○	_____	_____	_____	_____	_____	_____	_____
_____	○	_____	_____	_____	_____	_____	_____	_____
_____	○	_____	_____	_____	_____	_____	_____	_____
_____	○	_____	_____	_____	_____	_____	_____	_____
_____	○	_____	_____	_____	_____	_____	_____	_____
_____	○	_____	_____	_____	_____	_____	_____	_____
_____	○	_____	_____	_____	_____	_____	_____	_____

No Reef Use

Lower Keys

B1	B2	B3	B4	B5	B6	B7	B8	B9
Activity	Resp.	# Others	Respondent # of days	# days artificial	# days natural	Respondent # dives	# dives artificial	# dives natural
_____	○	_____	_____	_____	_____	_____	_____	_____
_____	○	_____	_____	_____	_____	_____	_____	_____
_____	○	_____	_____	_____	_____	_____	_____	_____
_____	○	_____	_____	_____	_____	_____	_____	_____
_____	○	_____	_____	_____	_____	_____	_____	_____
_____	○	_____	_____	_____	_____	_____	_____	_____
_____	○	_____	_____	_____	_____	_____	_____	_____
_____	○	_____	_____	_____	_____	_____	_____	_____
_____	○	_____	_____	_____	_____	_____	_____	_____

No Reef Use

Key West

B1	B2	B3	B4	B5	B6	B7	B8	B9
Activity	Resp.	# Others	Respondent # of days	# days artificial	# days natural	Respondent # dives	# dives artificial	# dives natural
_____	○	_____	_____	_____	_____	_____	_____	_____
_____	○	_____	_____	_____	_____	_____	_____	_____
_____	○	_____	_____	_____	_____	_____	_____	_____
_____	○	_____	_____	_____	_____	_____	_____	_____
_____	○	_____	_____	_____	_____	_____	_____	_____
_____	○	_____	_____	_____	_____	_____	_____	_____
_____	○	_____	_____	_____	_____	_____	_____	_____
_____	○	_____	_____	_____	_____	_____	_____	_____
_____	○	_____	_____	_____	_____	_____	_____	_____

## Part C: Specialization

In this section, we are interested in learning more about your primary activity. Please answer the following questions based on the response you gave to QUESTION A5.

For the four questions below, please read the four choices and circle the one answer that best fits you for that question.

### C1. When I participate in my primary activity, I feel like:

- 1 a beginner. I don't really feel like I am part of the activity scene.
- 2 an occasional or irregular participant. Sometimes it is fun, entertaining or rewarding to do my activity.
- 3 a habitual and regular participant in the activity.
- 4 an insider to the sport. The activity is an important part of who I am.

### C2. During my activity, I can best be described as:

- 1 having very little understanding of the activity. I am often unsure about how to do certain things when I go.
- 2 having some understanding of the activity, but still in the process of learning more about the sport. I am becoming more familiar and comfortable with the activity.
- 3 being comfortable with the sport. I have a good understanding of what I can do, and how to do it.
- 4 a knowledgeable expert in the sport. I encourage, teach and enhance opportunities for others who are interested in the activity.

### C3. My relationships with others who do the activity are:

- 1 not established. I really don't know any other people who do the activity.
- 2 very limited. I know some others in the activity by sight and sometimes talk with them, but I don't know their names.
- 3 one of familiarity. I know the names of others who do the activity, and often speak with them.
- 4 close. I have personal and close relationships with others in the activity. These friendships often revolve around the activity.

### C4. My commitment to the activity is:

- 1 very slight. I have very little connection to the activity. I may or may not continue to participate in the sport in the future.
- 2 moderate. I will continue to do it as it is entertaining and provides the benefits I want.
- 3 fairly strong. I have a sense of being a member of the activity, and it is likely that I will continue to do it for a long time.
- 4 very strong. I am totally committed to the activity. I encourage others to participate in the sport and seek to ensure the activity continues into the future.

### C5. If you had to replace all of the equipment that you currently own for your primary activity with similar equipment, how much would it cost to replace?

\$ \_\_\_\_\_ AMOUNT TO REPLACE PRIMARY ACTIVITY EQUIPMENT



**C6. To what extent do you make use of the following for current information about your primary activity? Please circle number that indicates your extent of use for each source of information.**

	No Use	Almost no use	A little use	Some use	A lot of use
a. Talking with others who participate in the activity.....	1	2	3	4	5
b. Magazines.....	1	2	3	4	5
c. Government agency publications.....	1	2	3	4	5
d. Conservation organization publications.....	1	2	3	4	5
e. Newspapers.....	1	2	3	4	5
f. Diving shops/companies.....	1	2	3	4	5
g. Club meetings.....	1	2	3	4	5
h. Television.....	1	2	3	4	5
i. Radio.....	1	2	3	4	5
j. Internet.....	1	2	3	4	5

**C7. Below is a list of reasons why people engage in recreation activities. Please circle the number that indicates how important each item is to you as a reason for participating in your primary activity.**

	Not at all important	Slightly important	Moderately important	Very important	Extremely important
a. To be outdoors.....	1	2	3	4	5
b. For family recreation.....	1	2	3	4	5
c. To experience new and different things.....	1	2	3	4	5
d. For relaxation.....	1	2	3	4	5
e. To be close to the water.....	1	2	3	4	5
f. To get away from the demands of other people.....	1	2	3	4	5
g. To be with friends.....	1	2	3	4	5
h. To develop my skills.....	1	2	3	4	5
i. To get away from the regular routine.....	1	2	3	4	5
j. To experience adventure and excitement.....	1	2	3	4	5
k. To experience natural surroundings.....	1	2	3	4	5

## Part D: Importance and satisfaction with facilities, services, and natural resources in the Florida Keys

In this section we are interested in identifying the recreation site information which is important to you.

Please read each statement and rate the importance of each item as it contributes to an ideal recreation/tourism setting for the activities you did in the Florida Keys. If an item does not apply, indicate by circling 9 (NA). Likewise, if you don't know, circle 8 (DK).

**1 = Not Important (NI), 2 = Somewhat Important (SI), 3 = Important (I),  
4 = Very Important (VI), 5 = Extremely Important (EI), 8 = Don't Know (DK), or 9 = NA**

	NI	SI	I	VI	EI	DK	NA
	1	2	3	4	5	8	9
D1. Clear water (high visibility) . . . . .	1	2	3	4	5	8	9
D2. Amount of living coral on reefs . . . . .	1	2	3	4	5	8	9
D3. Public transportation . . . . .	1	2	3	4	5	8	9
D4. Parking . . . . .	1	2	3	4	5	8	9
D5. Many different kind of fish and sea life to view . . . . .	1	2	3	4	5	8	9
D6. Many different kind of fish and sea life to catch . . . . .	1	2	3	4	5	8	9
D7. Large numbers of fish . . . . .	1	2	3	4	5	8	9
D8. Opportunity to view large wildlife: (manatees, whales, dolphins, sea turtles) . . . . .	1	2	3	4	5	8	9
D9. Uncrowded conditions . . . . .	1	2	3	4	5	8	9
D10. Maps, brochures, and other tourist information . . . . .	1	2	3	4	5	8	9
D11. Boat ramps/launching facilities . . . . .	1	2	3	4	5	8	9
D12. Marina facilities . . . . .	1	2	3	4	5	8	9
D13. Directional signs, street signs, mile markers . . . . .	1	2	3	4	5	8	9
D14. Condition of roads and streets . . . . .	1	2	3	4	5	8	9
D15. Cleanliness of streets and sidewalks . . . . .	1	2	3	4	5	8	9
D16. Condition of bike paths and sidewalks/walking paths . . . . .	1	2	3	4	5	8	9
D17. Shoreline access . . . . .	1	2	3	4	5	8	9
D18. Designated swimming/beach areas . . . . .	1	2	3	4	5	8	9
D19. Quality of beaches . . . . .	1	2	3	4	5	8	9
D20. Customer service and friendliness of people . . . . .	1	2	3	4	5	8	9
D21. Historic preservation (historic landmarks, houses, etc.) . . . . .	1	2	3	4	5	8	9
D22. Availability of public restrooms . . . . .	1	2	3	4	5	8	9
D23. Value for the price . . . . .	1	2	3	4	5	8	9
D24. Parks and specially protected areas . . . . .	1	2	3	4	5	8	9
D25. Mooring buoys near coral reefs . . . . .	1	2	3	4	5	8	9

On the previous page you indicated the importance of a list of items to your recreational/tourist experiences. Now read each of the items on this list and rate how satisfied you were with each at the places you did your activities in the Florida Keys. If an item does not apply, indicate by circling 9 (NA). Likewise, if you don't know, circle 8 (DK).

**1 = Terrible (T), 2 = Unhappy/Dissatisfied (UH), 3 = Mixed (M), 4 = Happy/Satisfied (H),  
5 = Delighted (D), 8 = Don't Know (DK), or 9 = NA**

	T	UH	M	H	D	DK	NA
	1	2	3	4	5	8	9
D26. Clear water (high visibility) . . . . .	1	2	3	4	5	8	9
D27. Amount of living coral on reefs . . . . .	1	2	3	4	5	8	9
D28. Public transportation . . . . .	1	2	3	4	5	8	9
D29. Parking . . . . .	1	2	3	4	5	8	9
D30. Many different kind of fish and sea life to view . .	1	2	3	4	5	8	9
D31. Many different kind of fish and sea life to catch .	1	2	3	4	5	8	9
D32. Large numbers of fish . . . . .	1	2	3	4	5	8	9
D33. Opportunity to view large wildlife: (manatees, whales, dolphins, sea turtles) . . . . .	1	2	3	4	5	8	9
D34. Uncrowded conditions . . . . .	1	2	3	4	5	8	9
D35. Maps, brochures, and other tourist information .	1	2	3	4	5	8	9
D36. Boat ramps/launching facilities . . . . .	1	2	3	4	5	8	9
D37. Marina facilities . . . . .	1	2	3	4	5	8	9
D38. Directional signs, street signs, mile markers . . . .	1	2	3	4	5	8	9
D39. Condition of roads and streets . . . . .	1	2	3	4	5	8	9
D40. Cleanliness of streets and sidewalks . . . . .	1	2	3	4	5	8	9
D41. Condition of bike paths and sidewalks/walking paths . . . . .	1	2	3	4	5	8	9
D42. Shoreline access . . . . .	1	2	3	4	5	8	9
D43. Designated swimming/beach areas . . . . .	1	2	3	4	5	8	9
D44. Quality of beaches . . . . .	1	2	3	4	5	8	9
D45. Customer service and friendliness of people . . . .	1	2	3	4	5	8	9
D46. Historic preservation (historic landmarks, houses, etc.) . . . . .	1	2	3	4	5	8	9
D47. Availability of public restrooms . . . . .	1	2	3	4	5	8	9
D48. Value for the price . . . . .	1	2	3	4	5	8	9
D49. Parks and specially protected areas . . . . .	1	2	3	4	5	8	9
D50. Mooring buoys near coral reefs . . . . .	1	2	3	4	5	8	9

D51. Had you lived-in or visited the Florida Keys more than five years ago?

Yes → Continue to question D52.

No → Skip to next page, Part E

Now read each of the items on this list and rate how satisfied you were with each when you were in the Florida Keys more than five years ago. If an item does not apply, indicate by circling 9 (NA). Likewise, if you don't know, circle 8 (DK).

1 = Terrible (T), 2 = Unhappy/Dissatisfied (UH), 3 = Mixed (M), 4 = Happy/Satisfied (H),  
5 = Delighted (D), 8 = Don't Know (DK), or 9 = NA

	T	UH	M	H	D	DK	NA
	1	2	3	4	5	8	9
D52. Clear water (high visibility) . . . . .	1	2	3	4	5	8	9
D53. Amount of living coral on reefs . . . . .	1	2	3	4	5	8	9
D54. Many different kind of fish and sea life to view . .	1	2	3	4	5	8	9
D55. Large numbers of fish . . . . .	1	2	3	4	5	8	9
D56. Opportunity to view large wildlife: (manatees, whales, dolphins, sea turtles) . . . . .	1	2	3	4	5	8	9
D57. Uncrowded conditions . . . . .	1	2	3	4	5	8	9
D58. Condition of roads and streets . . . . .	1	2	3	4	5	8	9
D59. Shoreline access . . . . .	1	2	3	4	5	8	9
D60. Quality of beaches . . . . .	1	2	3	4	5	8	9
D61. Customer service and friendliness of people . . .	1	2	3	4	5	8	9
D62. Historic preservation (historic landmarks, houses, etc.) . . . . .	1	2	3	4	5	8	9
D63. Parks and specially protected areas . . . . .	1	2	3	4	5	8	9
D64. Mooring buoys near coral reefs . . . . .	1	2	3	4	5	8	9

## Part E: Environmental Issues

In this section we are interested in learning about your feelings regarding various environmental issues. Below is a list of statements.

For each statement, please circle the response that best reflects your opinion about the statement.

1 = Strongly Agree (SA), 2 = Agree (A), 3 = Neutral (N), 4 = Disagree (D),  
5 = Strongly Disagree (SD), and 8 = Don't Know or No Opinion (DK)

	SA	A	N	D	SD	DK
	1	2	3	4	5	8
E1. The federal government will have to introduce harsh measures to halt pollution since few people will regulate themselves .....	1	2	3	4	5	8
E2. We should not worry about killing too many game animals because in the long run things will balance out .....	1	2	3	4	5	8
E3. I'd be willing to make personal sacrifices for the sake of slowing down pollution even though the immediate results might not seem significant .....	1	2	3	4	5	8
E4. Pollution is not personally affecting my life .....	1	2	3	4	5	8
E5. The benefits of modern consumer products are more important than the pollution that results from their production and use .....	1	2	3	4	5	8
E6. We must prevent any type of animal from becoming extinct, even if it means sacrificing some things for ourselves .....	1	2	3	4	5	8
E7. Courses focusing on the conservation of natural resources should be taught in the public schools .....	1	2	3	4	5	8
E8. Although there is continual contamination of our lakes, streams, and air, nature's purifying process will soon return them to normal .....	1	2	3	4	5	8
E9. Because the government has such good inspection and control agencies, it's very unlikely that pollution due to energy production will become excessive .....	1	2	3	4	5	8

For each statement, please circle the response that best reflects your opinion about the statement.

1 = Strongly Agree (SA), 2 = Agree (A), 3 = Neutral (N), 4 = Disagree (D),  
5 = Strongly Disagree (SD), and 8 = Don't Know or No Opinion (DK)

	SA	A	N	D	SD	DK
	1	2	3	4	5	8
E10. The government should provide each citizen with a list of agencies and organizations to which the citizen could report grievances concerning pollution .....	1	2	3	4	5	8
E11. Predators such as hawks, crows, skunks, and coyotes which prey on farmers' grain crops and poultry should be eliminated .....	1	2	3	4	5	8
E12. The currently active anti-pollution organizations are really more interested in disrupting society than they are in fighting pollution .....	1	2	3	4	5	8
E13. Even if public transportation was more efficient than it is, I would prefer to drive my car to work ..	1	2	3	4	5	8
E14. Industry is trying its best to develop effective anti-pollution technology .....	1	2	3	4	5	8
E15. If asked, I would contribute time, money, or both to an organization like the Sierra Club that works to improve the quality of the environment .....	1	2	3	4	5	8
E16. I would be willing to accept an increase in my family's expenses of \$100 next year to promote the wise use of natural resources .....	1	2	3	4	5	8

## Part F: Coral Reefs

Coral reefs are sensitive ecosystems. The Florida Keys, the world's third-largest barrier reef and the only coral reef system along the US mainland coast, is no exception. It has long been recognized that human use of coral reefs and adjacent coastal activities inflict strains on these systems. Non-local factors associated with global human use of the planet's resources add to the strain through their impact on air and sea temperatures.

The Florida Keys National Marine Sanctuary (FKNMS) was founded through a Federal Act to manage issues such as the above. It is managed cooperatively by the National Oceanic and Atmospheric Administration (NOAA) and the State of Florida, with significant input from local government, businesses, non-government organizations and the general public. Your views are valuable in the formulation of FKNMS action plans and management strategies.

In this section we have a few special issues questions we would like to ask you.

**F1. What do you think are the greatest threats to the reefs in the Florida Keys in the following list?** Please rank greatest threat=1, second-greatest threat=2, third-greatest threat=3, and so on for as many factors as you consider *important threats*. **Leave blank those you consider unimportant.**

- |   |                          |
|---|--------------------------|
| Spear fishers .....   | <input type="checkbox"/> |
| Scuba divers .....  | <input type="checkbox"/> |
| Urban development .....   | <input type="checkbox"/> |
| Ships and boats grounding on reefs, discharging pollutants..... | <input type="checkbox"/> |
| Hurricanes .....  | <input type="checkbox"/> |
| Solid waste disposal (sewage) .....                             | <input type="checkbox"/> |
| Climate change (global warming etc) .....                       | <input type="checkbox"/> |
| Stormwater and wastewater runoff .....                          | <input type="checkbox"/> |
| Overfishing by commercial and recreational fishers .....        | <input type="checkbox"/> |
| Number of tourists .....  | <input type="checkbox"/> |
| Chemical runoff (pesticides, herbicides, fertilizers) .....     | <input type="checkbox"/> |
| People collecting coral and live rock .....                     | <input type="checkbox"/> |

**F2. Any other important factors we have omitted from the list?**

If any, write in \_\_\_\_\_

**F3. What in your opinion should the Marine Sanctuary (FKNMS) do to reduce the main stress factors on the reef?**

Please rank your first recommendation=1, second=2, and so on for all recommendations you consider important. **Leave those blank that you consider unimportant.**

- Stringent control of pollutants to preserve water quality.....
- Enforced training/certification of scuba divers and snorkelers.....
- Prohibiting spear fishing.....
- Stronger shipping regulations.....
- Training, workshops and school programs.....
- Better management of waterways.....
- More no-catch fishing zones in the FKNMS.....

**F4. Do you have any other important recommendations on how FKNMS could reduce the main stress factors on the reef?**

If any, write in \_\_\_\_\_  
\_\_\_\_\_



- The main signs of coral stress are coral diseases and **coral bleaching**.
- The coral organism lives in a mutually dependent (symbiotic) relationship with tiny algae known as *zooxanthellae*. Their health is highly dependent on temperature and the coral expels them when the sea temperature gets above a certain level. This causes the coral to turn white and weaken, the phenomenon known as coral bleaching.
- There is general agreement among scientists that the world's climate is getting warmer and that this may cause large sections of the world's coral reefs to die.
- There is also a general consensus that control of other stress factors can make the coral organisms more resilient (able to resist and/or recover from stressful events).

**F5. Are you aware of coral bleaching and if so to what extent?**

- Highly aware
- Conscious but not highly aware
- Not aware (IF "Not aware", go to Question F7.)  
All other answers proceed to Question F6.

**F6. What in your opinion is the primary cause of coral bleaching?** *(Check one only)*

- Local factors exclusively
- Non-local factors such as global warming/climate change, exclusively
- Non-local factors aggravated by local factors
- Local factors aggravated by non-local factors
- I don't know

**F7. How important do you consider climate change to be for the world of the 21st century?**  
Circle the number that corresponds to your answer.

- |                   |                      |                           |                  |                       |                            |
|-------------------|----------------------|---------------------------|------------------|-----------------------|----------------------------|
| <i>Don't Know</i> | <i>Not Important</i> | <i>Somewhat Important</i> | <i>Important</i> | <i>Very Important</i> | <i>Extremely Important</i> |
| dk                | 1                    | 2                         | 3                | 4                     | 5                          |

**F8. And how important do you consider climate change to be for the future of the coral reefs in the Florida Keys?**

- |                   |                      |                           |                  |                       |                            |
|-------------------|----------------------|---------------------------|------------------|-----------------------|----------------------------|
| <i>Don't Know</i> | <i>Not Important</i> | <i>Somewhat Important</i> | <i>Important</i> | <i>Very Important</i> | <i>Extremely Important</i> |
| dk                | 1                    | 2                         | 3                | 4                     | 5                          |

The final part of this section explores a number of alternative management actions that might be applied to protect the Florida Keys. There is general agreement among scientists that the impact of these actions will be to reduce coral bleaching, but not to eliminate it.

- Coral reefs are affected by global and local forces.
- Global climate change and resulting rises in seawater temperatures are considered a major factor in coral bleaching.
- When corals bleach, the corals die and live coral cover is reduced.
- Scientists have found that more coral cover and complexity of corals is associated with more abundant and larger fish, and many different kinds of fish and sealife.
- Emissions of greenhouse gases are considered the main source of global climate change and coral bleaching.
- Water pollution can stress corals and make them more susceptible to disease or reduce their ability to recover from stressful events such as storms or bleaching events.
- Excess nutrients can lead to algal growth, which smothers the corals and kills them.

We present three global alternatives for coral health measured by the amount of live coral cover, before considering local management policies that could be applied to lessen the impact of each global scenario. In the absence of local management policies, living **coral cover** of comparable quality to what exists today is reduced by (a) a massive 95% in 20 years (by 2027) in the worst case scenario, (b) by 80% (intermediate case) or (c) by 50% (best case). Case (a) assumes that there is no further change in global strategies to reduce global warming, and that the average global temperature will increase by 6-8°C by the year 2100. In the intermediate case (b), the increase over the 21<sup>st</sup> century will be 4°C, and (c) using the most efficient policies nationally and internationally, there will be a 2°C increase in the average global temperature.

- Local forces also affect the health of coral reefs.
- Users can touch, step on, or drop their anchors on the corals.
- Fishermen can overfish a reef and remove fish species that eat algae that can smother and kill the corals.

## Local Management Strategies

There are four local strategies included in the FKNMS management plan designed to protect the health of the coral reefs. For each strategy, we present three levels of protection. The no change from current policy is always the low cost strategy.

1. **Education and outreach** are important activities in the FKNMS. The goal is to promote protection and sustainable use of Sanctuary reserves, and public understanding of the nature of marine sanctuaries. Activities include school programs, local community meetings, signage and exhibits in visitor centers, brochures, and TV and radio announcements. Team Ocean, a group of local volunteers, is provided with a FKNMS boat and fuel. They patrol the FKNMS and when they observe someone violating FKNMS rules and regulations, they educate them about how their activity harms the corals. Team Ocean and education and outreach staff also visit local businesses and distribute information on how users can better interact with corals to avoid damages. Education is also an integral element of other programs in the management plan and is considered a low-cost alternative to enforcement.

2. **Enforcement** includes a wide range of measures such as introducing no-anchor zones for vessels above a certain length, reinforcement of bans on spear fishing and touching corals, educating scuba divers and snorkelers about the reefs and enforcing reef protection, and restricting the use of personal vessels on or near the reef. It also involves the mooring buoy program set up around the restricted areas within the Sanctuary.

3. **Water quality** is a crucial issue as reflected by the FKNMS management plan: “Declining water quality continues to be a major concern for the Sanctuary.” Remedies include the development and implementation of wastewater and stormwater plans, efficient options to reduce loading of sediment, toxics and nutrients which damage water quality and the reef, targeting hot spots of industrial and commercial facilities, and reducing pollution from vessels and marinas. Improving water quality is a significantly higher-cost activity than the other items in this list.

4. **Zoning:** There are currently 24 no-take zones in the FKNMS. They cover less than five percent of FKNMS waters, but protect about 60% of the corals. Scientific monitoring of these zones has determined that coral health, fish abundance, size and diversity of fish and sea life have improved in protected areas versus non protected areas. The three levels of protection are (a) no change; or (b) 25% increase in coral cover protected, from 60% to 75%; or (c) 50% increase in coral cover protected, from 60% to 90%.

Reflecting current FKNMS management principles of running several parallel strategies, we have reduced these four policy options to two by combining education and outreach, enforcement, and water quality management into one group, with the options of (a) no change, (b) 5% increase in annual spending, and (c) 10% increase in annual spending. Zoning remains a separate strategy, with three possible levels of protection as shown above.

- A combination of global and local management strategies is required to save the health of the coral reefs.

- Scientists believe that global policies to minimize the increase in greenhouse gases are required to lower sea water temperatures from what they would otherwise have been, and so reduce coral bleaching.

- The more efficient the global strategy to reduce greenhouse gases, the more cost-efficient will be local management actions to protect the reef.

- If local forces are not addressed, the corals will not recover from coral bleaching when or if cooler waters return.

- Policies to reduce the increase in greenhouse gases will result in increased costs to your household through higher utility bills and the costs of products or services.

- Local management strategies will result in increased costs to your household if you are a resident or visitor to the Florida Keys. Costs will be passed on in terms of higher State and local taxes, local water/sewage bills and the costs of local goods and services purchased in the Florida Keys.

- We have worked with scientists and managers to estimate the approximate annual costs to your household for the different mixes of global and local management strategies which scientists think will deliver some protection to the corals. The costs to your household are stated in dollars per year.

Questions F9 - F14 contain six multiple-choice situations to which you are asked to state your preferences and provide a brief explanation for your choices. Each choice presents different mixes of global and local management strategies and has an estimated cost to your household. Each choice always includes the option of choosing the status quo or NO CHANGE (Alt A). This alternative will cost your household \$0, but will result in 95% reduction in the amount of live coral cover in 20 years, and local actions such as improving water quality and increasing the no-take areas will become much less efficient.

**Each choice will be similar to the following example.** Alt A is always the no-change situation as just explained. Alt B assumes an intermediate global policy for greenhouse gas reduction, and Alt C is based on a stronger and costlier global policy. In each Alt B and C case, different combinations of local management strategies have been designed which yield different coral cover outcomes at different costs to your household, giving you three choices.

We can't help you state your preferences, which depend on your own experience and attitudes. We don't know the extent of your concern about future climate change, how much value you put on the quality of the coral reefs relative to other attractions of the Florida Keys, and the main activities that attracted you there including fishing, boating, snorkeling, and land-based activities. So the example below is purely illustrative, and has nothing whatever to do with what you actually think. It's just an example to assist you in answering questions F9 - F14.

	<b>Alt A</b>	<b>Alt B</b>	<b>Alt C</b>
Global policy for reductions in greenhouse gases (compared with no change in policy as in Alt A.)	No change	Medium reductions	Large reductions
<b>Local Florida Keys Management Strategies</b>			
Added spending on water quality, education and outreach, and enforcement	No change	+10%	No change
Increase in no-take zoning of coral reef areas (percent of coral reefs protected)	No change (60%)	From 60% to 75%	From 60% to 90%
<b>Coral cover loss by 2027, Florida Keys</b>	<b>95%</b>	<b>75%</b>	<b>44%</b>
<b>Total annual cost to your household for global and local strategies</b>	<b>\$0</b>	<b>\$268</b>	<b>\$320</b>
Your most preferred alternative (check one)?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Your least preferred alternative (check one)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Please explain briefly why you made this choice (for example): “I like to fish, and clear water is important. But I would prefer to have more open area to fish on the reefs.”

Please note the following general assumptions when you make your choices:

- The most efficient local management strategy is centered on improving water quality, supplemented by efficient education and enforcement policies. This strategy is also the most expensive local strategy.
- Protecting the reef by increasing the area of no-take zones is also efficient but less so. This relatively low-cost option will reduce reef-fishing activities (but fishing opportunities may be unaffected or may even increase elsewhere in the FKNMS).
- The less efficient the global greenhouse gas strategy to control the rise in sea temperatures, the less efficient the local management strategies will also be.
- Making a choice to spend money on protecting the amount of living coral on the reefs will mean that you have less money to spend on other goods and services.

**F9.** Suppose you could only choose between the following three alternative combinations of global and local strategies, which would be your most preferred alternative and which would be your least preferred alternative?

	<b>Alt A</b>	<b>Alt B</b>	<b>Alt C</b>
Global policy for reductions in greenhouse gases (compared with no change in policy as in Alt A.)	No change	Medium reductions	Large reductions
<b>Local Florida Keys Management Strategies</b>			
Added spending on water quality, education and outreach, and enforcement	No change	+5%	+10%
Increase in no-take zoning of coral reef areas (percent of coral reefs protected)	No change (60%)	From 60% to 75%	From 60% to 90%
<b>Coral cover loss by 2027, Florida Keys</b>	<b>95%</b>	<b>77%</b>	<b>34%</b>
<b>Total annual cost to your household for global and local strategies</b>	<b>\$0</b>	<b>\$188</b>	<b>\$480</b>
Your most preferred alternative (check one)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Your least preferred alternative (check one)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Please explain briefly why you made this choice (for example): \_\_\_\_\_

**F10.** Suppose you could only choose between the following three alternative combinations of global and local strategies, which would be your most preferred alternative and which would be your least preferred alternative?

	<b>Alt A</b>	<b>Alt B</b>	<b>Alt C</b>
Global policy for reductions in greenhouse gases (compared with no change in policy as in Alt A.)	No change	Medium reductions	Large reductions
<b>Local Florida Keys Management Strategies</b>			
Added spending on water quality, education and outreach, and enforcement	No change	+5%	+5%
Increase in no-take zoning of coral reef areas (percent of coral reefs protected)	No change (60%)	From 60% to 75%	No change (60%)
<b>Coral cover loss by 2027, Florida Keys</b>	<b>95%</b>	<b>77%</b>	<b>44%</b>
<b>Total annual cost to your household for global and local strategies</b>	<b>\$0</b>	<b>\$188</b>	<b>\$380</b>
Your most preferred alternative (check one)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Your least preferred alternative (check one)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Please explain briefly why you made this choice (for example): \_\_\_\_\_

**F11.** Suppose you could only choose between the following three alternative combinations of global and local strategies, which would be your most preferred alternative and which would be your least preferred alternative?

	<b>Alt A</b>	<b>Alt B</b>	<b>Alt C</b>
Global policy for reductions in greenhouse gases (compared with no change in policy as in Alt A.)	No change	Medium reductions	Large reductions
<b>Local Florida Keys Management Strategies</b>			
Added spending on water quality, education and outreach, and enforcement	No change	No change	No change
Increase in no-take zoning of coral reef areas (percent of coral reefs protected)	No change (60%)	From 60% to 75%	From 60% to 75%
<b>Coral cover loss by 2027, Florida Keys</b>	<b>95%</b>	<b>79%</b>	<b>46%</b>
<b>Total annual cost to your household for global and local strategies</b>	<b>\$0</b>	<b>\$108</b>	<b>\$308</b>
Your most preferred alternative (check one)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Your least preferred alternative (check one)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Please explain briefly why you made this choice (for example): \_\_\_\_\_

**F12.** Suppose you could only choose between the following three alternative combinations of global and local strategies, which would be your most preferred alternative and which would be your least preferred alternative?

	<b>Alt A</b>	<b>Alt B</b>	<b>Alt C</b>
Global policy for reductions in greenhouse gases (compared with no change in policy as in Alt A.)	No change	Medium reductions	Large reductions
<b>Local Florida Keys Management Strategies</b>			
Added spending on water quality, education and outreach, and enforcement	No change	No change	+5%
Increase in no-take zoning of coral reef areas (percent of coral reefs protected)	No change (60%)	From 60% to 90%	No change (60%)
<b>Coral cover loss by 2027, Florida Keys</b>	<b>95%</b>	<b>78%</b>	<b>44%</b>
<b>Total annual cost to your household for global and local strategies</b>	<b>\$0</b>	<b>\$120</b>	<b>\$380</b>
Your most preferred alternative (check one)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Your least preferred alternative (check one)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Please explain briefly why you made this choice (for example): \_\_\_\_\_

**F13.** Suppose you could only choose between the following three alternative combinations of global and local strategies, which would be your most preferred alternative and which would be your least preferred alternative?

	<b>Alt A</b>	<b>Alt B</b>	<b>Alt C</b>
Global policy for reductions in greenhouse gases (compared with no change in policy as in Alt A.)	No change	Medium reductions	Large reductions
<b>Local Florida Keys Management Strategies</b>			
Added spending on water quality, education and outreach, and enforcement	No change	+5%	No change
Increase in no-take zoning of coral reef areas (percent of coral reefs protected)	No change (60%)	From 60% to 75%	From 60% to 75%
<b>Coral cover loss by 2027, Florida Keys</b>	<b>95%</b>	<b>77%</b>	<b>46%</b>
<b>Total annual cost to your household for global and local strategies</b>	<b>\$0</b>	<b>\$188</b>	<b>\$308</b>
Your most preferred alternative (check one)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Your least preferred alternative (check one)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Please explain briefly why you made this choice (for example): \_\_\_\_\_

**F14.** Suppose you could only choose between the following three alternative combinations of global and local strategies, which would be your most preferred alternative and which would be your least preferred alternative?

	<b>Alt A</b>	<b>Alt B</b>	<b>Alt C</b>
Global policy for reductions in greenhouse gases (compared with no change in policy as in Alt A.)	No change	Medium reductions	Large reductions
<b>Local Florida Keys Management Strategies</b>			
Added spending on water quality, education and outreach, and enforcement	No change	+5%	+5%
Increase in no-take zoning of coral reef areas (percent of coral reefs protected)	No change (60%)	From 60% to 75%	From 60% to 90%
<b>Coral cover loss by 2027, Florida Keys</b>	<b>95%</b>	<b>77%</b>	<b>38%</b>
<b>Total annual cost to your household for global and local strategies</b>	<b>\$0</b>	<b>\$188</b>	<b>\$400</b>
Your most preferred alternative (check one)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Your least preferred alternative (check one)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Please explain briefly why you made this choice (for example): \_\_\_\_\_



In Part A, you told us how many days you yourself participated in outdoor recreation activities during the past 12 months in the Florida Keys. You also told us how many days you participated in such activities outside the Florida Keys during the past 12 months (Part A, A6), if any.

**F15. Please confirm whether you did any outdoor recreation activities in the Florida Keys during the past 12 months:**

- Yes —————> Continue to question F16.  
 No —————> Skip to Part G.

**F16. Currently, 6% of the entire water area in the FKNMS is covered with living coral. If the living coral cover were only 3% (half the current cover), how would that affect the number of days you would spend on outdoor recreation activities in the Florida Keys during a 12-month period?**

- No change       \_\_\_\_ (#days less)       Would cease activities       Don't know

**F17. And how would this reduction in living coral cover affect the number of days you would spend on outdoor recreation activities outside the Florida Keys?**

- No change       \_\_\_\_ (#days more)       Don't know

**F18. If there were no living coral cover or 0% cover, how would that affect the number of days you would spend on outdoor recreation activities in the Florida Keys during a 12-month period?**

- No change       \_\_\_\_ (#days less)       Would cease activities       Don't know

**F19. And how would the disappearance of living coral cover affect the number of days you would spend on outdoor recreation activities outside the Florida Keys?**

- No change       \_\_\_\_ (#days more)       Don't know

[This page intentionally left blank. Proceed to next page.]

## Part G: Demographic Profile

In this final section, we need to know information about you and your household to make sure we have a representative sample of Monroe County residents.

Again, your privacy will be protected and any information identifying you or your household will not be revealed to anyone.

**G1. How many people in your household are permanent residents of Monroe County, Florida?**

\_\_\_\_\_ number of people

**G2. How many of these people are at least 16 years of age?** \_\_\_\_\_ number of people

**G3. What is the closest mile marker to your residence?** \_\_\_\_\_ mile marker number

**G4. Do you have access to the water from your residence?**  Yes  No

**G5. Do you own a boat?**  Yes  No

**G6. How many years have you lived in Monroe County?** \_\_\_\_\_ number of years

**G7. In what year were you born?** \_\_\_\_\_ year

**G8. Are you Spanish, Hispanic, or Latino?**  Yes  No

**G9. What race do you consider yourself?**

Please circle one or more of the letter(s) that best describes you

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

**G10. What is the highest level of education that you have completed?**

Please circle the letter of the category that best describes you

- A 8th Grade or Less
- B 9th to 11th Grade
- C 12th Grade, High School Grad, GED
- D 13 to 15 Years (some college or vocational training)
- E College Graduate
- F Graduate School, Law School, Medical School

G11. What is your employment status?

Please circle the letter or letters of all those that apply

- |   |                    |   |                   |
|---|--------------------|---|-------------------|
| A | Unemployed         | E | Student           |
| B | Employed full-time | F | Homemaker         |
| C | Employed part-time | G | None of the above |
| D | Retired            |   | (specify) _____   |

G12. Do you work outside Monroe County?  Yes  No

G13. What is your zip code? \_\_\_\_\_

G14. What is your total household income, before taxes.

Please circle the letter corresponding to the category that best describes your household

- |   |                      |   |                        |
|---|----------------------|---|------------------------|
| A | Under \$5,000        | I | \$40,000 to \$44,999   |
| B | \$5,000 to \$9,999   | J | \$45,000 to \$49,999   |
| B | \$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 |   |                        |

# *Monroe County Resident Survey*

**Your answers are voluntary and confidential.**

Your name will never be released to anyone unless otherwise required by law. After the completion of the project all materials identifying you as an individual will be destroyed.

This is a cooperative research project of the Monroe County Tourist Development Council and the National Oceanic and Atmospheric Administration. Public reporting burden for this collection of information is estimated to average 1 hour including time for reviewing instructions, searching existing data sources, gathering and maintaining the data need, 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 this burden, to U.S. Department of Commerce, Clearance Officer, Office of Chief Information Officer, Rm. 6625, 14<sup>th</sup> and Constitution Avenue NW, Washington, DC 20230. Notwithstanding any other provisions of the law, no person is required to respond to, nor shall any person be subject to penalty for failure to comply with, a collection of information subject to requirements of the Paperwork Reduction Act, unless that collection of information displays a currently valid OMB Control Number.



## Resident Survey

1. Overall, how would you rate Monroe County as a place to live?

- a. Excellent
- b. Good
- c. Fair
- d. Poor

Please circle letter corresponding to your answer

2. There are many reasons that people choose to live where they do in Florida. What are the two most important reasons you chose to live in Monroe County?

- a. No special reason
- b. Born here
- c. Job or business
- d. Climate
- e. Environment
- f. Access to natural resources, such as natural settings and wildlife
- g. Opportunities for water activities, such as fishing or diving
- h. Low crime rate
- i. Cultural activities
- j. Retirement
- k. Some other reason (specify) \_\_\_\_\_

Please circle letters corresponding to the two most important reasons

3. In the past 12 months, have you done any outdoor recreation activities in the Florida Keys?

- a. Yes (Go to Part A)
- b. No (Go to Part G)

Please use the enclosed White Card-Activities List to see what we mean by outdoor recreation



**Part A: Outdoor recreation activities during the past 12 months in the Florida Keys**

Please use the enclosed Activities List and map to help you answer the questions in this section

- A1. Which of the activities on the enclosed Activities List did you or someone in your household do in the Florida Keys during the last 12 months?**
- A2. Please fill in the circle for each activity you, yourself did during the past 12 months in the Upper Keys, Islamorada, Marathon, Lower Keys and Key West?**
- A3. On how many different days did you, yourself participate in each activity in the Upper Keys, Islamorada, Marathon, Lower Keys and Key West?**

Only answer for those activities you listed with an A on the end of the activity number

- A4. How many others (excluding yourself) in your household did each activity in the Upper Keys, Islamorada, Marathon, Lower Keys and Key West?**

A1 Activity	Upper Keys			Islamorada			Marathon			Lower Keys			Key West		
	A2 Resp. days	A3 #	A4 #	A2 Resp. days	A3 #	A4 #	A2 Resp. days	A3 #	A4 #	A2 Resp. days	A3 #	A4 #	A2 Resp. days	A3 #	A4 #
_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____
_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____
_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____
_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____
_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____
_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____
_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____
_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____
_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____
_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____
_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____
_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____
_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____
_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____
_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____
_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____
_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____
_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____
_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____
_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____
_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____

**A5. What would you say is the most important activity you did in the Florida Keys?**

**Most Important Activity** \_\_\_\_\_ (Activity List Number)

**No Activity Most Important (fill in box)**

**A6. On how many different days did you participate in outdoor recreation activities outside the Florida Keys during the past 12 months?** \_\_\_\_\_ (# of days)

**Part B: Reef use in the Florida Keys during the past 12 months. Both artificial and natural reefs.**

Please use Blue Card with Activities List for reef use and map of the Florida Keys in answering Part B

- B1. Which activities did you or someone in your household do on either artificial or natural reefs during the past 12 months in the Upper Keys, Islamorada, Marathon, Lower Keys and Key West?**

If you did not do anything in a region, check the box indicating no reef use in the region

- B2. Please fill in the circle for each activity you, yourself, did during the past 12 months in the Upper Keys, Islamorada, Marathon, Lower Keys and Key West.**
- B3. How many others in your household did each activity on the reefs in the Upper Keys, Islamorada, Marathon, Lower Keys and Key West during the past 12 months?**
- B4. On how many different days did you, yourself, participate in each activity on the reefs in the Upper Keys, Islamorada, Marathon, Lower Keys and Key West during the past 12 months?**
- B5. On how many different days did you, yourself, participate in each activity on the artificial reefs in the Upper Keys, Islamorada, Marathon, Lower Keys and Key West during the past 12 months?**
- B6. On how many different days did you, yourself, participate in each activity on the natural reefs in the Upper Keys, Islamorada, Marathon, Lower Keys and Key West during the past 12 months?**

Note: If you did part of a day on an artificial reef and part of a day on a natural reef, count one whole day on each type of reef

- B7. How many different dives did you, yourself, make for each type of diving activity you did on the reefs in the Upper Keys, Islamorada, Marathon, Lower Keys and Key West during the past 12 months?**

Diving activities include all snorkeling and scuba diving activities on the Blue Card-Activities List (Reef)

A dive is defined as an entry and exit from the water to snorkel or scuba dive

- B8. How many different dives did you, yourself, make for each type of diving activity you did on the artificial reefs in the Upper Keys, Islamorada, Marathon, Lower Keys and Key West during the past 12 months?**
- B9. How many different dives did you, yourself, make for each type of diving activity you did on the natural reefs in the Upper Keys, Islamorada, Marathon, Lower Keys and Key West during the past 12 months?**

Please refer to Questions B1 - B9 when filling in the tables on the following two pages

There is one table for each of the five regions of the Florida Keys (Upper Keys, Islamorada, Marathon, Lower Keys and Key West)

No Reef Use

Upper Keys

B1	B2	B3	B4	B5	B6	B7	B8	B9
Activity	Resp.	# Others	Respondent # of days	# days artificial	# days natural	Respondent # dives	# dives artificial	# dives natural
_____	○	_____	_____	_____	_____	_____	_____	_____
_____	○	_____	_____	_____	_____	_____	_____	_____
_____	○	_____	_____	_____	_____	_____	_____	_____
_____	○	_____	_____	_____	_____	_____	_____	_____
_____	○	_____	_____	_____	_____	_____	_____	_____
_____	○	_____	_____	_____	_____	_____	_____	_____
_____	○	_____	_____	_____	_____	_____	_____	_____
_____	○	_____	_____	_____	_____	_____	_____	_____
_____	○	_____	_____	_____	_____	_____	_____	_____

No Reef Use

Islamorada

B1	B2	B3	B4	B5	B6	B7	B8	B9
Activity	Resp.	# Others	Respondent # of days	# days artificial	# days natural	Respondent # dives	# dives artificial	# dives natural
_____	○	_____	_____	_____	_____	_____	_____	_____
_____	○	_____	_____	_____	_____	_____	_____	_____
_____	○	_____	_____	_____	_____	_____	_____	_____
_____	○	_____	_____	_____	_____	_____	_____	_____
_____	○	_____	_____	_____	_____	_____	_____	_____
_____	○	_____	_____	_____	_____	_____	_____	_____
_____	○	_____	_____	_____	_____	_____	_____	_____
_____	○	_____	_____	_____	_____	_____	_____	_____
_____	○	_____	_____	_____	_____	_____	_____	_____

No Reef Use

Marathon

B1	B2	B3	B4	B5	B6	B7	B8	B9
Activity	Resp.	# Others	Respondent # of days	# days artificial	# days natural	Respondent # dives	# dives artificial	# dives natural
_____	○	_____	_____	_____	_____	_____	_____	_____
_____	○	_____	_____	_____	_____	_____	_____	_____
_____	○	_____	_____	_____	_____	_____	_____	_____
_____	○	_____	_____	_____	_____	_____	_____	_____
_____	○	_____	_____	_____	_____	_____	_____	_____
_____	○	_____	_____	_____	_____	_____	_____	_____
_____	○	_____	_____	_____	_____	_____	_____	_____
_____	○	_____	_____	_____	_____	_____	_____	_____
_____	○	_____	_____	_____	_____	_____	_____	_____

No Reef Use

Lower Keys

B1	B2	B3	B4	B5	B6	B7	B8	B9
Activity	Resp.	# Others	Respondent # of days	# days artificial	# days natural	Respondent # dives	# dives artificial	# dives natural
_____	○	_____	_____	_____	_____	_____	_____	_____
_____	○	_____	_____	_____	_____	_____	_____	_____
_____	○	_____	_____	_____	_____	_____	_____	_____
_____	○	_____	_____	_____	_____	_____	_____	_____
_____	○	_____	_____	_____	_____	_____	_____	_____
_____	○	_____	_____	_____	_____	_____	_____	_____
_____	○	_____	_____	_____	_____	_____	_____	_____
_____	○	_____	_____	_____	_____	_____	_____	_____
_____	○	_____	_____	_____	_____	_____	_____	_____

No Reef Use

Key West

B1	B2	B3	B4	B5	B6	B7	B8	B9
Activity	Resp.	# Others	Respondent # of days	# days artificial	# days natural	Respondent # dives	# dives artificial	# dives natural
_____	○	_____	_____	_____	_____	_____	_____	_____
_____	○	_____	_____	_____	_____	_____	_____	_____
_____	○	_____	_____	_____	_____	_____	_____	_____
_____	○	_____	_____	_____	_____	_____	_____	_____
_____	○	_____	_____	_____	_____	_____	_____	_____
_____	○	_____	_____	_____	_____	_____	_____	_____
_____	○	_____	_____	_____	_____	_____	_____	_____
_____	○	_____	_____	_____	_____	_____	_____	_____
_____	○	_____	_____	_____	_____	_____	_____	_____

## Part C: Specialization

In this section, we are interested in learning more about your primary activity. Please answer the following questions based on the response you gave to QUESTION A5.

For the four questions below, please read the four choices and circle the one answer that best fits you for that question.

### C1. When I participate in my primary activity, I feel like:

- 1 a beginner. I don't really feel like I am part of the activity scene.
- 2 an occasional or irregular participant. Sometimes it is fun, entertaining or rewarding to do my activity.
- 3 a habitual and regular participant in the activity.
- 4 an insider to the sport. The activity is an important part of who I am.

### C2. During my activity, I can best be described as:

- 1 having very little understanding of the activity. I am often unsure about how to do certain things when I go.
- 2 having some understanding of the activity, but still in the process of learning more about the sport. I am becoming more familiar and comfortable with the activity.
- 3 being comfortable with the sport. I have a good understanding of what I can do, and how to do it.
- 4 a knowledgeable expert in the sport. I encourage, teach and enhance opportunities for others who are interested in the activity.

### C3. My relationships with others who do the activity are:

- 1 not established. I really don't know any other people who do the activity.
- 2 very limited. I know some others in the activity by sight and sometimes talk with them, but I don't know their names.
- 3 one of familiarity. I know the names of others who do the activity, and often speak with them.
- 4 close. I have personal and close relationships with others in the activity. These friendships often revolve around the activity.

### C4. My commitment to the activity is:

- 1 very slight. I have very little connection to the activity. I may or may not continue to participate in the sport in the future.
- 2 moderate. I will continue to do it as it is entertaining and provides the benefits I want.
- 3 fairly strong. I have a sense of being a member of the activity, and it is likely that I will continue to do it for a long time.
- 4 very strong. I am totally committed to the activity. I encourage others to participate in the sport and seek to ensure the activity continues into the future.

### C5. If you had to replace all of the equipment that you currently own for your primary activity with similar equipment, how much would it cost to replace?

\$ \_\_\_\_\_ AMOUNT TO REPLACE PRIMARY ACTIVITY EQUIPMENT

---

## Part D: Knowledge, Attitudes & Perceptions of Sanctuary Management Strategies and Regulations

In 1990, Congress and the President established the Florida Keys National Marine Sanctuary (FKNMS). The FKNMS is just one of 13 National Marine Sanctuaries in the U.S, which are managed by the National Oceanic and Atmospheric Administration (NOAA). After a long public process and approval by the Governor and Cabinet of Florida, regulations were established and implemented in July 1997. The FKNMS is cooperatively managed with the State of Florida. This survey asks about your knowledge, attitudes and perceptions of FKNMS management strategies and regulations and conditions of the resources in the FKNMS. There are no right or wrong answers; we simply want your honest opinions. Again, your privacy will be protected. No one will be given information that will allow them to identify you from survey data.

### INFORMATION AND PERCEPTIONS

In this section of the survey, we want to know about how you get information about the FKNMS, which covers all the waters surrounding the Florida Keys/Key West. A map is included with this booklet showing the boundaries of the FKNMS. We also ask questions about the public process in creating the management strategies and regulations and ask about your opinions about the existence of the FKNMS and an appraisal of how well the area is being managed.

- D1. Please list the sources of information that you have received in the past on the FKNMS and rank the sources in terms of their usefulness. Place an "x" for each source used. Please rank each source 1=highest (most important) to 9=lowest (least important).**

SOURCE	Sources Used	RANK Sources	
a. FKNMS website	_____	_____	
b. FKNMS Staff	_____	_____	
c. Sanctuary Advisory Council	_____	_____	
d. FKNMS brochures/literature	_____	_____	
e. FKNMS signage	_____	_____	<b>Was signage easy to see?</b>
f. Information in newspapers	_____	_____	__ Yes __ No __ N/A
g. Radio	_____	_____	
h. TV	_____	_____	
i. Word of mouth	_____	_____	

- D2. Did you do any activities through a Dive Shop in the Florida Keys/Key West?**

\_\_\_ YES (Go to Question 3) \_\_\_ NO (Go to Question 6)

- D3. Did the Dive Shop staff, either in the Dive Shop or onboard the boat, give you a briefing and/or education materials on how you should behave on the reefs to avoid damaging the reefs?**

\_\_\_ YES (Go to Question 4) \_\_\_ NO (Go to Question 6)

- D4. Did you find the information useful? \_\_\_ YES (Go to Question 6) \_\_\_ NO (Go to Question 5)**

- D5. Please tell us why you didn't find the information useful and what kinds of information you would have liked to receive.**

---



---



---



---

**D6. Have you ever rented a boat or personal watercraft (Jet Ski, wave runner, etc.) in the Florida Keys/Key West?**

YES (Go to Question 7)  NO (Go to Question 10)

**D7. Did the boat rental operation provide you with a briefing and/or education materials on how to navigate or how to behave while on the reefs or information on special zones where you are not allowed to motor the boat?**

YES (Go to Question 8)  NO (Go to Question 10)

**D8. Did you find the information useful?**

YES (Go to Question 10)  NO (Go to Question 9)

**D9. Please tell us why you didn't find the information useful and what kinds of information you would have liked to receive.**

---

---

---

---

For the next set of questions, please provide an answer on a 1 to 5 scale, where 1 means Strongly Agree, 2 means Moderately Agree, 3 means Neutral or Neither Agree or Disagree, 4 means Moderately Disagree, and 5 means Strongly Disagree. Please circle the appropriate number or I don't know, if you simply have no knowledge on the issue.

**D10. The process that NOAA has used to develop rules and regulations for the FKNMS was open and fair to all groups.**

1 2 3 4 5 I don't know

**D11. The process used by NOAA to develop boundaries and regulations for the FKNMS zones was open and fair to all groups.**

1 2 3 4 5 I don't know

**D12. It has not mattered whether the average person participated in the workshops and meetings on the FKNMS because the average person could not influence the final decisions.**

1 2 3 4 5 I don't know

**D13. NOAA has not addressed the concerns of local and state governments in developing rules and regulations for the FKNMS.**

1 2 3 4 5 I don't know

**D14. NOAA has not addressed the concerns of individual citizens in developing rules and regulations for the FKNMS.**

1 2 3 4 5 I don't know

**D15. Once that the regulations have been in effect, there has been no way that the average person could voice his/her opinion on the usefulness of the regulations.**

1 2 3 4 5 I don't know



- D16. The procedures that NOAA has established to deal with violations of FKNMS regulations have been fair and just.  
1 2 3 4 5 I don't know
- D17. NOAA has made a positive contribution to the marine environment via the National Marine Sanctuary Program.  
1 2 3 4 5 I don't know
- D18. The Florida Keys have benefited environmentally from the FKNMS.  
1 2 3 4 5 I don't know
- D19. There has been a net economic benefit to the Florida Keys from the establishment of the FKNMS.  
1 2 3 4 5 I don't know
- D20. I generally support the establishment of the FKNMS.  
1 2 3 4 5 I don't know

For the next set of questions, we want to find out how important you think the FKNMS is in affecting the Florida Keys/Key West as your place of residence and/or as a place to undertake your outdoor recreation activities.

- D21. Did you know before this survey that all the waters surrounding the Florida Keys/Key West are in a National Marine Sanctuary?  
\_\_\_ YES \_\_\_ NO
- D22. Do you think having all the waters surrounding the Florida Keys/Key West in a National Marine Sanctuary makes the area a more attractive place to live and/or undertake your outdoor recreation activities?  
\_\_\_ YES \_\_\_ NO

On a scale of 1 to 5, with 1=Not Important, 2=Somewhat Important, 3=Important, 4=Very Important and 5=Extremely Important.

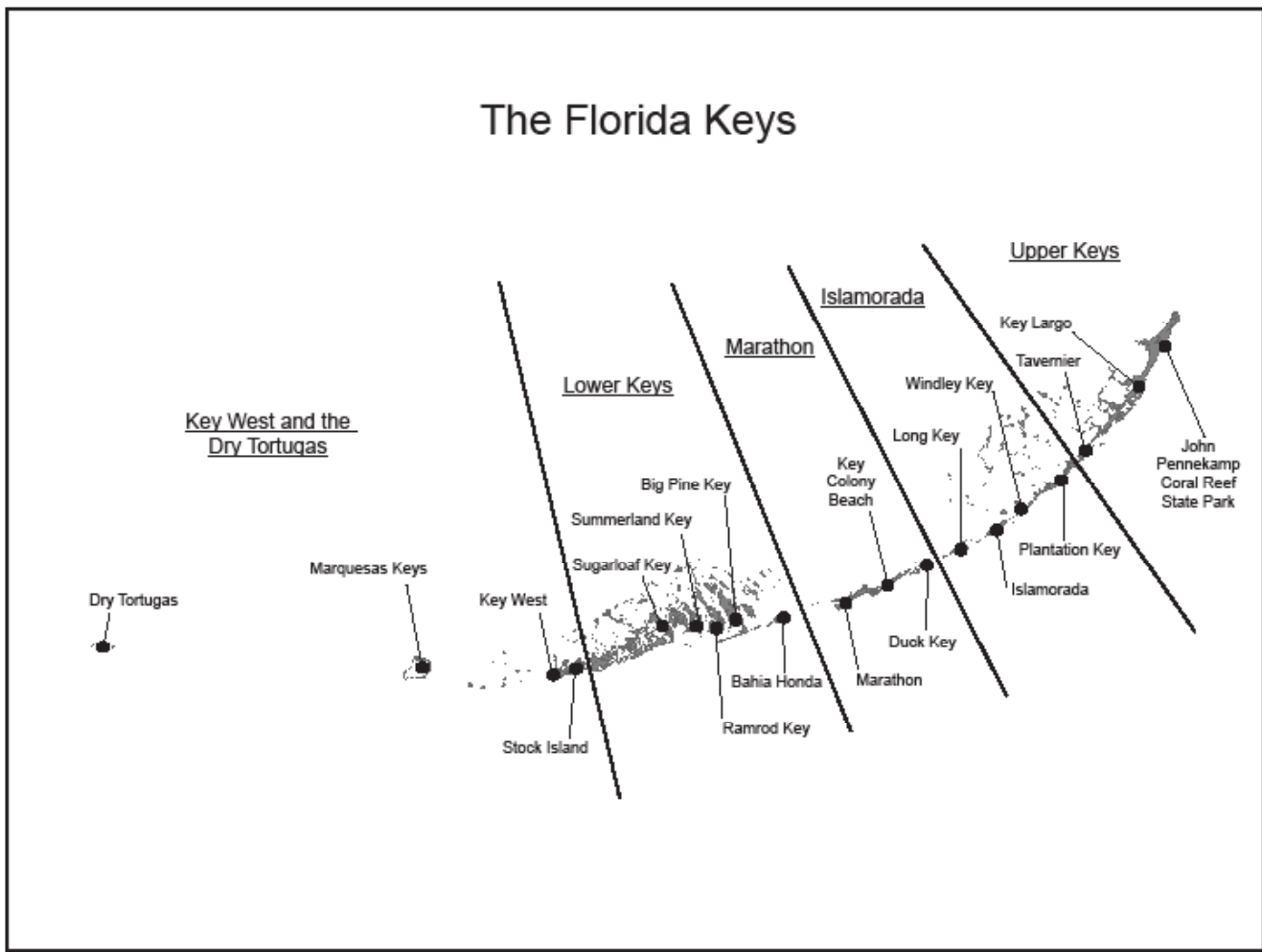
- D23. Again, regarding the Florida Keys/Key West as a place to live and/or undertake outdoor recreation activities, how important was the fact that all the waters surrounding the Florida Keys/Key West was in a National Marine Sanctuary?  
Please circle the appropriate number or "dk" for don't know.  
1 2 3 4 5 dk
- D24. When planning your outdoor recreation activities in the Florida Keys/Key West, did you know that there were special zones where certain activities are restricted or not allowed?  
\_\_\_ YES \_\_\_ NO

There are five kinds of zones established within the FKNMS, and three of these zone types analyzed for this study are collectively referred to as 'FKNMS zones' in the survey. Zones allow different uses and are generally established for different purposes. Below, a short, general description for each of the three zone types is provided.

**Sanctuary Preservation Areas**, or SPAs, encompass discrete, biologically important areas and are designed to reduce user conflicts and sustain critical marine species and habitats. Regulations for SPAs are designed to limit consumptive activities while continuing to allow activities that do not threaten resource protection. There are 18 SPAs in the FKNMS, which limit consumptive activities (activities where you take something) and 4 that are set aside for research only.

**Ecological Reserves**, or ERs, encompass large, contiguous, diverse habitats, in order to protect and enhance natural spawning, nursery, and permanent-residence areas for the replenishment and genetic protection of fish and other marine life. Regulations for Ecological Reserves are designed to meet the objectives of these zones by limiting consumptive activities while continuing to allow activities that do not threaten resource protection. Ecological Reserves therefore restrict all consumptive activities and allow non-consumptive activities only where such activities are compatible with resource protection. There are currently two Ecological Reserves in the Sanctuary, the Western Sambo's Ecological Reserve and the Tortugas Ecological Reserve.

**Wildlife Management Areas**, or WMAs, include bird nesting, resting, or feeding areas, turtle-nesting beaches, and other sensitive habitats. Regulations are designed to protect these species or the habitat while providing for public use. Access restrictions will include no-access buffers, no-motor zones, idle-speed only/no-wake zones, and closed zones. Some restrictions will apply to time periods, others to areas. There are currently 27 WMAs, of which 7 are managed exclusively by the FKNMS (the FKNMS co-manages the others with the US Fish and Wildlife Service).



The next set of questions asks about your opinions on the three types of zones. Please answer each question for each type of zone. Answer by placing an "x" in the space for each type of zone. Leaving a space blank means you don't think the statement applies to that type of zone.

	ER	SPA	WMA
<b>D25. Which of the following represents the main purpose of the FKNMS zones?</b>			
a. Increasing overall fish stocks and biomass within the zones	—	—	—
b. Increasing overall fish stocks and biomass outside the zones	—	—	—
c. Conserving and protecting corals, fish, and other marine life inside the zones	—	—	—
d. Resolving user conflicts	—	—	—
e. Supporting scientific research	—	—	—
<b>D26. Which groups have most benefited from FKNMS zones?</b>			
a. Commercial fishers	—	—	—
b. Recreational/sport fishers	—	—	—
c. Commercial dive operators	—	—	—
d. Recreational (local and tourist) divers	—	—	—
<b>D27. FKNMS zones have reduced conflicts between different user groups</b>	—	—	—
<b>D28. FKNMS zones have been effective in restoring coral reefs in the Florida Keys to what they used to be.</b>	—	—	—
<b>D29. I support the establishment of FKNMS zones as they are currently established.</b>	—	—	—

For questions 30 through 33, please refer to the map of the FKNMS.

<b>D30. I support the establishment of FKNMS zones in the Upper Keys.</b>	—	—	—
<b>D31. I support the establishment of FKNMS zones in the Middle Keys.</b>	—	—	—
<b>D32. I support the establishment of FKNMS zones in the Lower Keys.</b>	—	—	—
<b>D33. I support the establishment of FKNMS zones in the Dry Tortugas.</b>	—	—	—
<b>D34. There should be more FKNMS zones in the Florida Keys.</b>	—	—	—

**D35. Do you use any of the FKNMS zones? \_\_ YES (Go to Question 36) \_\_ NO (Go Question 39)**

**D36. Which ones do you use?** \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

**D37. Since the FKNMS zones were established, has your use:**

**INCREASED \_\_\_%    SAME    DECREASED \_\_\_%**

Please circle answer and fill in estimate of percentage of how your use increased or decreased.

**D38. For the each of the different types of FKNMS zones that you use, could you rate how the zones have changed for each of the following items: Please rate them on a scale of 1 to 5 with 1 being Better to 5 being Worse. Leaving a space blank means you didn't use that type of zone.**

Better-----Worse  
 1 2 3 4 5

	ER	SPA	WMA
a. Water quality	___	___	___
b. Number of fish	___	___	___
c. Types of fish	___	___	___
d. Amount of living coral	___	___	___
e. Other marine life	___	___	___
f. Crowding	___	___	___

The final set of questions ask about how effective you think the FKNMS has been in managing the natural resources in the surrounding waters of the Florida Keys/Key West.

**D39. Please rate the status/condition of the following resources by their status/condition since implementation of the FKNMS, where 1 equals Much Better and 5 is Much Worse and "dk" is don't know.**

Please circle your answer.

Better-----Worse

a. Water quality	1	2	3	4	5	dk
b. Land-based pollution/sewage	1	2	3	4	5	dk
c. Sea-based pollution/marine debris	1	2	3	4	5	dk
d. Coral reefs	1	2	3	4	5	dk
e. Sea grasses	1	2	3	4	5	dk
f. Fisheries	1	2	3	4	5	dk
g. Mooring buoys	1	2	3	4	5	dk

For the following statement (Question 40), please circle your answer according to the following scale:

1=Strongly Agree, 2=Moderately Agree, 3=Neutral (neither agree or disagree), 4=Moderately Disagree, 5=Strongly Disagree

**D40. The FKNMS is mostly responsible for the status/condition of the resources that you rated in the previous question.**

1 2 3 4 5 dk

**D41. In which area(s) has the FKNMS been a success?**

---

---

---

---

**D42. In which area(s) has the FKNMS been least successful?**

---

---

---

---

**D43. Are there any management strategies or regulations which you would like to see changed in the FKNMS?**

**Please briefly describe the top three management strategies or regulations you would like to see changed and how you would like to see them changed.**

<b>Management Strategy or Regulation</b>	<b>How I would like to see it changed.</b>
<b>a.</b> _____ _____	_____ _____ _____
<b>b.</b> _____ _____	_____ _____ _____
<b>c.</b> _____ _____	_____ _____ _____

## Part E: Demographic Profile

In this final section, we need to know information about you and your household to make sure we have a representative sample of Monroe County residents.

Again, your privacy will be protected and any information identifying you or your household will not be revealed to anyone.

**E1. How many people in your household are permanent residents of Monroe County, Florida?**

\_\_\_\_\_ number of people

**E2. How many of these people are at least 16 years of age?** \_\_\_\_\_ number of people

**E3. What is the closest mile marker to your residence?** \_\_\_\_\_ mile marker number

**E4. Do you have access to the water from your residence?**  Yes  No

**E5. Do you own a boat?**  Yes  No

**E6. How many years have you lived in Monroe County?** \_\_\_\_\_ number of years

**E7. In what year were you born?** \_\_\_\_\_ year

**E8. Are you Hispanic, Latino, or of Spanish origin?**  Yes  No

**E9. What race do you consider yourself?**

Please circle one or more of the letter(s) that best describes you

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

**E10. What is the highest level of education that you have completed?**

Please circle the letter of the category that best describes you

- A 8th Grade or Less
- B 9th to 11th Grade
- C 12th Grade, High School Grad, GED
- D 13 to 15 Years (some college or vocational training)
- E College Graduate
- F Graduate School, Law School, Medical School

E11. What is your employment status?

Please circle the letter or letters of all those that apply

- |   |                    |   |                   |
|---|--------------------|---|-------------------|
| A | Unemployed         | E | Student           |
| B | Employed full-time | F | Homemaker         |
| C | Employed part-time | G | None of the above |
| D | Retired            |   | (specify) _____   |

E12. Do you work outside Monroe County?  Yes  No

E13. What is your zip code? \_\_\_\_\_

E14. What is your total household income, before taxes.

Please circle the letter corresponding to the category that best describes your household

- |   |                      |   |                        |
|---|----------------------|---|------------------------|
| A | Under \$5,000        | I | \$40,000 to \$44,999   |
| B | \$5,000 to \$9,999   | J | \$45,000 to \$49,999   |
| B | \$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 |   |                        |

# *Monroe County Resident Survey*

**Your answers are voluntary and confidential.**

Your name will never be released to anyone unless otherwise required by law. After the completion of the project all materials identifying you as an individual will be destroyed.



This is a cooperative research project of the Monroe County Tourist Development Council and the National Oceanic and Atmospheric Administration. Public reporting burden for this collection of information is estimated to average 1 hour including time for reviewing instructions, searching existing data sources, gathering and maintaining the data need, 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 this burden, to U.S. Department of Commerce, Clearance Officer, Office of Chief Information Officer, Rm. 6625, 14<sup>th</sup> and Constitution Avenue NW, Washington, DC 20230. Notwithstanding any other provisions of the law, no person is required to respond to, nor shall any person be subject to penalty for failure to comply with, a collection of information subject to requirements of the Paperwork Reduction Act, unless that collection of information displays a currently valid OMB Control Number.



## Resident Survey

1. Overall, how would you rate Monroe County as a place to live?

- a. Excellent
- b. Good
- c. Fair
- d. Poor

Please circle letter corresponding to your answer

2. There are many reasons that people choose to live where they do in Florida. What are the two most important reasons you chose to live in Monroe County?

- a. No special reason
- b. Born here
- c. Job or business
- d. Climate
- e. Environment
- f. Access to natural resources, such as natural settings and wildlife
- g. Opportunities for water activities, such as fishing or diving
- h. Low crime rate
- i. Cultural activities
- j. Retirement
- k. Some other reason (specify) \_\_\_\_\_

Please circle letters corresponding to the two most important reasons

3. In the past 12 months, have you done any outdoor recreation activities in the Florida Keys?

- a. Yes (Go to Part A)
- b. No (Go to Part G)

Please use the enclosed White Card-Activities List to see what we mean by outdoor recreation

**Part A: Outdoor recreation activities during the past 12 months in the Florida Keys**

Please use the enclosed Activities List and map to help you answer the questions in this section

- A1. Which of the activities on the enclosed Activities List did you or someone in your household do in the Florida Keys during the last 12 months?
- A2. Please fill in the circle for each activity you, yourself did during the past 12 months in the Upper Keys, Islamorada, Marathon, Lower Keys and Key West?
- A3. On how many different days did you, yourself participate in each activity in the Upper Keys, Islamorada, Marathon, Lower Keys and Key West?

Only answer for those activities you listed with an A on the end of the activity number

- A4. How many others (excluding yourself) in your household did each activity in the Upper Keys, Islamorada, Marathon, Lower Keys and Key West?

A1 Activity	Upper Keys			Islamorada			Marathon			Lower Keys			Key West		
	A2 Resp.	A3 # days	A4 # others	A2 Resp.	A3 # days	A4 # others	A2 Resp.	A3 # days	A4 # others	A2 Resp.	A3 # days	A4 # others	A2 Resp.	A3 # days	A4 # others
_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____
_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____
_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____
_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____
_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____
_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____
_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____
_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____
_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____
_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____
_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____
_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____
_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____
_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____
_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____
_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____
_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____
_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____
_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____
_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____
_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____
_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____

**A5. What would you say is the most important activity you did in the Florida Keys?**

**Most Important Activity** \_\_\_\_\_ (Activity List Number)

**No Activity Most Important (fill in box)**

**A6. On how many different days did you participate in outdoor recreation activities outside the Florida Keys during the past 12 months?** \_\_\_\_\_ (# of days)

**Part B: Reef use in the Florida Keys during the past 12 months. Both artificial and natural reefs.**

Please use Blue Card with Activities List for reef use and map of the Florida Keys in answering Part B

- B1. Which activities did you or someone in your household do on either artificial or natural reefs during the past 12 months in the Upper Keys, Islamorada, Marathon, Lower Keys and Key West?**

If you did not do anything in a region, check the box indicating no reef use in the region

- B2. Please fill in the circle for each activity you, yourself, did during the past 12 months in the Upper Keys, Islamorada, Marathon, Lower Keys and Key West.**
- B3. How many others in your household did each activity on the reefs in the Upper Keys, Islamorada, Marathon, Lower Keys and Key West during the past 12 months?**
- B4. On how many different days did you, yourself, participate in each activity on the reefs in the Upper Keys, Islamorada, Marathon, Lower Keys and Key West during the past 12 months?**
- B5. On how many different days did you, yourself, participate in each activity on the artificial reefs in the Upper Keys, Islamorada, Marathon, Lower Keys and Key West during the past 12 months?**
- B6. On how many different days did you, yourself, participate in each activity on the natural reefs in the Upper Keys, Islamorada, Marathon, Lower Keys and Key West during the past 12 months?**

Note: If you did part of a day on an artificial reef and part of a day on a natural reef, count one whole day on each type of reef

- B7. How many different dives did you, yourself, make for each type of diving activity you did on the reefs in the Upper Keys, Islamorada, Marathon, Lower Keys and Key West during the past 12 months?**

Diving activities include all snorkeling and scuba diving activities on the Blue Card-Activities List (Reef)

A dive is defined as an entry and exit from the water to snorkel or scuba dive

- B8. How many different dives did you, yourself, make for each type of diving activity you did on the artificial reefs in the Upper Keys, Islamorada, Marathon, Lower Keys and Key West during the past 12 months?**
- B9. How many different dives did you, yourself, make for each type of diving activity you did on the natural reefs in the Upper Keys, Islamorada, Marathon, Lower Keys and Key West during the past 12 months?**

Please refer to Questions B1 - B9 when filling in the tables on the following two pages

There is one table for each of the five regions of the Florida Keys (Upper Keys, Islamorada, Marathon, Lower Keys and Key West)

No Reef Use

Upper Keys

B1	B2	B3	B4	B5	B6	B7	B8	B9
Activity	Resp.	# Others	Respondent # of days	# days artificial	# days natural	Respondent # dives	# dives artificial	# dives natural
_____	○	_____	_____	_____	_____	_____	_____	_____
_____	○	_____	_____	_____	_____	_____	_____	_____
_____	○	_____	_____	_____	_____	_____	_____	_____
_____	○	_____	_____	_____	_____	_____	_____	_____
_____	○	_____	_____	_____	_____	_____	_____	_____
_____	○	_____	_____	_____	_____	_____	_____	_____
_____	○	_____	_____	_____	_____	_____	_____	_____
_____	○	_____	_____	_____	_____	_____	_____	_____
_____	○	_____	_____	_____	_____	_____	_____	_____

No Reef Use

Islamorada

B1	B2	B3	B4	B5	B6	B7	B8	B9
Activity	Resp.	# Others	Respondent # of days	# days artificial	# days natural	Respondent # dives	# dives artificial	# dives natural
_____	○	_____	_____	_____	_____	_____	_____	_____
_____	○	_____	_____	_____	_____	_____	_____	_____
_____	○	_____	_____	_____	_____	_____	_____	_____
_____	○	_____	_____	_____	_____	_____	_____	_____
_____	○	_____	_____	_____	_____	_____	_____	_____
_____	○	_____	_____	_____	_____	_____	_____	_____
_____	○	_____	_____	_____	_____	_____	_____	_____
_____	○	_____	_____	_____	_____	_____	_____	_____
_____	○	_____	_____	_____	_____	_____	_____	_____

No Reef Use

Marathon

B1	B2	B3	B4	B5	B6	B7	B8	B9
Activity	Resp.	# Others	Respondent # of days	# days artificial	# days natural	Respondent # dives	# dives artificial	# dives natural
_____	○	_____	_____	_____	_____	_____	_____	_____
_____	○	_____	_____	_____	_____	_____	_____	_____
_____	○	_____	_____	_____	_____	_____	_____	_____
_____	○	_____	_____	_____	_____	_____	_____	_____
_____	○	_____	_____	_____	_____	_____	_____	_____
_____	○	_____	_____	_____	_____	_____	_____	_____
_____	○	_____	_____	_____	_____	_____	_____	_____
_____	○	_____	_____	_____	_____	_____	_____	_____
_____	○	_____	_____	_____	_____	_____	_____	_____

No Reef Use

Lower Keys

B1	B2	B3	B4	B5	B6	B7	B8	B9
Activity	Resp.	# Others	Respondent # of days	# days artificial	# days natural	Respondent # dives	# dives artificial	# dives natural
_____	○	_____	_____	_____	_____	_____	_____	_____
_____	○	_____	_____	_____	_____	_____	_____	_____
_____	○	_____	_____	_____	_____	_____	_____	_____
_____	○	_____	_____	_____	_____	_____	_____	_____
_____	○	_____	_____	_____	_____	_____	_____	_____
_____	○	_____	_____	_____	_____	_____	_____	_____
_____	○	_____	_____	_____	_____	_____	_____	_____
_____	○	_____	_____	_____	_____	_____	_____	_____
_____	○	_____	_____	_____	_____	_____	_____	_____

No Reef Use

Key West

B1	B2	B3	B4	B5	B6	B7	B8	B9
Activity	Resp.	# Others	Respondent # of days	# days artificial	# days natural	Respondent # dives	# dives artificial	# dives natural
_____	○	_____	_____	_____	_____	_____	_____	_____
_____	○	_____	_____	_____	_____	_____	_____	_____
_____	○	_____	_____	_____	_____	_____	_____	_____
_____	○	_____	_____	_____	_____	_____	_____	_____
_____	○	_____	_____	_____	_____	_____	_____	_____
_____	○	_____	_____	_____	_____	_____	_____	_____
_____	○	_____	_____	_____	_____	_____	_____	_____
_____	○	_____	_____	_____	_____	_____	_____	_____
_____	○	_____	_____	_____	_____	_____	_____	_____



## Part C: Specialization

In this section, we are interested in learning more about your primary activity. Please answer the following questions based on the response you gave to QUESTION A5.

For the four questions below, please read the four choices and circle the one answer that best fits you for that question.

### C1. When I participate in my primary activity, I feel like:

- 1 a beginner. I don't really feel like I am part of the activity scene.
- 2 an occasional or irregular participant. Sometimes it is fun, entertaining or rewarding to do my activity.
- 3 a habitual and regular participant in the activity.
- 4 an insider to the sport. The activity is an important part of who I am.

### C2. During my activity, I can best be described as:

- 1 having very little understanding of the activity. I am often unsure about how to do certain things when I go.
- 2 having some understanding of the activity, but still in the process of learning more about the sport. I am becoming more familiar and comfortable with the activity.
- 3 being comfortable with the sport. I have a good understanding of what I can do, and how to do it.
- 4 a knowledgeable expert in the sport. I encourage, teach and enhance opportunities for others who are interested in the activity.

### C3. My relationships with others who do the activity are:

- 1 not established. I really don't know any other people who do the activity.
- 2 very limited. I know some others in the activity by sight and sometimes talk with them, but I don't know their names.
- 3 one of familiarity. I know the names of others who do the activity, and often speak with them.
- 4 close. I have personal and close relationships with others in the activity. These friendships often revolve around the activity.

### C4. My commitment to the activity is:

- 1 very slight. I have very little connection to the activity. I may or may not continue to participate in the sport in the future.
- 2 moderate. I will continue to do it as it is entertaining and provides the benefits I want.
- 3 fairly strong. I have a sense of being a member of the activity, and it is likely that I will continue to do it for a long time.
- 4 very strong. I am totally committed to the activity. I encourage others to participate in the sport and seek to ensure the activity continues into the future.

### C5. If you had to replace all of the equipment that you currently own for your primary activity with similar equipment, how much would it cost to replace?

\$ \_\_\_\_\_ AMOUNT TO REPLACE PRIMARY ACTIVITY EQUIPMENT

**C6. To what extent do you make use of the following for current information about your primary activity? Please circle the number that indicates your extent of use for each source of information.**

	No Use	Almost no use	A little use	Some use	A lot of use
a. Talking with others who participate in the activity.....	1	2	3	4	5
b. Magazines.....	1	2	3	4	5
c. Government agency publications.....	1	2	3	4	5
d. Conservation organization publications.....	1	2	3	4	5
e. Newspapers.....	1	2	3	4	5
f. Diving shops/companies.....	1	2	3	4	5
g. Club meetings.....	1	2	3	4	5
h. Television.....	1	2	3	4	5
i. Radio.....	1	2	3	4	5
j. Internet.....	1	2	3	4	5

**C7. Below is a list of reasons why people engage in recreation activities. Please circle the number that indicates how important each item is to you as a reason for participating in your primary activity.**

	Not at all important	Slightly important	Moderately important	Very important	Extremely important
a. To be outdoors.....	1	2	3	4	5
b. For family recreation.....	1	2	3	4	5
c. To experience new and different things.....	1	2	3	4	5
d. For relaxation.....	1	2	3	4	5
e. To be close to the water.....	1	2	3	4	5
f. To get away from the demands of other people.....	1	2	3	4	5
g. To be with friends.....	1	2	3	4	5
h. To develop my skills.....	1	2	3	4	5
i. To get away from the regular routine.....	1	2	3	4	5
j. To experience adventure and excitement.....	1	2	3	4	5
k. To experience natural surroundings.....	1	2	3	4	5

## Part D: Substitution

There are many places to engage in snorkeling/SCUBA diving activities. In the next several questions, we are attempting to understand the reason you may choose to snorkel/SCUBA dive on one reef versus another, or if necessary, choose to engage in activities other than snorkeling/SCUBA diving in the Florida Keys.

When answering the following questions, please think about a favorite or most common reef that you dive on in the Florida Keys. If you do not have a favorite or most common reef that you dive on in the Keys, please think about the last reef that you dove on in the Florida Keys. Read the choices and circle the number that indicates your answer for that question.

**D1. Please circle which reef you are thinking of when responding to the following questions. (Please circle only one answer)**

- 1 Favorite reef to snorkel/dive on
- 2 Most common reef I snorkel/dive on
- 3 Most recent reef I snorkeled/dove on

**D2. Is this reef a:**

- 1 Natural coral reef
- 2 Artificial reef

**D3. Are you able to recall the name of this reef? If so, please list in below.**

\_\_\_\_\_ reef

**D4. Imagine that you discovered that you could not snorkel/SCUBA dive at this reef (from question #D1 above) during your next planned snorkel/SCUBA dive trip. What would you do? (Please circle only one answer)**

- 1 I would still snorkel/ SCUBA dive, but elsewhere in the Florida Keys
- 2 I would still snorkel/ SCUBA dive, but at a location outside of the Florida Keys
- 3 I would temporarily participate in a different activity in the Florida Keys
- 4 I would temporarily participate in a different activity, but outside the Florida Keys

**D5. Imagine that you discovered that you could not snorkel/SCUBA dive at this reef (from question #D1 above) for the next five years. What would you do?**

- 1 I would still snorkel/ SCUBA dive, but elsewhere in the Florida Keys
- 2 I would still snorkel/ SCUBA dive, but at a location outside of the Florida Keys
- 3 I would permanently participate in a different activity in the Florida Keys
- 4 I would permanently participate in a different activity, but outside the Florida Keys

**D6. Imagine that you discovered during your next snorkel/SCUBA dive trip that this reef (from question #D1 above) was more crowded than you normally find acceptable. What would you do?**

- 1 I would make an exception and still snorkel/ SCUBA dive on this reef
- 2 I would still snorkel/ SCUBA dive, but elsewhere in the Florida Keys
- 3 I would temporarily participate in a different activity in the Florida Keys
- 4 I would temporarily participate in a different activity, but outside the Florida Keys

**D7. Imagine that you discovered during your next snorkel/SCUBA dive trip that this reef (from question #D1 above) was more ecologically damaged (e.g., there wasn't enough healthy coral or fish) than normally find acceptable. What would you do?**

- 1 I would make an exception and snorkel/ SCUBA dive on this reef
- 2 I would still snorkel/ SCUBA dive, but elsewhere in the Florida Keys
- 3 I would temporarily participate in a different activity in the Florida Keys
- 4 I would temporarily participate in a different activity, but outside the Florida Keys

**D8. Imagine that you discovered during your next snorkel/SCUBA dive trip that user groups with whom you experience conflict are using this reef (from question #D1 above). What would you do?**

- 1 I would still snorkel/ SCUBA dive on this reef
- 2 I would still snorkel/ SCUBA dive, but elsewhere in the Florida Keys
- 3 I would temporarily participate in a different activity in the Florida Keys
- 4 I would temporarily participate in a different activity, but outside the Florida Keys

**D9. If you could not snorkel/SCUBA dive at this reef (from question #D1 above), how many other Florida Keys reefs do you think can offer you just as good an experience as your favorite reefs?**

\_\_\_\_\_ number of other Florida Keys reefs

Don't Know

**D10. If you could not snorkel/SCUBA dive at this reef (from question #D1 above), how many other Florida Keys reefs do you think can offer you a similar, but not quite as good, experience?**

\_\_\_\_\_ number of other Florida Keys reefs

Don't Know

**D11. Please rate how similar you think the snorkeling/SCUBA diving experience is at your best similar reef compared to this reef (from question #D1 above).**

1                      2                      3                      4                      5                      6                      7  
Not as Good                      Equivalent                      Better

**D12. There are many things that you might think about or consider when deciding to substitute one reef for another when snorkeling or SCUBA diving. Please indicate how important each of the following factors is in terms of deciding whether or not you would choose to snorkel/SCUBA dive at a substitute reef.**

	Not at all important	Somewhat important	Moderately important	Very important	Extremely important
a) The quality of other reefs.....	1	2	3	4	5
b) The difficulty of the diving conditions on other reefs.....	1	2	3	4	5
c) The distance to other reefs.....	1	2	3	4	5
d) My familiarity with various dive shops.....	1	2	3	4	5
e) The adequacy of my boat to get to other reefs.....	1	2	3	4	5
f) The number of fish at other reefs.....	1	2	3	4	5
g) The cost of fuel to get to other reefs.....	1	2	3	4	5
h) The level of crowding at other reefs.....	1	2	3	4	5
i) The amount of live coral at other reefs.....	1	2	3	4	5
j) Area closures at desirable reef locations.....	1	2	3	4	5
k) The presence of other groups that I don't like.....	1	2	3	4	5
l) Other.....	1	2	3	4	5

**D13. If you could not go snorkeling/SCUBA diving, either in the Florida Keys or elsewhere, are there any other recreation activities in the Florida Keys that would provide you with the same satisfaction and enjoyment that you receive from going snorkeling/SCUBA diving?**

Yes --- If yes, please go to question # D14 below

No --- If no, please go to question # D15 below

**D14. If you answered “yes” to question D13, please list up to three specific activities that you consider to be substitutes for snorkeling/SCUBA diving.**

\_\_\_\_\_ activity

\_\_\_\_\_ activity

\_\_\_\_\_ activity

**D15. There are reasons why people cannot participate as often as they would like in an activity they enjoy doing. Please indicate the extent to which you agree or disagree with each of the following statements as they relate to your ability to snorkel/SCUBA dive in the Florida Keys as often as you would like.**

	Completely disagree	Disagree	Neutral	Agree	Completely agree
a) I don't have enough leisure time.....	1	2	3	4	5
b) The equipment is too expensive.....	1	2	3	4	5
c) The cost of travel is too high.....	1	2	3	4	5
d) It is difficult to find snorkel/SCUBA diving partners.....	1	2	3	4	5
e) Fuel prices for my boat are too high.....	1	2	3	4	5
f) Snorkel/SCUBA diving areas are too crowded.....	1	2	3	4	5
g) Too many snorkel/SCUBA diving areas are off-limits.....	1	2	3	4	5
h) Dive boats are too expensive .....	1	2	3	4	5
i) Other.....	1	2	3	4	5

**D16. Below is a list of reasons why people snorkel/SCUBA dive in the Florida Keys. Please circle the number that indicates how important each item is to you as a reason for snorkel/SCUBA diving in the Florida Keys.**

	Not at all important	Somewhat important	Moderately important	Very important	Extremely important
a) To develop my skills.....	1	2	3	4	5
b) To experience excitement.....	1	2	3	4	5
c) For family recreation.....	1	2	3	4	5
d) To be with friends.....	1	2	3	4	5
e) To be outdoors.....	1	2	3	4	5
f) To experience new and different things.....	1	2	3	4	5
g) For the experience of the dive.....	1	2	3	4	5
h) To get away from the demands of other people.....	1	2	3	4	5
i) To get away from the regular routine.....	1	2	3	4	5
j) To see diverse underwater life.....	1	2	3	4	5
k) To teach underwater skills to other people.....	1	2	3	4	5
l) To obtain additional dive ratings.....	1	2	3	4	5
m) To experience natural surroundings.....	1	2	3	4	5
n) For solitude.....	1	2	3	4	5
o) For relaxation.....	1	2	3	4	5
p) For the challenge of the dive.....	1	2	3	4	5

There are many places to engage in fishing. In the next several questions, we are attempting to understand the reason you may choose to fish in one location versus another, or if necessary, engage in an activity other than fishing in the Florida Keys.

When answering the following questions, please think about a favorite or most common area that you fish in off the Florida Keys. If you do not have a favorite or most common area that you fish in off the Keys, please think about the last area that you fished in off the Florida Keys.

**D17. Please indicate which reef you are thinking of when responding to the following questions. (Please circle only one answer)**

- 1 My favorite reef to fish at
- 2 The most common area I fish at
- 3 The most recent area I fished in

**D18. Is this area:**

- 1 A flat
- 2 A natural coral reef
- 3 Hawk Channel
- 4 An artificial reef
- 5 Other (please list)\_\_\_\_\_

**D19. Are you able to recall the name of this area? If so, please list it below.**

\_\_\_\_\_ area

**D20. Imagine that you discovered that you could not fish in this area (from question #D17 above) during your next planned fishing trip. What would you do? (Please circle only one answer)**

- 1 I would still fish, but elsewhere in the Florida Keys
- 2 I would still fish, but at a location outside of the Florida Keys
- 3 I would temporarily participate in a different activity in the Florida Keys
- 4 I would temporarily participate in a different activity, but outside the Florida Keys

**D21. Imagine that you discovered that you could not fish in this area (from question #D17 above) for the next five years. What would you do?**

- 1 I would still fish, but elsewhere in the Florida Keys
- 2 I would still fish, but at a location outside of the Florida Keys
- 3 I would permanently participate in a different activity in the Florida Keys
- 4 I would permanently participate in a different activity, but outside the Florida Keys

**D22. Imagine that you discovered during your next fishing trip that this area (from question #D17 above) was more crowded than you normally find acceptable. What would you do?**

- 1 I would make an exception and still fish in this area
- 2 I would still fish, but elsewhere in the Florida Keys
- 3 I would temporarily participate in a different activity in the Florida Keys
- 4 I would temporarily participate in a different activity, but outside the Florida Keys

**D23. Imagine that you discovered during your next fishing trip that this area (from question #D17 above) was more ecologically damaged (e.g., there was no longer enough good fish habitat) than you normally find acceptable. What would you do?**

- 1 I would still fish in this area
- 2 I would still fish, but elsewhere in the Florida Keys
- 3 I would temporarily participate in a different activity in the Florida Keys
- 4 I would temporarily participate in a different activity, but outside the Florida Keys

**D24. Imagine that you discovered during your next fishing trip that other user groups with whom you experience conflict are using this area (from question #D17 above). What would you do?**

- 1 I would still fish in this area
- 2 I would still fish, but elsewhere in the Florida Keys
- 3 I would temporarily participate in a different activity in the Florida Keys
- 4 I would temporarily participate in a different activity, but outside the Florida Keys

**D25. If you could not fish in this area (from question #D17 above), how many other areas in the Florida Keys do you think can offer you an overall experience that is just as good?**

\_\_\_\_\_ number of other areas in the Florida Keys

Don't Know

**D26. If you could not fish in this area (from question #1 above), how many other areas in the Florida Keys do you think can offer you a similar, but not quite as good, overall experience?**

\_\_\_\_\_ number of other areas Florida Keys

Don't Know

**D27. Please rate how similar you think the fishing experience is at your best similar fishing area compared to this area.**

- |             |   |   |            |   |   |        |
|-------------|---|---|------------|---|---|--------|
| 1           | 2 | 3 | 4          | 5 | 6 | 7      |
| Not as Good |   |   | Equivalent |   |   | Better |



**D28. There are many things that you might think about or consider when deciding to substitute one fishing area for another. Please indicate how important each of the following factors is in terms of deciding whether or not you would choose to fish in a substitute area.**

	Not at all important	Slightly important	Moderately important	Very important	Extremely important
a) The number of fish at other areas.....	1	2	3	4	5
b) The difficulty of boating conditions.....	1	2	3	4	5
c) The distance to other areas.....	1	2	3	4	5
d) The charter boats and captains at other areas.....	1	2	3	4	5
e) The adequacy of my boat to get to other areas.....	1	2	3	4	5
f) The cost of fuel to get to other areas.....	1	2	3	4	5
g) The level of crowding at other areas.....	1	2	3	4	5
h) Area closures at desirable locations.....	1	2	3	4	5
i) The presence of other groups that I don't like.....	1	2	3	4	5
j) Other.....	1	2	3	4	5

**D29. If you could not go fishing, either in the Florida Keys or elsewhere, are there any other recreation activities in the Florida Keys that would provide you with the same satisfaction and enjoyment that you receive from going fishing?**

- Yes --- If yes, please go to question # D30 below
- No --- If no, please go to question # D31 below

**D30. If you answered “yes” to question D29, please list up to three specific activities that you consider to be substitutes for fishing in the Florida Keys.**

\_\_\_\_\_ activity

\_\_\_\_\_ activity

\_\_\_\_\_ activity

**D31. There are reasons why people cannot participate as often as they would like in an activity they enjoy doing. Please indicate the extent to which you agree or disagree with each of the following statements as they relate to your ability to fish in the Florida Keys as often as you would like.**

	Completely disagree	Disagree	Neutral	Agree	Completely agree
a) I don't have enough leisure time.....	1	2	3	4	5
b) The equipment is too expensive.....	1	2	3	4	5
c) The cost of travel is too high.....	1	2	3	4	5
d) It is difficult to find fishing partners.....	1	2	3	4	5
e) Fuel prices for my boat are too high.....	1	2	3	4	5
f) Fishing areas are too crowded.....	1	2	3	4	5
g) Too many fishing areas are off-limits.....	1	2	3	4	5
h) Fishing charters are too expensive.....	1	2	3	4	5
i) Other.....	1	2	3	4	5

**D32. Below is a list of reasons why people saltwater fish in the Florida Keys. Please circle the number that indicates how important each item is to you as a reason for saltwater fishing in the Florida Keys.**

	Not at all important	Somewhat important	Moderately important	Very important	Extremely important
a) To develop my skills.....	1	2	3	4	5
b) To experience excitement.....	1	2	3	4	5
c) For family recreation.....	1	2	3	4	5
d) To be with friends.....	1	2	3	4	5
e) To be outdoors.....	1	2	3	4	5
f) To experience new and different things.....	1	2	3	4	5
g) For the experience of the catch.....	1	2	3	4	5
h) To get away from the demands of other people.....	1	2	3	4	5
i) To get away from the regular routine.....	1	2	3	4	5
j) To catch a trophy fish.....	1	2	3	4	5
k) For the sport of fishing, not to obtain food to eat.....	1	2	3	4	5
l) For the fun of catching fish.....	1	2	3	4	5
m) To experience natural surroundings.....	1	2	3	4	5
n) For solitude.....	1	2	3	4	5
o) For relaxation.....	1	2	3	4	5
p) For the challenge of the catch.....	1	2	3	4	5
q) To obtain fish for eating, not for sport.....	1	2	3	4	5

## Part E: Management Alternatives

### Snorkeler / SCUBA diver

If not a snorkeler / SCUBA diver in the Florida Keys, but do recreational fishing, GO to page 22.

If not a snorkeler / SCUBA diver or recreational fisher in the Florida Keys, GO to page 27.

Please think about a recreational snorkeling / SCUBA diving experience on a reef in the Florida Keys when answering the questions on the following pages. You will be offered eight (8) choices of two diving trips. Each choice has different features for you to evaluate. Please read each choice carefully. Although they may look similar, trips in each question differ in at least one way. There is an example below to assist you. Please note the following definitions before reviewing the example.

- Number of Snorkelers / Divers - the number of snorkelers / divers on a reef at any one time
- Restrictions- percent area of reef open to use
- Enforcement- the number of law enforcement patrols you observe per trip
- Number of Fish Species- the amount of different kinds of fish species observed on the reef
- Site Settings- the amount of live coral and/or algae on the reef
- Number of Fish- the overall amount of fish observed on the reef
- Size of Fish- the size of fish observed on the reef
- Travel cost / day – Travel cost that a snorkeler / diver spends for a diving trip per day (including gas and other trip expenses)

### Example

If you were planning a snorkel / SCUBA dive trip to the Florida Keys, which trip would you prefer: Trip A, Trip B, or neither?

ATTRIBUTE	Trip A	Trip B
<b>Number of Snorkelers / Divers</b>	<i>15% fewer snorkelers / divers</i>	<i>30% fewer snorkelers /divers</i>
<b>Site Settings</b>	<i>Mix of coral and algae cover</i>	<i>High live coral cover</i>
<b>Restrictions</b>	<i>25% of area closed</i>	<i>75 % of area closed</i>
<b>Number of Fish</b>	<i>40% more fish</i>	<i>No increase in numbers of fish</i>
<b>Size of Fish</b>	<i>40% more larger fish</i>	<i>20 % more larger fish</i>
<b>Species</b>	<i>No change in species numbers</i>	<i>Fewer species</i>
<b>Enforcement</b>	<i>Two additional patrols</i>	<i>No additional patrols</i>
<b>Travel Cost / Day</b>	<i>Your current total cost per day</i>	<i>10% more than your current total cost per day</i>

Which trip do you prefer? (check only one box below)

Trip A

Trip B

I would not take either trip

E1. If you were planning a snorkel / SCUBA dive trip to the Florida Keys, which trip would you prefer: Trip A, Trip B, or neither?

<b>ATTRIBUTE</b>	<b>Trip A</b>	<b>Trip B</b>
<b>Number of Snorkelers / Divers</b>	<i>The usual number of other snorkelers /divers at the site</i>	<i>30% fewer snorkelers / divers</i>
<b>Site Settings</b>	<i>Mix of coral and algae cover</i>	<i>High algae cover</i>
<b>Restrictions</b>	<i>25% of area closed</i>	<i>75 % of area closed</i>
<b>Number of Fish</b>	<i>40% more fish</i>	<i>No increase in numbers of fish</i>
<b>Size of Fish</b>	<i>40% more larger fish</i>	<i>20 % more larger fish</i>
<b>Species</b>	<i>No change in species numbers</i>	<i>Many species</i>
<b>Enforcement</b>	<i>No additional patrols</i>	<i>Two additional patrols</i>
<b>Travel Cost / Day</b>	<i>10% less than your current total cost per day</i>	<i>10% less than your current total cost per day</i>

Which trip do you prefer? (check only one box below)

Trip A       Trip B       I would not take either trip

E2. If you were planning a snorkel / SCUBA dive trip to the Florida Keys, which trip would you prefer: Trip A, Trip B, or neither?

<b>ATTRIBUTE</b>	<b>Trip A</b>	<b>Trip B</b>
<b>Number of Snorkelers / Divers</b>	<i>The usual number of other snorkelers /divers at the site</i>	<i>The usual number of other snorkelers /divers at the site</i>
<b>Site Settings</b>	<i>High live coral cover</i>	<i>High live coral cover</i>
<b>Restrictions</b>	<i>No area closed</i>	<i>75% of area closed</i>
<b>Number of Fish</b>	<i>60% more fish</i>	<i>No increase in numbers of fish</i>
<b>Size of Fish</b>	<i>60% more larger fish</i>	<i>40% more larger fish</i>
<b>Species</b>	<i>No change in species numbers</i>	<i>Fewer species</i>
<b>Enforcement</b>	<i>One additional patrol</i>	<i>One additional patrol</i>
<b>Travel Cost / Day</b>	<i>10% more than your current total cost per day</i>	<i>10% more than your current total cost per day</i>

Which trip do you prefer? (check only one box below)

Trip A       Trip B       I would not take either trip

**E3.** If you were planning a snorkel / SCUBA dive trip to the Florida Keys, which trip would you prefer: Trip A, Trip B, or neither?

<b>ATTRIBUTE</b>	<b>Trip A</b>	<b>Trip B</b>
<b>Number of Snorkelers / Divers</b>	<i>15% fewer snorkelers /divers</i>	<i>15% fewer snorkelers /divers</i>
<b>Site Settings</b>	<i>Mix of coral and algae cover</i>	<i>High live coral cover</i>
<b>Restrictions</b>	<i>75% of area closed</i>	<i>25% of area closed</i>
<b>Number of Fish</b>	<i>20% more fish</i>	<i>20% more fish</i>
<b>Size of Fish</b>	<i>60% more larger fish</i>	<i>No increase in larger fish</i>
<b>Species</b>	<i>Fewer species</i>	<i>Fewer species</i>
<b>Enforcement</b>	<i>Two additional patrols</i>	<i>No additional patrols</i>
<b>Travel Cost / Day</b>	<i>10% less than your current total cost per day</i>	<i>Your current total cost per day</i>

Which trip do you prefer? (check only one box below)

Trip A       Trip B       I would not take either trip

**E4.** If you were planning a snorkel / SCUBA dive trip to the Florida Keys, which trip would you prefer: Trip A, Trip B, or neither?

<b>ATTRIBUTE</b>	<b>Trip A</b>	<b>Trip B</b>
<b>Number of Snorkelers / Divers</b>	<i>30% fewer snorkelers / divers</i>	<i>15% fewer snorkelers / divers</i>
<b>Site Settings</b>	<i>High algae cover</i>	<i>High algae cover</i>
<b>Restrictions</b>	<i>50% of area closed</i>	<i>No area closed</i>
<b>Number of Fish</b>	<i>20% more fish</i>	<i>60% more fish</i>
<b>Size of Fish</b>	<i>20% more larger fish</i>	<i>20% more larger fish</i>
<b>Species</b>	<i>No change in species numbers</i>	<i>Fewer species</i>
<b>Enforcement</b>	<i>No additional patrols</i>	<i>Two additional patrols</i>
<b>Travel Cost / Day</b>	<i>10% more than your current total cost per day</i>	<i>10% more than your current total cost per day</i>

Which trip do you prefer? (check only one box below)

Trip A       Trip B       I would not take either trip

**E5.** If you were planning a snorkel / SCUBA dive trip to the Florida Keys, which trip would you prefer: Trip A, Trip B, or neither?

<b>ATTRIBUTE</b>	<b>Trip A</b>	<b>Trip B</b>
<b>Number of Snorkelers / Divers</b>	<i>15% fewer snorkelers /divers</i>	<i>The usual number of other snorkelers /divers</i>
<b>Site Settings</b>	<i>Mix of coral and algae cover</i>	<i>High algae cover</i>
<b>Restrictions</b>	<i>50% of area closed</i>	<i>75% of area closed</i>
<b>Number of Fish</b>	<i>No increase in numbers of fish</i>	<i>60% more fish</i>
<b>Size of Fish</b>	<i>20% more larger fish</i>	<i>40% more larger fish</i>
<b>Species</b>	<i>Many species</i>	<i>No change in species numbers</i>
<b>Enforcement</b>	<i>Two additional patrols</i>	<i>One additional patrol</i>
<b>Travel Cost / Day</b>	<i>Your current total cost per day</i>	<i>10% less than your current total cost per day</i>

Which trip do you prefer? (check only one box below)

Trip A       Trip B       I would not take either trip

**E6.** If you were planning a snorkel / SCUBA dive trip to the Florida Keys, which trip would you prefer: Trip A, Trip B, or neither?

<b>ATTRIBUTE</b>	<b>Trip A</b>	<b>Trip B</b>
<b>Number of Snorkelers / Divers</b>	<i>The usual number of other snorkelers / divers at the site</i>	<i>15% fewer snorkelers / divers</i>
<b>Site Settings</b>	<i>High live coral cover</i>	<i>Mix of coral and algae cover</i>
<b>Restrictions</b>	<i>75% of area closed</i>	<i>50% of area closed</i>
<b>Number of Fish</b>	<i>No increase in numbers of fish</i>	<i>40% more fish</i>
<b>Size of Fish</b>	<i>20% more larger fish</i>	<i>60% more larger fish</i>
<b>Species</b>	<i>No change in species numbers</i>	<i>No change in species numbers</i>
<b>Enforcement</b>	<i>No additional patrols</i>	<i>No additional patrols</i>
<b>Travel Cost / Day</b>	<i>10% less than your current total cost per day</i>	<i>10% less than your current total cost per day</i>

Which trip do you prefer? (check only one box below)

Trip A       Trip B       I would not take either trip

E7. If you were planning a snorkel / SCUBA dive trip to the Florida Keys, which trip would you prefer: Trip A, Trip B, or neither?

<b>ATTRIBUTE</b>	<b>Trip A</b>	<b>Trip B</b>
<b>Number of Snorkelers / Divers</b>	<i>15% fewer snorkelers / divers</i>	<i>15% fewer snorkelers / divers</i>
<b>Site Settings</b>	<i>High live coral cover</i>	<i>High algae cover</i>
<b>Restrictions</b>	<i>25% of area closed</i>	<i>No area closed</i>
<b>Number of Fish</b>	<i>40% more fish</i>	<i>40% more fish</i>
<b>Size of Fish</b>	<i>60% more larger fish</i>	<i>60% more larger fish</i>
<b>Species</b>	<i>No change in species numbers</i>	<i>Many species</i>
<b>Enforcement</b>	<i>One additional patrol</i>	<i>One additional patrol</i>
<b>Travel Cost / Day</b>	<i>Your current total cost per day</i>	<i>10% less than your current total cost per day</i>

Which trip do you prefer? (check only one box below)

Trip A       Trip B       I would not take either trip

E8. If you were planning a snorkel / SCUBA dive trip to the Florida Keys, which trip would you prefer: Trip A, Trip B, or neither?

<b>ATTRIBUTE</b>	<b>Trip A</b>	<b>Trip B</b>
<b>Number of Snorkelers / Divers</b>	<i>30% fewer snorkelers / divers</i>	<i>The usual number of other snorkelers / divers at the site</i>
<b>Site Settings</b>	<i>High algae cover</i>	<i>High live coral cover</i>
<b>Restrictions</b>	<i>50% of area closed</i>	<i>50% of area closed</i>
<b>Number of Fish</b>	<i>40% more fish</i>	<i>40% more fish</i>
<b>Size of Fish</b>	<i>No increase in larger fish</i>	<i>40% more larger fish</i>
<b>Species</b>	<i>Fewer species</i>	<i>Many species</i>
<b>Enforcement</b>	<i>No additional patrols</i>	<i>Two additional patrols</i>
<b>Travel Cost / Day</b>	<i>Your current total cost per day</i>	<i>10% more than your current total cost per day</i>

Which trip do you prefer? (check only one box below)

Trip A       Trip B       I would not take either trip

**Recreational Fisher**

If not a Recreational fisher in the Florida Keys, GO to page 27 Part F.

Please think about a recreational fishing experience in the Florida Keys when answering the questions on the following pages. You will be offered eight (8) choices of two fishing trips. Each choice has different features for you to evaluate. Please read each choice carefully. Although they may look similar, trips in each question differ in at least one way.

There is an example below to assist you. Please note the following definitions before reviewing the example.

- Number of Recreational Fishing Boats- the number of recreational fishing boats near you at any one time
- Number of Non-fishing boats- the number of non-fishing boats near you at any one time
- Restrictions- the number of reefs closed to fishing per zone (upper Keys, middle Keys, lower Keys)
- Number of Fish Species- the amount of different kinds of fish species caught in a trip
- Number of Fish- the overall amount of fish caught on a trip
- Size of Fish- the number of legal sized fish caught on a trip
- Travel cost / day – Travel cost that an angler spends for a fishing trip per day (including gas and other trip expenses)

**Example**

Suppose that you could choose from the recreational fishing opportunities described below. Which of these fishing trips would you prefer?

<b>ATTRIBUTE</b>	<b>Trip A</b>	<b>Trip B</b>
<b>Number of Recreational Fishing Boats</b>	<i>30% fewer boats</i>	<i>The usual number of other boats near the location</i>
<b>Number of Non-fishing Boats</b>	<i>The usual number of other boats near the location</i>	<i>30% fewer boats</i>
<b>Restrictions</b>	<i>25% of area closed</i>	<i>25% of area closed</i>
<b>Number of Species</b>	<i>No change in species numbers</i>	<i>Fewer species fish caught</i>
<b>Number of fish</b>	<i>10% more fish caught</i>	<i>30% more fish caught</i>
<b>Size of Fish</b>	<i>60% more keepers</i>	<i>20% more keepers</i>
<b>Travel Cost / Day</b>	<i>10% more than your current total cost per day</i>	<i>10% less than your current total cost per day</i>

Which trip do you prefer? (check only one box below)

Trip A

Trip B

I would not take either trip



**E9.** Suppose that you could choose from the recreational fishing opportunities described below. Which of these fishing trips would you prefer?

<b>ATTRIBUTE</b>	<b>Trip A</b>	<b>Trip B</b>
<b>Number of Recreational Fishing Boats</b>	<i>15% fewer boats</i>	<i>15% fewer boats</i>
<b>Number of Non-fishing Boats</b>	<i>30% fewer boats</i>	<i>30% fewer boats</i>
<b>Restrictions</b>	<i>25% of area closed</i>	<i>25% of area closed</i>
<b>Number of Species</b>	<i>No change in species numbers</i>	<i>Fewer species fish caught</i>
<b>Number of fish</b>	<i>30% more fish caught</i>	<i>30% more fish caught</i>
<b>Size of Fish</b>	<i>20% more keepers</i>	<i>40% more keepers</i>
<b>Travel Cost / Day</b>	<i>Your current total cost per day</i>	<i>Your current total cost per day</i>

Which trip do you prefer? (check only one box below)

Trip A       Trip B       I would not take either trip

**E10.** Suppose that you could choose from the recreational fishing opportunities described below. Which of these fishing trips would you prefer?

<b>ATTRIBUTE</b>	<b>Trip A</b>	<b>Trip B</b>
<b>Number of Recreational Fishing Boats</b>	<i>30% fewer boats</i>	<i>The usual number of other boats near the location</i>
<b>Number of Non-fishing Boats</b>	<i>30% fewer boats</i>	<i>The usual number of other boats near the location</i>
<b>Restrictions</b>	<i>75% of area closed</i>	<i>50% of area closed</i>
<b>Number of Species</b>	<i>Fewer species fish caught</i>	<i>More species fish caught</i>
<b>Number of fish</b>	<i>10% more fish caught</i>	<i>10% more fish caught</i>
<b>Size of Fish</b>	<i>No increase in the number of caught kept</i>	<i>60% more keepers</i>
<b>Travel Cost / Day</b>	<i>Your current total cost per day</i>	<i>Your current total cost per day</i>

Which trip do you prefer? (check only one box below)

Trip A       Trip B       I would not take either trip

**E11.** Suppose that you could choose from the recreational fishing opportunities described below. Which of these fishing trips would you prefer?

<b>ATTRIBUTE</b>	<b>Trip A</b>	<b>Trip B</b>
<b>Number of Recreational Fishing Boats</b>	<i>15% fewer boats</i>	<i>15% fewer boats</i>
<b>Number of Non-fishing Boats</b>	<i>30% fewer boats</i>	<i>The usual number of other boats near the location</i>
<b>Restrictions</b>	<i>25% of area closed</i>	<i>75% of area closed</i>
<b>Number of Species</b>	<i>Fewer species fish caught</i>	<i>More species fish caught</i>
<b>Number of fish</b>	<i>No increase in numbers of fish caught</i>	<i>20% more fish caught</i>
<b>Size of Fish</b>	<i>60% more keepers</i>	<i>20% more keepers</i>
<b>Travel Cost / Day</b>	<i>Your current total cost per day</i>	<i>10% less than your current total cost per day</i>

Which trip do you prefer? (check only one box below)

- Trip A     
 Trip B     
 I would not take either trip

**E12.** Suppose that you could choose from the recreational fishing opportunities described below. Which of these fishing trips would you prefer?

<b>ATTRIBUTE</b>	<b>Trip A</b>	<b>Trip B</b>
<b>Number of Recreational Fishing Boats</b>	<i>15% fewer boats</i>	<i>15% fewer boats</i>
<b>Number of Non-fishing Boats</b>	<i>15% fewer boats</i>	<i>The usual number of other boats near the location</i>
<b>Restrictions</b>	<i>25% of area closed</i>	<i>50% of area closed</i>
<b>Number of Species</b>	<i>More species fish caught</i>	<i>No change in species numbers</i>
<b>Number of fish</b>	<i>20% more fish caught</i>	<i>30% more fish caught</i>
<b>Size of Fish</b>	<i>No increase in the number of caught kept</i>	<i>No increase in the number of caught kept</i>
<b>Travel Cost / Day</b>	<i>10% more than your current total cost per day</i>	<i>10% more than your current total cost per day</i>

Which trip do you prefer? (check only one box below)

- Trip A     
 Trip B     
 I would not take either trip

**E13.** Suppose that you could choose from the recreational fishing opportunities described below. Which of these fishing trips would you prefer?

<b>ATTRIBUTE</b>	<b>Trip A</b>	<b>Trip B</b>
<b>Number of Recreational Fishing Boats</b>	<i>30% fewer boats</i>	<i>30% fewer boats</i>
<b>Number of Non-fishing Boats</b>	<i>The usual number of other boats near the location</i>	<i>15% fewer boats</i>
<b>Restrictions</b>	<i>75% of area closed</i>	<i>75% of area closed</i>
<b>Number of Species</b>	<i>More species fish caught</i>	<i>More species fish caught</i>
<b>Number of fish</b>	<i>20% more fish caught</i>	<i>10% more fish caught</i>
<b>Size of Fish</b>	<i>20% more keepers</i>	<i>No increase in the number of caught kept</i>
<b>Travel Cost / Day</b>	<i>10% less than your current total cost per day</i>	<i>10% less than your current total cost per day</i>

Which trip do you prefer? (check only one box below)

- Trip A     
 Trip B     
 I would not take either trip

**E14.** Suppose that you could choose from the recreational fishing opportunities described below. Which of these fishing trips would you prefer?

<b>ATTRIBUTE</b>	<b>Trip A</b>	<b>Trip B</b>
<b>Number of Recreational Fishing Boats</b>	<i>30% fewer boats</i>	<i>The usual number of other boats near the location</i>
<b>Number of Non-fishing Boats</b>	<i>The usual number of other boats near the location</i>	<i>15% fewer boats</i>
<b>Restrictions</b>	<i>25% of area closed</i>	<i>25% of area closed</i>
<b>Number of Species</b>	<i>Fewer species fish caught</i>	<i>No change in species numbers</i>
<b>Number of fish</b>	<i>30% more fish caught</i>	<i>No increase in numbers of fish caught</i>
<b>Size of Fish</b>	<i>40% more keepers</i>	<i>60% more keepers</i>
<b>Travel Cost / Day</b>	<i>10% more than your current total cost per day</i>	<i>Your current total cost per day</i>

Which trip do you prefer? (check only one box below)

- Trip A     
 Trip B     
 I would not take either trip

**E15.** Suppose that you could choose from the recreational fishing opportunities described below. Which of these fishing trips would you prefer?

<b>ATTRIBUTE</b>	<b>Trip A</b>	<b>Trip B</b>
<b>Number of Recreational Fishing Boats</b>	<i>The usual number of other boats near the location</i>	<i>30% fewer boats</i>
<b>Number of Non-fishing Boats</b>	<i>The usual number of other boats near the location</i>	<i>30% fewer boats</i>
<b>Restrictions</b>	<i>50% of area closed</i>	<i>No area closed</i>
<b>Number of Species</b>	<i>No change in species numbers</i>	<i>Fewer species fish caught</i>
<b>Number of fish</b>	<i>10% more fish caught</i>	<i>30% more fish caught</i>
<b>Size of Fish</b>	<i>60% more keepers</i>	<i>20% more keepers</i>
<b>Travel Cost / Day</b>	<i>10% more than your current total cost per day</i>	<i>10% less than your current total cost per day</i>

Which trip do you prefer? (check only one box below)

- Trip A     
 Trip B     
 I would not take either trip

**E16.** Suppose that you could choose from the recreational fishing opportunities described below. Which of these fishing trips would you prefer?

<b>ATTRIBUTE</b>	<b>Trip A</b>	<b>Trip B</b>
<b>Number of Recreational Fishing Boats</b>	<i>The usual number of other boats near the location</i>	<i>The usual number of other boats near the location</i>
<b>Number of Non-fishing Boats</b>	<i>15% fewer boats</i>	<i>30% fewer boats</i>
<b>Restrictions</b>	<i>75% of area closed</i>	<i>No area closed</i>
<b>Number of Species</b>	<i>No change in species numbers</i>	<i>More species fish caught</i>
<b>Number of fish</b>	<i>30% more fish caught</i>	<i>No increase in numbers of fish caught</i>
<b>Size of Fish</b>	<i>60% more keepers</i>	<i>No increase in the number of caught kept</i>
<b>Travel Cost / Day</b>	<i>10% more than your current total cost per day</i>	<i>10% more than your current total cost per day</i>

Which trip do you prefer? (check only one box below)

- Trip A     
 Trip B     
 I would not take either trip

## Part F: Demographic Profile

In this final section, we need to know information about you and your household to make sure we have a representative sample of Monroe County residents.

Again, your privacy will be protected and any information identifying you or your household will not be revealed to anyone.

**F1. How many people in your household are permanent residents of Monroe County, Florida?**

\_\_\_\_\_ number of people

**F2. How many of these people are at least 16 years of age?** \_\_\_\_\_ number of people

**F3. What is the closest mile marker to your residence?** \_\_\_\_\_ mile marker number

**F4. Do you have access to the water from your residence?**  Yes  No

**F5. Do you own a boat?**  Yes  No

**F6. How many years have you lived in Monroe County?** \_\_\_\_\_ number of years

**F7. In what year were you born?** \_\_\_\_\_ year

**F8. Are you Hispanic, Latino, or of Spanish origin?**  Yes  No

**F9. What race do you consider yourself?**

Please circle one or more of the letter(s) that best describes you

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

**F10. What is the highest level of education that you have completed?**

Please circle the letter of the category that best describes you

- A 8th Grade or Less
- B 9th to 11th Grade
- C 12th Grade, High School Grad, GED
- D 13 to 15 Years (some college or vocational training)
- E College Graduate
- F Graduate School, Law School, Medical School

F11. What is your employment status?

Please circle the letter or letters of all those that apply

- |   |                    |   |                   |
|---|--------------------|---|-------------------|
| A | Unemployed         | E | Student           |
| B | Employed full-time | F | Homemaker         |
| C | Employed part-time | G | None of the above |
| D | Retired            |   | (specify) _____   |

F12. Do you work outside Monroe County?  Yes  No

F13. What is your zip code? \_\_\_\_\_

F14. What is your total household income, before taxes.

Please circle the letter corresponding to the category that best describes your household

- |   |                      |   |                        |
|---|----------------------|---|------------------------|
| A | Under \$5,000        | I | \$40,000 to \$44,999   |
| B | \$5,000 to \$9,999   | J | \$45,000 to \$49,999   |
| B | \$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 |   |                        |

# *Monroe County Resident Survey*

**Your answers are voluntary and confidential.**

Your name will never be released to anyone unless otherwise required by law. After the completion of the project all materials identifying you as an individual will be destroyed.

This is a cooperative research project of the Monroe County Tourist Development Council and the National Oceanic and Atmospheric Administration. Public reporting burden for this collection of information is estimated to average 1 hour including time for reviewing instructions, searching existing data sources, gathering and maintaining the data need, 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 this burden, to U.S. Department of Commerce, Clearance Officer, Office of Chief Information Officer, Rm. 6625, 14<sup>th</sup> and Constitution Avenue NW, Washington, DC 20230. Notwithstanding any other provisions of the law, no person is required to respond to, nor shall any person be subject to penalty for failure to comply with, a collection of information subject to requirements of the Paperwork Reduction Act, unless that collection of information displays a currently valid OMB Control Number.





## Resident Survey

1. Overall, how would you rate Monroe County as a place to live?

- a. Excellent
- b. Good
- c. Fair
- d. Poor

Please circle letter corresponding to your answer

2. There are many reasons that people choose to live where they do in Florida. What are the two most important reasons you chose to live in Monroe County?

- a. No special reason
- b. Born here
- c. Job or business
- d. Climate
- e. Environment
- f. Access to natural resources, such as natural settings and wildlife
- g. Opportunities for water activities, such as fishing or diving
- h. Low crime rate
- i. Cultural activities
- j. Retirement
- k. Some other reason (specify) \_\_\_\_\_

Please circle letters corresponding to the two most important reasons

3. In the past 12 months, have you done any outdoor recreation activities in the Florida Keys?

- a. Yes (Go to Part A)
- b. No (Go to Part G)

Please use the enclosed White Card-Activities List to see what we mean by outdoor recreation

**Part A: Outdoor recreation activities during the past 12 months in the Florida Keys**

Please use the enclosed Activities List and map to help you answer the questions in this section

- A1. Which of the activities on the enclosed Activities List did you or someone in your household do in the Florida Keys during the last 12 months?**
- A2. Pleas fill in the circle for each activity you, yourself did during the past 12 months in the Upper Keys, Islamorada, Marathon, Lower Keys and Key West?**
- A3. On how many different days did you, yourself participate in each activity in the Upper Keys, Islamorada, Marathon, Lower Keys and Key West?**

Only answer for those activities you listed with an A on the end of the activity number

- A4. How many others (excluding yourself) in your household did each activity in the Upper Keys, Islamorada, Marathon, Lower Keys and Key West?**

A1 Activity	Upper Keys			Islamorada			Marathon			Lower Keys			Key West		
	A2 Resp.	A3 # days	A4 # others	A2 Resp.	A3 # days	A4 # others	A2 Resp.	A3 # days	A4 # others	A2 Resp.	A3 # days	A4 # others	A2 Resp.	A3 # days	A4 # others
_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____
_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____
_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____
_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____
_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____
_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____
_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____
_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____
_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____
_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____
_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____
_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____
_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____
_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____
_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____
_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____
_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____
_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____
_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____
_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____
_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____
_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____
_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____
_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____
_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____
_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____
_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____

**A5. What would you say is the most important activity you did in the Florida Keys?**

**Most Important Activity** \_\_\_\_\_ (Activity List Number)

**No Activity Most Important (fill in box)**

**A6. On how many different days did you participate in outdoor recreation activities outside the Florida Keys during the past 12 months?** \_\_\_\_\_ (# of days)

**Part B: Reef use in the Florida Keys during the past 12 months. Both artificial and natural reefs.**

Please use Blue Card with Activities List for reef use and map of the Florida Keys in answering Part B

- B1. Which activities did you or someone in your household do on either artificial or natural reefs during the past 12 months in the Upper Keys, Islamorada, Marathon, Lower Keys and Key West?**

If you did not do anything in a region, check the box indicating no reef use in the region

- B2. Please fill in the circle for each activity you, yourself, did during the past 12 months in the Upper Keys, Islamorada, Marathon, Lower Keys and Key West.**
- B3. How many others in your household did each activity on the reefs in the Upper Keys, Islamorada, Marathon, Lower Keys and Key West during the past 12 months?**
- B4. On how many different days did you, yourself, participate in each activity on the reefs in the Upper Keys, Islamorada, Marathon, Lower Keys and Key West during the past 12 months?**
- B5. On how many different days did you, yourself, participate in each activity on the artificial reefs in the Upper Keys, Islamorada, Marathon, Lower Keys and Key West during the past 12 months?**
- B6. On how many different days did you, yourself, participate in each activity on the natural reefs in the Upper Keys, Islamorada, Marathon, Lower Keys and Key West during the past 12 months?**

Note: If you did part of a day on an artificial reef and part of a day on a natural reef, count one whole day on each type of reef

- B7. How many different dives did you, yourself, make for each type of diving activity you did on the reefs in the Upper Keys, Islamorada, Marathon, Lower Keys and Key West during the past 12 months?**

Diving activities include all snorkeling and scuba diving activities on the Blue Card-Activities List (Reef)

A dive is defined as an entry and exit from the water to snorkel or scuba dive

- B8. How many different dives did you, yourself, make for each type of diving activity you did on the artificial reefs in the Upper Keys, Islamorada, Marathon, Lower Keys and Key West during the past 12 months?**
- B9. How many different dives did you, yourself, make for each type of diving activity you did on the natural reefs in the Upper Keys, Islamorada, Marathon, Lower Keys and Key West during the past 12 months?**

Please refer to Questions B1 - B9 when filling in the tables on the following two pages

There is one table for each of the five regions of the Florida Keys (Upper Keys, Islamorada, Marathon, Lower Keys and Key West)

No Reef Use

Upper Keys

B1	B2	B3	B4	B5	B6	B7	B8	B9
Activity	Resp.	# Others	Respondent # of days	# days artificial	# days natural	Respondent # dives	# dives artificial	# dives natural
_____	○	_____	_____	_____	_____	_____	_____	_____
_____	○	_____	_____	_____	_____	_____	_____	_____
_____	○	_____	_____	_____	_____	_____	_____	_____
_____	○	_____	_____	_____	_____	_____	_____	_____
_____	○	_____	_____	_____	_____	_____	_____	_____
_____	○	_____	_____	_____	_____	_____	_____	_____
_____	○	_____	_____	_____	_____	_____	_____	_____
_____	○	_____	_____	_____	_____	_____	_____	_____
_____	○	_____	_____	_____	_____	_____	_____	_____

No Reef Use

Islamorada

B1	B2	B3	B4	B5	B6	B7	B8	B9
Activity	Resp.	# Others	Respondent # of days	# days artificial	# days natural	Respondent # dives	# dives artificial	# dives natural
_____	○	_____	_____	_____	_____	_____	_____	_____
_____	○	_____	_____	_____	_____	_____	_____	_____
_____	○	_____	_____	_____	_____	_____	_____	_____
_____	○	_____	_____	_____	_____	_____	_____	_____
_____	○	_____	_____	_____	_____	_____	_____	_____
_____	○	_____	_____	_____	_____	_____	_____	_____
_____	○	_____	_____	_____	_____	_____	_____	_____
_____	○	_____	_____	_____	_____	_____	_____	_____
_____	○	_____	_____	_____	_____	_____	_____	_____

No Reef Use

Marathon

B1	B2	B3	B4	B5	B6	B7	B8	B9
Activity	Resp.	# Others	Respondent # of days	# days artificial	# days natural	Respondent # dives	# dives artificial	# dives natural
_____	○	_____	_____	_____	_____	_____	_____	_____
_____	○	_____	_____	_____	_____	_____	_____	_____
_____	○	_____	_____	_____	_____	_____	_____	_____
_____	○	_____	_____	_____	_____	_____	_____	_____
_____	○	_____	_____	_____	_____	_____	_____	_____
_____	○	_____	_____	_____	_____	_____	_____	_____
_____	○	_____	_____	_____	_____	_____	_____	_____
_____	○	_____	_____	_____	_____	_____	_____	_____
_____	○	_____	_____	_____	_____	_____	_____	_____

No Reef Use

Lower Keys

B1	B2	B3	B4	B5	B6	B7	B8	B9
Activity	Resp.	# Others	Respondent # of days	# days artificial	# days natural	Respondent # dives	# dives artificial	# dives natural
_____	○	_____	_____	_____	_____	_____	_____	_____
_____	○	_____	_____	_____	_____	_____	_____	_____
_____	○	_____	_____	_____	_____	_____	_____	_____
_____	○	_____	_____	_____	_____	_____	_____	_____
_____	○	_____	_____	_____	_____	_____	_____	_____
_____	○	_____	_____	_____	_____	_____	_____	_____
_____	○	_____	_____	_____	_____	_____	_____	_____
_____	○	_____	_____	_____	_____	_____	_____	_____
_____	○	_____	_____	_____	_____	_____	_____	_____

No Reef Use

Key West

B1	B2	B3	B4	B5	B6	B7	B8	B9
Activity	Resp.	# Others	Respondent # of days	# days artificial	# days natural	Respondent # dives	# dives artificial	# dives natural
_____	○	_____	_____	_____	_____	_____	_____	_____
_____	○	_____	_____	_____	_____	_____	_____	_____
_____	○	_____	_____	_____	_____	_____	_____	_____
_____	○	_____	_____	_____	_____	_____	_____	_____
_____	○	_____	_____	_____	_____	_____	_____	_____
_____	○	_____	_____	_____	_____	_____	_____	_____
_____	○	_____	_____	_____	_____	_____	_____	_____
_____	○	_____	_____	_____	_____	_____	_____	_____
_____	○	_____	_____	_____	_____	_____	_____	_____

## Part C: Specialization

In this section, we are interested in learning more about your primary activity. Please answer the following questions based on the response you gave to QUESTION A5.

For the four questions below, please read the four choices and circle the one answer that best fits you for that question.

### C1. When I participate in my primary activity, I feel like:

- 1 a beginner. I don't really feel like I am part of the activity scene.
- 2 an occasional or irregular participant. Sometimes it is fun, entertaining or rewarding to do my activity.
- 3 a habitual and regular participant in the activity.
- 4 an insider to the sport. The activity is an important part of who I am.

### C2. During my activity, I can best be described as:

- 1 having very little understanding of the activity. I am often unsure about how to do certain things when I go.
- 2 having some understanding of the activity, but still in the process of learning more about the sport. I am becoming more familiar and comfortable with the activity.
- 3 being comfortable with the sport. I have a good understanding of what I can do, and how to do it.
- 4 a knowledgeable expert in the sport. I encourage, teach and enhance opportunities for others who are interested in the activity.

### C3. My relationships with others who do the activity are:

- 1 not established. I really don't know any other people who do the activity.
- 2 very limited. I know some others in the activity by sight and sometimes talk with them, but I don't know their names.
- 3 one of familiarity. I know the names of others who do the activity, and often speak with them.
- 4 close. I have personal and close relationships with others in the activity. These friendships often revolve around the activity.

### C4. My commitment to the activity is:

- 1 very slight. I have very little connection to the activity. I may or may not continue to participate in the sport in the future.
- 2 moderate. I will continue to do it as it is entertaining and provides the benefits I want.
- 3 fairly strong. I have a sense of being a member of the activity, and it is likely that I will continue to do it for a long time.
- 4 very strong. I am totally committed to the activity. I encourage others to participate in the sport and seek to ensure the activity continues into the future.

### C5. If you had to replace all of the equipment that you currently own for your primary activity with similar equipment, how much would it cost to replace?

\$ \_\_\_\_\_ AMOUNT TO REPLACE PRIMARY ACTIVITY EQUIPMENT



**C6. To what extent do you make use of the following for current information about your primary activity? Please circle the number that indicates your extent of use for each source of information.**

	No Use	Almost no use	A little use	Some use	A lot of use
a. Talking with others who participate in the activity.....	1	2	3	4	5
b. Magazines.....	1	2	3	4	5
c. Government agency publications.....	1	2	3	4	5
d. Conservation organization publications.....	1	2	3	4	5
e. Newspapers.....	1	2	3	4	5
f. Diving shops/companies.....	1	2	3	4	5
g. Club meetings.....	1	2	3	4	5
h. Television.....	1	2	3	4	5
i. Radio.....	1	2	3	4	5
j. Internet.....	1	2	3	4	5

**C7. Below is a list of reasons why people engage in recreation activities. Please circle the number that indicates how important each item is to you as a reason for participating in your primary activity.**

	Not at all important	Slightly important	Moderately important	Very important	Extremely important
a. To be outdoors.....	1	2	3	4	5
b. For family recreation.....	1	2	3	4	5
c. To experience new and different things.....	1	2	3	4	5
d. For relaxation.....	1	2	3	4	5
e. To be close to the water.....	1	2	3	4	5
f. To get away from the demands of other people.....	1	2	3	4	5
g. To be with friends.....	1	2	3	4	5
h. To develop my skills.....	1	2	3	4	5
i. To get away from the regular routine.....	1	2	3	4	5
j. To experience adventure and excitement.....	1	2	3	4	5
k. To experience natural surroundings.....	1	2	3	4	5

## Part D: Substitution

There are many places to engage in snorkeling/SCUBA diving activities. In the next several questions, we are attempting to understand the reason you may choose to snorkel/SCUBA dive on one reef versus another, or if necessary, choose to engage in activities other than snorkeling/SCUBA diving in the Florida Keys.

When answering the following questions, please think about a favorite or most common reef that you dive on in the Florida Keys. If you do not have a favorite or most common reef that you dive on in the Keys, please think about the last reef that you dove on in the Florida Keys. Read the choices and circle the number that indicates your answer for that question.

**D1. Please circle which reef you are thinking of when responding to the following questions. (Please circle only one answer)**

- 1 Favorite reef to snorkel/dive on
- 2 Most common reef I snorkel/dive on
- 3 Most recent reef I snorkeled/dove on

**D2. Is this reef a:**

- 1 Natural coral reef
- 2 Artificial reef

**D3. Are you able to recall the name of this reef? If so, please list in below.**

\_\_\_\_\_ reef

**D4. Imagine that you discovered that you could not snorkel/SCUBA dive at this reef (from question #D1 above) during your next planned snorkel/SCUBA dive trip. What would you do? (Please circle only one answer)**

- 1 I would still snorkel/ SCUBA dive, but elsewhere in the Florida Keys
- 2 I would still snorkel/ SCUBA dive, but at a location outside of the Florida Keys
- 3 I would temporarily participate in a different activity in the Florida Keys
- 4 I would temporarily participate in a different activity, but outside the Florida Keys

**D5. Imagine that you discovered that you could not snorkel/SCUBA dive at this reef (from question #D1 above) for the next five years. What would you do?**

- 1 I would still snorkel/ SCUBA dive, but elsewhere in the Florida Keys
- 2 I would still snorkel/ SCUBA dive, but at a location outside of the Florida Keys
- 3 I would permanently participate in a different activity in the Florida Keys
- 4 I would permanently participate in a different activity, but outside the Florida Keys

**D6. Imagine that you discovered during your next snorkel/SCUBA dive trip that this reef (from question #D1 above) was more crowded than you normally find acceptable. What would you do?**

- 1 I would make an exception and still snorkel/ SCUBA dive on this reef
- 2 I would still snorkel/ SCUBA dive, but elsewhere in the Florida Keys
- 3 I would temporarily participate in a different activity in the Florida Keys
- 4 I would temporarily participate in a different activity, but outside the Florida Keys

**D7. Imagine that you discovered during your next snorkel/SCUBA dive trip that this reef (from question #D1 above) was more ecologically damaged (e.g., there wasn't enough healthy coral or fish) than normally find acceptable. What would you do?**

- 1 I would make an exception and snorkel/ SCUBA dive on this reef
- 2 I would still snorkel/ SCUBA dive, but elsewhere in the Florida Keys
- 3 I would temporarily participate in a different activity in the Florida Keys
- 4 I would temporarily participate in a different activity, but outside the Florida Keys

**D8. Imagine that you discovered during your next snorkel/SCUBA dive trip that user groups with whom you experience conflict are using this reef (from question #D1 above). What would you do?**

- 1 I would still snorkel/ SCUBA dive on this reef
- 2 I would still snorkel/ SCUBA dive, but elsewhere in the Florida Keys
- 3 I would temporarily participate in a different activity in the Florida Keys
- 4 I would temporarily participate in a different activity, but outside the Florida Keys

**D9. If you could not snorkel/SCUBA dive at this reef (from question #D1 above), how many other Florida Keys reefs do you think can offer you just as good an experience as your favorite reefs?**

\_\_\_\_\_ number of other Florida Keys reefs

Don't Know

**D10. If you could not snorkel/SCUBA dive at this reef (from question #D1 above), how many other Florida Keys reefs do you think can offer you a similar, but not quite as good, experience?**

\_\_\_\_\_ number of other Florida Keys reefs

Don't Know

**D11. Please rate how similar you think the snorkeling/SCUBA diving experience is at your best similar reef compared to this reef (from question #D1 above).**

1                      2                      3                      4                      5                      6                      7  
Not as Good                      Equivalent                      Better

**D12. There are many things that you might think about or consider when deciding to substitute one reef for another when snorkeling or SCUBA diving. Please indicate how important each of the following factors is in terms of deciding whether or not you would choose to snorkel/SCUBA dive at a substitute reef.**

	Not at all important	Somewhat important	Moderately important	Very important	Extremely important
a) The quality of other reefs.....	1	2	3	4	5
b) The difficulty of the diving conditions on other reefs.....	1	2	3	4	5
c) The distance to other reefs.....	1	2	3	4	5
d) My familiarity with various dive shops.....	1	2	3	4	5
e) The adequacy of my boat to get to other reefs.....	1	2	3	4	5
f) The number of fish at other reefs.....	1	2	3	4	5
g) The cost of fuel to get to other reefs.....	1	2	3	4	5
h) The level of crowding at other reefs.....	1	2	3	4	5
i) The amount of live coral at other reefs.....	1	2	3	4	5
j) Area closures at desirable reef locations.....	1	2	3	4	5
k) The presence of other groups that I don't like.....	1	2	3	4	5
l) Other.....	1	2	3	4	5

**D13. If you could not go snorkeling/SCUBA diving, either in the Florida Keys or elsewhere, are there any other recreation activities in the Florida Keys that would provide you with the same satisfaction and enjoyment that you receive from going snorkeling/SCUBA diving?**

Yes --- If yes, please go to question # D14 below

No --- If no, please go to question # D15 below

**D14. If you answered “yes” to question D13, please list up to three specific activities that you consider to be substitutes for snorkeling/SCUBA diving.**

\_\_\_\_\_ activity

\_\_\_\_\_ activity

\_\_\_\_\_ activity

**D15. There are reasons why people cannot participate as often as they would like in an activity they enjoy doing. Please indicate the extent to which you agree or disagree with each of the following statements as they relate to your ability to snorkel/SCUBA dive in the Florida Keys as often as you would like.**

	Completely disagree	Disagree	Neutral	Agree	Completely agree
a) I don't have enough leisure time.....	1	2	3	4	5
b) The equipment is too expensive.....	1	2	3	4	5
c) The cost of travel is too high.....	1	2	3	4	5
d) It is difficult to find snorkel/SCUBA diving partners.....	1	2	3	4	5
e) Fuel prices for my boat are too high.....	1	2	3	4	5
f) Snorkel/SCUBA diving areas are too crowded.....	1	2	3	4	5
g) Too many snorkel/SCUBA diving areas are off-limits.....	1	2	3	4	5
h) Dive boats are too expensive .....	1	2	3	4	5
i) Other.....	1	2	3	4	5

**D16. Below is a list of reasons why people snorkel/SCUBA dive in the Florida Keys. Please circle the number that indicates how important each item is to you as a reason for snorkel/SCUBA diving in the Florida Keys.**

	Not at all important	Somewhat important	Moderately important	Very important	Extremely important
a) To develop my skills.....	1	2	3	4	5
b) To experience excitement.....	1	2	3	4	5
c) For family recreation.....	1	2	3	4	5
d) To be with friends.....	1	2	3	4	5
e) To be outdoors.....	1	2	3	4	5
f) To experience new and different things.....	1	2	3	4	5
g) For the experience of the dive.....	1	2	3	4	5
h) To get away from the demands of other people.....	1	2	3	4	5
i) To get away from the regular routine.....	1	2	3	4	5
j) To see diverse underwater life.....	1	2	3	4	5
k) To teach underwater skills to other people.....	1	2	3	4	5
l) To obtain additional dive ratings.....	1	2	3	4	5
m) To experience natural surroundings.....	1	2	3	4	5
n) For solitude.....	1	2	3	4	5
o) For relaxation.....	1	2	3	4	5
p) For the challenge of the dive.....	1	2	3	4	5

There are many places to engage in fishing. In the next several questions, we are attempting to understand the reason you may choose to fish in one location versus another, or if necessary, engage in an activity other than fishing in the Florida Keys.

When answering the following questions, please think about a favorite or most common area that you fish in off the Florida Keys. If you do not have a favorite or most common area that you fish in off the Keys, please think about the last area that you fished in off the Florida Keys.

**D17. Please indicate which reef you are thinking of when responding to the following questions. (Please circle only one answer)**

- 1 My favorite reef to fish at
- 2 The most common area I fish at
- 3 The most recent area I fished in

**D18. Is this area:**

- 1 A flat
- 2 A natural coral reef
- 3 Hawk Channel
- 4 An artificial reef
- 5 Other (please list)\_\_\_\_\_

**D19. Are you able to recall the name of this area? If so, please list it below.**

\_\_\_\_\_ area

**D20. Imagine that you discovered that you could not fish in this area (from question #D17 above) during your next planned fishing trip. What would you do? (Please circle only one answer)**

- 1 I would still fish, but elsewhere in the Florida Keys
- 2 I would still fish, but at a location outside of the Florida Keys
- 3 I would temporarily participate in a different activity in the Florida Keys
- 4 I would temporarily participate in a different activity, but outside the Florida Keys

**D21. Imagine that you discovered that you could not fish in this area (from question #D17 above) for the next five years. What would you do?**

- 1 I would still fish, but elsewhere in the Florida Keys
- 2 I would still fish, but at a location outside of the Florida Keys
- 3 I would permanently participate in a different activity in the Florida Keys
- 4 I would permanently participate in a different activity, but outside the Florida Keys

**D22. Imagine that you discovered during your next fishing trip that this area (from question #D17 above) was more crowded than you normally find acceptable. What would you do?**

- 1 I would make an exception and still fish in this area
- 2 I would still fish, but elsewhere in the Florida Keys
- 3 I would temporarily participate in a different activity in the Florida Keys
- 4 I would temporarily participate in a different activity, but outside the Florida Keys

**D23. Imagine that you discovered during your next fishing trip that this area (from question #D17 above) was more ecologically damaged (e.g., there was no longer enough good fish habitat) than you normally find acceptable. What would you do?**

- 1 I would still fish in this area
- 2 I would still fish, but elsewhere in the Florida Keys
- 3 I would temporarily participate in a different activity in the Florida Keys
- 4 I would temporarily participate in a different activity, but outside the Florida Keys

**D24. Imagine that you discovered during your next fishing trip that other user groups with whom you experience conflict are using this area (from question #D17 above). What would you do?**

- 1 I would still fish in this area
- 2 I would still fish, but elsewhere in the Florida Keys
- 3 I would temporarily participate in a different activity in the Florida Keys
- 4 I would temporarily participate in a different activity, but outside the Florida Keys

**D25. If you could not fish in this area (from question #D17 above), how many other areas in the Florida Keys do you think can offer you an overall experience that is just as good?**

\_\_\_\_\_ number of other areas in the Florida Keys

Don't Know

**D26. If you could not fish in this area (from question #1 above), how many other areas in the Florida Keys do you think can offer you a similar, but not quite as good, overall experience?**

\_\_\_\_\_ number of other areas Florida Keys

Don't Know

**D27. Please rate how similar you think the fishing experience is at your best similar fishing area compared to this area.**

1                      2                      3                      4                      5                      6                      7  
Not as Good                      Equivalent                      Better

**D28. There are many things that you might think about or consider when deciding to substitute one fishing area for another. Please indicate how important each of the following factors is in terms of deciding whether or not you would choose to fish in a substitute area.**

	Not at all important	Slightly important	Moderately important	Very important	Extremely important
a) The number of fish at other areas.....	1	2	3	4	5
b) The difficulty of boating conditions.....	1	2	3	4	5
c) The distance to other areas.....	1	2	3	4	5
d) The charter boats and captains at other areas.....	1	2	3	4	5
e) The adequacy of my boat to get to other areas.....	1	2	3	4	5
f) The cost of fuel to get to other areas.....	1	2	3	4	5
g) The level of crowding at other areas.....	1	2	3	4	5
h) Area closures at desirable locations.....	1	2	3	4	5
i) The presence of other groups that I don't like.....	1	2	3	4	5
j) Other.....	1	2	3	4	5

**D29. If you could not go fishing, either in the Florida Keys or elsewhere, are there any other recreation activities in the Florida Keys that would provide you with the same satisfaction and enjoyment that you receive from going fishing?**

- Yes --- If yes, please go to question # D30 below
- No --- If no, please go to question # D31 below

**D30. If you answered “yes” to question D29, please list up to three specific activities that you consider to be substitutes for fishing in the Florida Keys.**

\_\_\_\_\_ activity

\_\_\_\_\_ activity

\_\_\_\_\_ activity



**D31. There are reasons why people cannot participate as often as they would like in an activity they enjoy doing. Please indicate the extent to which you agree or disagree with each of the following statements as they relate to your ability to fish in the Florida Keys as often as you would like.**

	Completely disagree	Disagree	Neutral	Agree	Completely agree
a) I don't have enough leisure time.....	1	2	3	4	5
b) The equipment is too expensive.....	1	2	3	4	5
c) The cost of travel is too high.....	1	2	3	4	5
d) It is difficult to find fishing partners.....	1	2	3	4	5
e) Fuel prices for my boat are too high.....	1	2	3	4	5
f) Fishing areas are too crowded.....	1	2	3	4	5
g) Too many fishing areas are off-limits.....	1	2	3	4	5
h) Fishing charters are too expensive.....	1	2	3	4	5
i) Other.....	1	2	3	4	5

**D32. Below is a list of reasons why people saltwater fish in the Florida Keys. Please circle the number that indicates how important each item is to you as a reason for saltwater fishing in the Florida Keys.**

	Not at all important	Somewhat important	Moderately important	Very important	Extremely important
a) To develop my skills.....	1	2	3	4	5
b) To experience excitement.....	1	2	3	4	5
c) For family recreation.....	1	2	3	4	5
d) To be with friends.....	1	2	3	4	5
e) To be outdoors.....	1	2	3	4	5
f) To experience new and different things.....	1	2	3	4	5
g) For the experience of the catch.....	1	2	3	4	5
h) To get away from the demands of other people.....	1	2	3	4	5
i) To get away from the regular routine.....	1	2	3	4	5
j) To catch a trophy fish.....	1	2	3	4	5
k) For the sport of fishing, not to obtain food to eat.....	1	2	3	4	5
l) For the fun of catching fish.....	1	2	3	4	5
m) To experience natural surroundings.....	1	2	3	4	5
n) For solitude.....	1	2	3	4	5
o) For relaxation.....	1	2	3	4	5
p) For the challenge of the catch.....	1	2	3	4	5
q) To obtain fish for eating, not for sport.....	1	2	3	4	5

## Part E: Management Alternatives

### Snorkeler / SCUBA diver

If not a snorkeler / SCUBA diver in the Florida Keys, but do recreational fishing, GO to page 22.

If not a snorkeler / SCUBA diver or recreational fisher in the Florida Keys, GO to page 27.

Please think about a recreational snorkeling / SCUBA diving experience on a reef in the Florida Keys when answering the questions on the following pages. You will be offered eight (8) choices of two diving trips. Each choice has different features for you to evaluate. Please read each choice carefully. Although they may look similar, trips in each question differ in at least one way.

There is an example below to assist you. Please note the following definitions before reviewing the example.

- Number of Snorkelers / Divers - the number of snorkelers / divers on a reef at any one time
- Restrictions- percent area of reef open to use
- Enforcement- the number of law enforcement patrols you observe per trip
- Number of Fish Species- the amount of different kinds of fish species observed on the reef
- Site Settings- the amount of live coral and/or algae on the reef
- Number of Fish- the overall amount of fish observed on the reef
- Size of Fish- the size of fish observed on the reef
- Travel cost / day – Travel cost that a snorkeler / diver spends for a diving trip per day (including gas and other trip expenses)

### Example

If you were planning a snorkel / SCUBA dive trip to the Florida Keys, which trip would you prefer: Trip A, Trip B, or neither?

ATTRIBUTE	Trip A	Trip B
<b>Number of Snorkelers / Divers</b>	<i>15% fewer snorkelers / divers</i>	<i>30% fewer snorkelers / divers</i>
<b>Site Settings</b>	<i>Mix of coral and algae cover</i>	<i>High live coral cover</i>
<b>Restrictions</b>	<i>25% of area closed</i>	<i>75 % of area closed</i>
<b>Number of Fish</b>	<i>40% more fish</i>	<i>No increase in numbers of fish</i>
<b>Size of Fish</b>	<i>40% more larger fish</i>	<i>20 % more larger fish</i>
<b>Species</b>	<i>No change in species numbers</i>	<i>Fewer species</i>
<b>Enforcement</b>	<i>Two additional patrols</i>	<i>No additional patrols</i>
<b>Travel Cost / Day</b>	<i>Your current total cost per day</i>	<i>10% more than your current total cost per day</i>

Which trip do you prefer? (check only one box below)

Trip A

Trip B

I would not take either trip

**E1.** If you were planning a snorkel / SCUBA dive trip to the Florida Keys, which trip would you prefer: Trip A, Trip B, or neither?

<b>ATTRIBUTE</b>	<b>Trip A</b>	<b>Trip B</b>
<b>Number of Snorkelers / Divers</b>	<i>15% fewer snorkelers / divers</i>	<i>30% fewer snorkelers / divers</i>
<b>Site Settings</b>	<i>High live coral cover</i>	<i>Mix of coral and algae cover</i>
<b>Restrictions</b>	<i>75% of area closed</i>	<i>75% of area closed</i>
<b>Number of Fish</b>	<i>No increase in numbers of fish</i>	<i>60% more fish</i>
<b>Size of Fish</b>	<i>20% more larger fish</i>	<i>20% more larger fish</i>
<b>Species</b>	<i>Fewer species</i>	<i>Many species</i>
<b>Enforcement</b>	<i>One additional patrol</i>	<i>Two additional patrols</i>
<b>Travel Cost / Day</b>	<i>Your current total cost per day</i>	<i>10% more than your current total cost per day</i>

Which trip do you prefer? (check only one box below)

Trip A       Trip B       I would not take either trip

**E2.** If you were planning a snorkel / SCUBA dive trip to the Florida Keys, which trip would you prefer: Trip A, Trip B, or neither?

<b>ATTRIBUTE</b>	<b>Trip A</b>	<b>Trip B</b>
<b>Number of Snorkelers / Divers</b>	<i>30% fewer snorkelers / divers</i>	<i>15% fewer snorkelers / divers</i>
<b>Site Settings</b>	<i>High algae cover</i>	<i>Mix of coral and algae cover</i>
<b>Restrictions</b>	<i>50% of area closed</i>	<i>25% of area closed</i>
<b>Number of Fish</b>	<i>40% more fish</i>	<i>20% more fish</i>
<b>Size of Fish</b>	<i>40% more larger fish</i>	<i>No increase in larger fish</i>
<b>Species</b>	<i>No change in species numbers</i>	<i>No change in species numbers</i>
<b>Enforcement</b>	<i>One additional patrol</i>	<i>One additional patrol</i>
<b>Travel Cost / Day</b>	<i>Your current total cost per day</i>	<i>10% more than your current total cost per day</i>

Which trip do you prefer? (check only one box below)

Trip A       Trip B       I would not take either trip

**E3.** If you were planning a snorkel / SCUBA dive trip to the Florida Keys, which trip would you prefer: Trip A, Trip B, or neither?

<b>ATTRIBUTE</b>	<b>Trip A</b>	<b>Trip B</b>
<b>Number of Snorkelers / Divers</b>	<i>15% fewer snorkelers / divers</i>	<i>15% fewer snorkelers / divers</i>
<b>Site Settings</b>	<i>High algae cover</i>	<i>Mix of coral and algae cover</i>
<b>Restrictions</b>	<i>25% of area closed</i>	<i>No area closed</i>
<b>Number of Fish</b>	<i>40% more fish</i>	<i>No increase in numbers of fish</i>
<b>Size of Fish</b>	<i>20% more larger fish</i>	<i>40% more larger fish</i>
<b>Species</b>	<i>Fewer species</i>	<i>Fewer species</i>
<b>Enforcement</b>	<i>Two additional patrols</i>	<i>No additional patrols</i>
<b>Travel Cost / Day</b>	<i>10% more than your current total cost per day</i>	<i>10% less than your current total cost per day</i>

Which trip do you prefer? (check only one box below)

Trip A       Trip B       I would not take either trip

**E4.** If you were planning a snorkel / SCUBA dive trip to the Florida Keys, which trip would you prefer: Trip A, Trip B, or neither?

<b>ATTRIBUTE</b>	<b>Trip A</b>	<b>Trip B</b>
<b>Number of Snorkelers / Divers</b>	<i>15% fewer snorkelers / divers</i>	<i>The usual number of other snorkelers / divers at the site</i>
<b>Site Settings</b>	<i>Mix of coral and algae cover</i>	<i>High algae cover</i>
<b>Restrictions</b>	<i>50% of area closed</i>	<i>25% of area closed</i>
<b>Number of Fish</b>	<i>No increase in numbers of fish</i>	<i>No increase in numbers of fish</i>
<b>Size of Fish</b>	<i>60% more larger fish</i>	<i>60% more larger fish</i>
<b>Species</b>	<i>No change in species numbers</i>	<i>Fewer species</i>
<b>Enforcement</b>	<i>No additional patrols</i>	<i>Two additional patrols</i>
<b>Travel Cost / Day</b>	<i>10% more than your current total cost per day</i>	<i>10% more than your current total cost per day</i>

Which trip do you prefer? (check only one box below)

Trip A       Trip B       I would not take either trip

**E5.** If you were planning a snorkel / SCUBA dive trip to the Florida Keys, which trip would you prefer: Trip A, Trip B, or neither?

<b>ATTRIBUTE</b>	<b>Trip A</b>	<b>Trip B</b>
<b>Number of Snorkelers / Divers</b>	<i>15% fewer snorkelers / divers</i>	<i>30% fewer snorkelers / divers</i>
<b>Site Settings</b>	<i>High live coral cover</i>	<i>High algae cover</i>
<b>Restrictions</b>	<i>No area closed</i>	<i>50% of area closed</i>
<b>Number of Fish</b>	<i>20% more fish</i>	<i>40% more fish</i>
<b>Size of Fish</b>	<i>40% more larger fish</i>	<i>40% more larger fish</i>
<b>Species</b>	<i>No change in species numbers</i>	<i>Fewer species</i>
<b>Enforcement</b>	<i>No additional patrols</i>	<i>No additional patrols</i>
<b>Travel Cost / Day</b>	<i>Your current total cost per day</i>	<i>Your current total cost per day</i>

Which trip do you prefer? (check only one box below)

Trip A       Trip B       I would not take either trip

**E6.** If you were planning a snorkel / SCUBA dive trip to the Florida Keys, which trip would you prefer: Trip A, Trip B, or neither?

<b>ATTRIBUTE</b>	<b>Trip A</b>	<b>Trip B</b>
<b>Number of Snorkelers / Divers</b>	<i>The usual number of other snorkelers / divers at the site</i>	<i>The usual number of other snorkelers / divers at the site</i>
<b>Site Settings</b>	<i>High algae cover</i>	<i>High live coral cover</i>
<b>Restrictions</b>	<i>50% of area closed</i>	<i>75% of area closed</i>
<b>Number of Fish</b>	<i>20% more fish</i>	<i>40% more fish</i>
<b>Size of Fish</b>	<i>60% more larger fish</i>	<i>20% more larger fish</i>
<b>Species</b>	<i>Fewer species</i>	<i>No change in species numbers</i>
<b>Enforcement</b>	<i>One additional patrol</i>	<i>No additional patrols</i>
<b>Travel Cost / Day</b>	<i>10% less than your current total cost per day</i>	<i>10% less than your current total cost per day</i>

Which trip do you prefer? (check only one box below)

Trip A       Trip B       I would not take either trip

E7. If you were planning a snorkel / SCUBA dive trip to the Florida Keys, which trip would you prefer: Trip A, Trip B, or neither?

<b>ATTRIBUTE</b>	<b>Trip A</b>	<b>Trip B</b>
<b>Number of Snorkelers / Divers</b>	<i>30% fewer snorkelers / divers</i>	<i>The usual number of other snorkelers / divers at the site</i>
<b>Site Settings</b>	<i>High live coral cover</i>	<i>High live coral cover</i>
<b>Restrictions</b>	<i>25% of area closed</i>	<i>25% of area closed</i>
<b>Number of Fish</b>	<i>60% more fish</i>	<i>60% more fish</i>
<b>Size of Fish</b>	<i>20% more larger fish</i>	<i>No increase in larger fish</i>
<b>Species</b>	<i>Many species</i>	<i>Fewer species</i>
<b>Enforcement</b>	<i>No additional patrols</i>	<i>One additional patrol</i>
<b>Travel Cost / Day</b>	<i>10% less than your current total cost per day</i>	<i>10% less than your current total cost per day</i>

Which trip do you prefer? (check only one box below)

Trip A       Trip B       I would not take either trip

E8. If you were planning a snorkel / SCUBA dive trip to the Florida Keys, which trip would you prefer: Trip A, Trip B, or neither?

<b>ATTRIBUTE</b>	<b>Trip A</b>	<b>Trip B</b>
<b>Number of Snorkelers / Divers</b>	<i>The usual number of other snorkelers / divers at the site</i>	<i>30% fewer snorkelers / divers</i>
<b>Site Settings</b>	<i>Mix of coral and algae cover</i>	<i>Mix of coral and algae cover</i>
<b>Restrictions</b>	<i>75% of area closed</i>	<i>No area closed</i>
<b>Number of Fish</b>	<i>60% more fish</i>	<i>40% more fish</i>
<b>Size of Fish</b>	<i>No increase in larger fish</i>	<i>No increase in larger fish</i>
<b>Species</b>	<i>Many species</i>	<i>No change in species numbers</i>
<b>Enforcement</b>	<i>One additional patrol</i>	<i>Two additional patrols</i>
<b>Travel Cost / Day</b>	<i>10% more than your current total cost per day</i>	<i>10% less than your current total cost per day</i>

Which trip do you prefer? (check only one box below)

Trip A       Trip B       I would not take either trip

**Recreational Fisher**

If not a Recreational fisher in the Florida Keys, GO to page 27 Part F.

Please think about a recreational fishing experience in the Florida Keys when answering the questions on the following pages. You will be offered eight (8) choices of two fishing trips. Each choice has different features for you to evaluate. Please read each choice carefully. Although they may look similar, trips in each question differ in at least one way.

There is an example below to assist you. Please note the following definitions before reviewing the example.

- Number of Recreational Fishing Boats- the number of recreational fishing boats near you at any one time
- Number of Non-fishing Boats- the number of non-fishing boats near you at any one time
- Restrictions- the number of reefs closed to fishing per zone (upper Keys, middle Keys, lower Keys)
- Number of Fish Species- the amount of different kinds of fish species caught in a trip
- Number of Fish- the overall amount of fish caught on a trip
- Size of Fish- the number of legal sized fish caught on a trip
- Travel cost / day – Travel cost that an angler spends for a fishing trip per day (including gas and other trip expenses)

**Example**

Suppose that you could choose from the recreational fishing opportunities described below. Which of these fishing trips would you prefer?

<b>ATTRIBUTE</b>	<b>Trip A</b>	<b>Trip B</b>
<b>Number of Recreational Fishing Boats</b>	<i>30% fewer boats</i>	<i>The usual number of other boats near the location</i>
<b>Number of Non-fishing Boats</b>	<i>The usual number of other boats near the location</i>	<i>30% fewer boats</i>
<b>Restrictions</b>	<i>25% of area closed</i>	<i>25% of area closed</i>
<b>Number of Species</b>	<i>No change in species numbers</i>	<i>Fewer species fish caught</i>
<b>Number of fish</b>	<i>10% more fish caught</i>	<i>30% more fish caught</i>
<b>Size of Fish</b>	<i>60% more keepers</i>	<i>20% more keepers</i>
<b>Travel Cost / Day</b>	<i>10% more than your current total cost per day</i>	<i>10% less than your current total cost per day</i>

Which trip do you prefer? (check only one box below)

Trip A

Trip B

I would not take either trip

**E9.** Suppose that you could choose from the recreational fishing opportunities described below. Which of these fishing trips would you prefer?

<b>ATTRIBUTE</b>	<b>Trip A</b>	<b>Trip B</b>
<b>Number of Recreational Fishing Boats</b>	<i>The usual number of other boats near the location</i>	<i>The usual number of other boats near the location</i>
<b>Number of Non-fishing Boats</b>	<i>30% fewer boats</i>	<i>The usual number of other boats near the location</i>
<b>Restrictions</b>	<i>75% of area closed</i>	<i>25% of area closed</i>
<b>Number of Species</b>	<i>No change in species numbers</i>	<i>No change in species numbers</i>
<b>Number of fish</b>	<i>No increase in numbers of fish caught</i>	<i>20% more fish caught</i>
<b>Size of Fish</b>	<i>40% more keepers</i>	<i>No increase in the number of caught kept</i>
<b>Travel Cost / Day</b>	<i>10% more than your current total cost per day</i>	<i>10% less than your current total cost per day</i>

Which trip do you prefer? (check only one box below)

Trip A       Trip B       I would not take either trip

**E10.** Suppose that you could choose from the recreational fishing opportunities described below. Which of these fishing trips would you prefer?

<b>ATTRIBUTE</b>	<b>Trip A</b>	<b>Trip B</b>
<b>Number of Recreational Fishing Boats</b>	<i>The usual number of other boats near the location</i>	<i>15% fewer boats</i>
<b>Number of Non-fishing Boats</b>	<i>15% fewer boats</i>	<i>The usual number of other boats near the location</i>
<b>Restrictions</b>	<i>No area closed</i>	<i>50% of area closed</i>
<b>Number of Species</b>	<i>More species fish caught</i>	<i>More species fish caught</i>
<b>Number of fish</b>	<i>30% more fish caught</i>	<i>10% more fish caught</i>
<b>Size of Fish</b>	<i>20% more keepers</i>	<i>60% more keepers</i>
<b>Travel Cost / Day</b>	<i>10% more than your current total cost per day</i>	<i>10% less than your current total cost per day</i>

Which trip do you prefer? (check only one box below)

Trip A       Trip B       I would not take either trip



**E11.** Suppose that you could choose from the recreational fishing opportunities described below. Which of these fishing trips would you prefer?

<b>ATTRIBUTE</b>	<b>Trip A</b>	<b>Trip B</b>
<b>Number of Recreational Fishing Boats</b>	<i>15% fewer boats</i>	<i>30% fewer boats</i>
<b>Number of Non-fishing Boats</b>	<i>30% fewer boats</i>	<i>15% fewer boats</i>
<b>Restrictions</b>	<i>25% of area closed</i>	<i>No area closed</i>
<b>Number of Species</b>	<i>No change in species numbers</i>	<i>More species fish caught</i>
<b>Number of fish</b>	<i>20% more fish caught</i>	<i>20% more fish caught</i>
<b>Size of Fish</b>	<i>No increase in the number of caught kept</i>	<i>60% more keepers</i>
<b>Travel Cost / Day</b>	<i>10% less than your current total cost per day</i>	<i>Your current total cost per day</i>

Which trip do you prefer? (check only one box below)

- Trip A     
 Trip B     
 I would not take either trip

**E12.** Suppose that you could choose from the recreational fishing opportunities described below. Which of these fishing trips would you prefer?

<b>ATTRIBUTE</b>	<b>Trip A</b>	<b>Trip B</b>
<b>Number of Recreational Fishing Boats</b>	<i>30% fewer boats</i>	<i>15% fewer boats</i>
<b>Number of Non-fishing Boats</b>	<i>15% fewer boats</i>	<i>30% fewer boats</i>
<b>Restrictions</b>	<i>No area closed</i>	<i>No area closed</i>
<b>Number of Species</b>	<i>Fewer species fish caught fish caught</i>	<i>No change in species numbers</i>
<b>Number of fish</b>	<i>10% more fish caught</i>	<i>20% more fish caught</i>
<b>Size of Fish</b>	<i>40% more keepers</i>	<i>60% more keepers</i>
<b>Travel Cost / Day</b>	<i>10% less than your current total cost per day</i>	<i>10% more than your current total cost per day</i>

Which trip do you prefer? (check only one box below)

- Trip A     
 Trip B     
 I would not take either trip

**E13.** Suppose that you could choose from the recreational fishing opportunities described below. Which of these fishing trips would you prefer?

<b>ATTRIBUTE</b>	<b>Trip A</b>	<b>Trip B</b>
<b>Number of Recreational Fishing Boats</b>	<i>30% fewer boats</i>	<i>30% fewer boats</i>
<b>Number of Non-fishing Boats</b>	<i>30% fewer boats</i>	<i>The usual number of other boats near the location</i>
<b>Restrictions</b>	<i>50% of area closed</i>	<i>50% of area closed</i>
<b>Number of Species</b>	<i>More species fish caught</i>	<i>Fewer species fish caught</i>
<b>Number of fish</b>	<i>30% more fish caught</i>	<i>No increase in numbers of fish caught</i>
<b>Size of Fish</b>	<i>No increase in the number of caught kept</i>	<i>20% more keepers</i>
<b>Travel Cost / Day</b>	<i>10% less than your current total cost per day</i>	<i>10% more than your current total cost per day</i>

Which trip do you prefer? (check only one box below)

Trip A       Trip B       I would not take either trip

**E14.** Suppose that you could choose from the recreational fishing opportunities described below. Which of these fishing trips would you prefer?

<b>ATTRIBUTE</b>	<b>Trip A</b>	<b>Trip B</b>
<b>Number of Recreational Fishing Boats</b>	<i>The usual number of other boats near the location</i>	<i>The usual number of other boats near the location</i>
<b>Number of Non-fishing Boats</b>	<i>15% fewer boats</i>	<i>30% fewer boats</i>
<b>Restrictions</b>	<i>25% of area closed</i>	<i>75% of area closed</i>
<b>Number of Species</b>	<i>Fewer species fish caught</i>	<i>Fewer species fish caught</i>
<b>Number of fish</b>	<i>20% more fish caught</i>	<i>No increase in numbers of fish caught</i>
<b>Size of Fish</b>	<i>No increase in the number of caught kept</i>	<i>40% more keepers</i>
<b>Travel Cost / Day</b>	<i>Your current total cost per day</i>	<i>10% less than your current total cost per day</i>

Which trip do you prefer? (check only one box below)

Trip A       Trip B       I would not take either trip

**E15.** Suppose that you could choose from the recreational fishing opportunities described below. Which of these fishing trips would you prefer?

<b>ATTRIBUTE</b>	<b>Trip A</b>	<b>Trip B</b>
<b>Number of Recreational Fishing Boats</b>	<i>15% fewer boats</i>	<i>The usual number of other boats near the location</i>
<b>Number of Non-fishing Boats</b>	<i>The usual number of other boats near the location</i>	<i>15% fewer boats</i>
<b>Restrictions</b>	<i>50% of area closed</i>	<i>75% of area closed</i>
<b>Number of Species</b>	<i>Fewer species fish caught</i>	<i>No change in species numbers</i>
<b>Number of fish</b>	<i>10% more fish caught</i>	<i>10% more fish caught</i>
<b>Size of Fish</b>	<i>60% more keepers</i>	<i>No increase in the number of caught kept</i>
<b>Travel Cost / Day</b>	<i>Your current total cost per day</i>	<i>Your current total cost per day</i>

Which trip do you prefer? (check only one box below)

- Trip A     
 Trip B     
 I would not take either trip

**E16.** Suppose that you could choose from the recreational fishing opportunities described below. Which of these fishing trips would you prefer?

<b>ATTRIBUTE</b>	<b>Trip A</b>	<b>Trip B</b>
<b>Number of Recreational Fishing Boats</b>	<i>30% fewer boats</i>	<i>30% fewer boats</i>
<b>Number of Non-fishing Boats</b>	<i>15% fewer boats</i>	<i>15% fewer boats</i>
<b>Restrictions</b>	<i>25% of area closed</i>	<i>25% of area closed</i>
<b>Number of Species</b>	<i>More species fish caught</i>	<i>Fewer species fish caught</i>
<b>Number of fish</b>	<i>No increase in numbers of fish caught</i>	<i>30% more fish caught</i>
<b>Size of Fish</b>	<i>60% more keepers</i>	<i>40% more keepers</i>
<b>Travel Cost / Day</b>	<i>10% less than your current total cost per day</i>	<i>10% more than your current total cost per day</i>

Which trip do you prefer? (check only one box below)

- Trip A     
 Trip B     
 I would not take either trip

## Part F: Demographic Profile

In this final section, we need to know information about you and your household to make sure we have a representative sample of Monroe County residents.

Again, your privacy will be protected and any information identifying you or your household will not be revealed to anyone.

**F1. How many people in your household are permanent residents of Monroe County, Florida?**

\_\_\_\_\_ number of people

**F2. How many of these people are at least 16 years of age?** \_\_\_\_\_ number of people

**F3. What is the closest mile marker to your residence?** \_\_\_\_\_ mile marker number

**F4. Do you have access to the water from your residence?**  Yes  No

**F5. Do you own a boat?**  Yes  No

**F6. How many years have you lived in Monroe County?** \_\_\_\_\_ number of years

**F7. In what year were you born?** \_\_\_\_\_ year

**F8. Are you Hispanic, Latino, or of Spanish origin?**  Yes  No

**F9. What race do you consider yourself?**

Please circle one or more of the letter(s) that best describes you

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

**F10. What is the highest level of education that you have completed?**

Please circle the letter of the category that best describes you

- A 8th Grade or Less
- B 9th to 11th Grade
- C 12th Grade, High School Grad, GED
- D 13 to 15 Years (some college or vocational training)
- E College Graduate
- F Graduate School, Law School, Medical School

F11. What is your employment status?

Please circle the letter or letters of all those that apply

- |   |                    |   |                   |
|---|--------------------|---|-------------------|
| A | Unemployed         | E | Student           |
| B | Employed full-time | F | Homemaker         |
| C | Employed part-time | G | None of the above |
| D | Retired            |   | (specify) _____   |

F12. Do you work outside Monroe County?  Yes  No

F13. What is your zip code? \_\_\_\_\_

F14. What is your total household income, before taxes.

Please circle the letter corresponding to the category that best describes your household

- |   |                      |   |                        |
|---|----------------------|---|------------------------|
| A | Under \$5,000        | I | \$40,000 to \$44,999   |
| B | \$5,000 to \$9,999   | J | \$45,000 to \$49,999   |
| B | \$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 |   |                        |

# *Monroe County Resident Survey*

**Your answers are voluntary and confidential.**

Your name will never be released to anyone unless otherwise required by law. After the completion of the project all materials identifying you as an individual will be destroyed.

This is a cooperative research project of the Monroe County Tourist Development Council and the National Oceanic and Atmospheric Administration. Public reporting burden for this collection of information is estimated to average 1 hour including time for reviewing instructions, searching existing data sources, gathering and maintaining the data need, 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 this burden, to U.S. Department of Commerce, Clearance Officer, Office of Chief Information Officer, Rm. 6625, 14<sup>th</sup> and Constitution Avenue NW, Washington, DC 20230. Notwithstanding any other provisions of the law, no person is required to respond to, nor shall any person be subject to penalty for failure to comply with, a collection of information subject to requirements of the Paperwork Reduction Act, unless that collection of information displays a currently valid OMB Control Number.





## Resident Survey

1. Overall, how would you rate Monroe County as a place to live?

- a. Excellent
- b. Good
- c. Fair
- d. Poor

Please circle letter corresponding to your answer

2. There are many reasons that people choose to live where they do in Florida. What are the two most important reasons you chose to live in Monroe County?

- a. No special reason
- b. Born here
- c. Job or business
- d. Climate
- e. Environment
- f. Access to natural resources, such as natural settings and wildlife
- g. Opportunities for water activities, such as fishing or diving
- h. Low crime rate
- i. Cultural activities
- j. Retirement
- k. Some other reason (specify) \_\_\_\_\_

Please circle letters corresponding to the two most important reasons

3. In the past 12 months, have you done any outdoor recreation activities in the Florida Keys?

- a. Yes (Go to Part A)
- b. No (Go to Part G)

Please use the enclosed White Card-Activities List to see what we mean by outdoor recreation

**Part A: Outdoor recreation activities during the past 12 months in the Florida Keys**

Please use the enclosed Activities List and map to help you answer the questions in this section

- A1. Which of the activities on the enclosed Activities List did you or someone in your household do in the Florida Keys during the last 12 months?
- A2. Pleas fill in the circle for each activity you, yourself did during the past 12 months in the Upper Keys, Islamorada, Marathon, Lower Keys and Key West?
- A3. On how many different days did you, yourself participate in each activity in the Upper Keys, Islamorada, Marathon, Lower Keys and Key West?

Only answer for those activities you listed with an A on the end of the activity number

- A4. How many others (excluding yourself) in your household did each activity in the Upper Keys, Islamorada, Marathon, Lower Keys and Key West?

A1 Activity	Upper Keys			Islamorada			Marathon			Lower Keys			Key West		
	A2 Resp.	A3 # days	A4 # others	A2 Resp.	A3 # days	A4 # others	A2 Resp.	A3 # days	A4 # others	A2 Resp.	A3 # days	A4 # others	A2 Resp.	A3 # days	A4 # others
_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____
_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____
_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____
_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____
_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____
_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____
_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____
_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____
_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____
_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____
_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____
_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____
_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____
_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____
_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____
_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____
_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____
_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____
_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____
_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____
_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____
_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____

**A5. What would you say is the most important activity you did in the Florida Keys?**

**Most Important Activity** \_\_\_\_\_ (Activity List Number)

**No Activity Most Important (fill in box)**

**A6. On how many different days did you participate in outdoor recreation activities outside the Florida Keys during the past 12 months?** \_\_\_\_\_ (# of days)

**Part B: Reef use in the Florida Keys during the past 12 months. Both artificial and natural reefs.**

Please use Blue Card with Activities List for reef use and map of the Florida Keys in answering Part B

- B1. Which activities did you or someone in your household do on either artificial or natural reefs during the past 12 months in the Upper Keys, Islamorada, Marathon, Lower Keys and Key West?**

If you did not do anything in a region, check the box indicating no reef use in the region

- B2. Please fill in the circle for each activity you, yourself, did during the past 12 months in the Upper Keys, Islamorada, Marathon, Lower Keys and Key West.**
- B3. How many others in your household did each activity on the reefs in the Upper Keys, Islamorada, Marathon, Lower Keys and Key West during the past 12 months?**
- B4. On how many different days did you, yourself, participate in each activity on the reefs in the Upper Keys, Islamorada, Marathon, Lower Keys and Key West during the past 12 months?**
- B5. On how many different days did you, yourself, participate in each activity on the artificial reefs in the Upper Keys, Islamorada, Marathon, Lower Keys and Key West during the past 12 months?**
- B6. On how many different days did you, yourself, participate in each activity on the natural reefs in the Upper Keys, Islamorada, Marathon, Lower Keys and Key West during the past 12 months?**

Note: If you did part of a day on an artificial reef and part of a day on a natural reef, count one whole day on each type of reef

- B7. How many different dives did you, yourself, make for each type of diving activity you did on the reefs in the Upper Keys, Islamorada, Marathon, Lower Keys and Key West during the past 12 months?**

Diving activities include all snorkeling and scuba diving activities on the Blue Card-Activities List (Reef)

A dive is defined as an entry and exit from the water to snorkel or scuba dive

- B8. How many different dives did you, yourself, make for each type of diving activity you did on the artificial reefs in the Upper Keys, Islamorada, Marathon, Lower Keys and Key West during the past 12 months?**
- B9. How many different dives did you, yourself, make for each type of diving activity you did on the natural reefs in the Upper Keys, Islamorada, Marathon, Lower Keys and Key West during the past 12 months?**

Please refer to Questions B1 - B9 when filling in the tables on the following two pages

There is one table for each of the five regions of the Florida Keys (Upper Keys, Islamorada, Marathon, Lower Keys and Key West)

No Reef Use

Upper Keys

B1	B2	B3	B4	B5	B6	B7	B8	B9
Activity	Resp.	# Others	Respondent # of days	# days artificial	# days natural	Respondent # dives	# dives artificial	# dives natural
_____	○	_____	_____	_____	_____	_____	_____	_____
_____	○	_____	_____	_____	_____	_____	_____	_____
_____	○	_____	_____	_____	_____	_____	_____	_____
_____	○	_____	_____	_____	_____	_____	_____	_____
_____	○	_____	_____	_____	_____	_____	_____	_____
_____	○	_____	_____	_____	_____	_____	_____	_____
_____	○	_____	_____	_____	_____	_____	_____	_____
_____	○	_____	_____	_____	_____	_____	_____	_____
_____	○	_____	_____	_____	_____	_____	_____	_____

No Reef Use

Islamorada

B1	B2	B3	B4	B5	B6	B7	B8	B9
Activity	Resp.	# Others	Respondent # of days	# days artificial	# days natural	Respondent # dives	# dives artificial	# dives natural
_____	○	_____	_____	_____	_____	_____	_____	_____
_____	○	_____	_____	_____	_____	_____	_____	_____
_____	○	_____	_____	_____	_____	_____	_____	_____
_____	○	_____	_____	_____	_____	_____	_____	_____
_____	○	_____	_____	_____	_____	_____	_____	_____
_____	○	_____	_____	_____	_____	_____	_____	_____
_____	○	_____	_____	_____	_____	_____	_____	_____
_____	○	_____	_____	_____	_____	_____	_____	_____
_____	○	_____	_____	_____	_____	_____	_____	_____

No Reef Use

Marathon

B1	B2	B3	B4	B5	B6	B7	B8	B9
Activity	Resp.	# Others	Respondent # of days	# days artificial	# days natural	Respondent # dives	# dives artificial	# dives natural
_____	○	_____	_____	_____	_____	_____	_____	_____
_____	○	_____	_____	_____	_____	_____	_____	_____
_____	○	_____	_____	_____	_____	_____	_____	_____
_____	○	_____	_____	_____	_____	_____	_____	_____
_____	○	_____	_____	_____	_____	_____	_____	_____
_____	○	_____	_____	_____	_____	_____	_____	_____
_____	○	_____	_____	_____	_____	_____	_____	_____
_____	○	_____	_____	_____	_____	_____	_____	_____
_____	○	_____	_____	_____	_____	_____	_____	_____

No Reef Use

Lower Keys

B1	B2	B3	B4	B5	B6	B7	B8	B9
Activity	Resp.	# Others	Respondent # of days	# days artificial	# days natural	Respondent # dives	# dives artificial	# dives natural
_____	○	_____	_____	_____	_____	_____	_____	_____
_____	○	_____	_____	_____	_____	_____	_____	_____
_____	○	_____	_____	_____	_____	_____	_____	_____
_____	○	_____	_____	_____	_____	_____	_____	_____
_____	○	_____	_____	_____	_____	_____	_____	_____
_____	○	_____	_____	_____	_____	_____	_____	_____
_____	○	_____	_____	_____	_____	_____	_____	_____
_____	○	_____	_____	_____	_____	_____	_____	_____
_____	○	_____	_____	_____	_____	_____	_____	_____

No Reef Use

Key West

B1	B2	B3	B4	B5	B6	B7	B8	B9
Activity	Resp.	# Others	Respondent # of days	# days artificial	# days natural	Respondent # dives	# dives artificial	# dives natural
_____	○	_____	_____	_____	_____	_____	_____	_____
_____	○	_____	_____	_____	_____	_____	_____	_____
_____	○	_____	_____	_____	_____	_____	_____	_____
_____	○	_____	_____	_____	_____	_____	_____	_____
_____	○	_____	_____	_____	_____	_____	_____	_____
_____	○	_____	_____	_____	_____	_____	_____	_____
_____	○	_____	_____	_____	_____	_____	_____	_____
_____	○	_____	_____	_____	_____	_____	_____	_____
_____	○	_____	_____	_____	_____	_____	_____	_____

## Part C: Specialization

In this section, we are interested in learning more about your primary activity. Please answer the following questions based on the response you gave to QUESTION A5.

For the four questions below, please read the four choices and circle the one answer that best fits you for that question.

### C1. When I participate in my primary activity, I feel like:

- 1 a beginner. I don't really feel like I am part of the activity scene.
- 2 an occasional or irregular participant. Sometimes it is fun, entertaining or rewarding to do my activity.
- 3 a habitual and regular participant in the activity.
- 4 an insider to the sport. The activity is an important part of who I am.

### C2. During my activity, I can best be described as:

- 1 having very little understanding of the activity. I am often unsure about how to do certain things when I go.
- 2 having some understanding of the activity, but still in the process of learning more about the sport. I am becoming more familiar and comfortable with the activity.
- 3 being comfortable with the sport. I have a good understanding of what I can do, and how to do it.
- 4 a knowledgeable expert in the sport. I encourage, teach and enhance opportunities for others who are interested in the activity.

### C3. My relationships with others who do the activity are:

- 1 not established. I really don't know any other people who do the activity.
- 2 very limited. I know some others in the activity by sight and sometimes talk with them, but I don't know their names.
- 3 one of familiarity. I know the names of others who do the activity, and often speak with them.
- 4 close. I have personal and close relationships with others in the activity. These friendships often revolve around the activity.

### C4. My commitment to the activity is:

- 1 very slight. I have very little connection to the activity. I may or may not continue to participate in the sport in the future.
- 2 moderate. I will continue to do it as it is entertaining and provides the benefits I want.
- 3 fairly strong. I have a sense of being a member of the activity, and it is likely that I will continue to do it for a long time.
- 4 very strong. I am totally committed to the activity. I encourage others to participate in the sport and seek to ensure the activity continues into the future.

### C5. If you had to replace all of the equipment that you currently own for your primary activity with similar equipment, how much would it cost to replace?

\$ \_\_\_\_\_ AMOUNT TO REPLACE PRIMARY ACTIVITY EQUIPMENT

**C6. To what extent do you make use of the following for current information about your primary activity? Please circle the number that indicates your extent of use for each source of information.**

	No Use	Almost no use	A little use	Some use	A lot of use
a. Talking with others who participate in the activity.....	1	2	3	4	5
b. Magazines.....	1	2	3	4	5
c. Government agency publications.....	1	2	3	4	5
d. Conservation organization publications.....	1	2	3	4	5
e. Newspapers.....	1	2	3	4	5
f. Diving shops/companies.....	1	2	3	4	5
g. Club meetings.....	1	2	3	4	5
h. Television.....	1	2	3	4	5
i. Radio.....	1	2	3	4	5
j. Internet.....	1	2	3	4	5

**C7. Below is a list of reasons why people engage in recreation activities. Please circle the number that indicates how important each item is to you as a reason for participating in your primary activity.**

	Not at all important	Slightly important	Moderately important	Very important	Extremely important
a. To be outdoors.....	1	2	3	4	5
b. For family recreation.....	1	2	3	4	5
c. To experience new and different things.....	1	2	3	4	5
d. For relaxation.....	1	2	3	4	5
e. To be close to the water.....	1	2	3	4	5
f. To get away from the demands of other people.....	1	2	3	4	5
g. To be with friends.....	1	2	3	4	5
h. To develop my skills.....	1	2	3	4	5
i. To get away from the regular routine.....	1	2	3	4	5
j. To experience adventure and excitement.....	1	2	3	4	5
k. To experience natural surroundings.....	1	2	3	4	5



## Part D: Substitution

There are many places to engage in snorkeling/SCUBA diving activities. In the next several questions, we are attempting to understand the reason you may choose to snorkel/SCUBA dive on one reef versus another, or if necessary, choose to engage in activities other than snorkeling/SCUBA diving in the Florida Keys.

When answering the following questions, please think about a favorite or most common reef that you dive on in the Florida Keys. If you do not have a favorite or most common reef that you dive on in the Keys, please think about the last reef that you dove on in the Florida Keys. Read the choices and circle the number that indicates your answer for that question.

**D1. Please circle which reef you are thinking of when responding to the following questions. (Please circle only one answer)**

- 1 Favorite reef to snorkel/dive on
- 2 Most common reef I snorkel/dive on
- 3 Most recent reef I snorkeled/dove on

**D2. Is this reef a:**

- 1 Natural coral reef
- 2 Artificial reef

**D3. Are you able to recall the name of this reef? If so, please list in below.**

\_\_\_\_\_ reef

**D4. Imagine that you discovered that you could not snorkel/SCUBA dive at this reef (from question #D1 above) during your next planned snorkel/SCUBA dive trip. What would you do? (Please circle only one answer)**

- 1 I would still snorkel/ SCUBA dive, but elsewhere in the Florida Keys
- 2 I would still snorkel/ SCUBA dive, but at a location outside of the Florida Keys
- 3 I would temporarily participate in a different activity in the Florida Keys
- 4 I would temporarily participate in a different activity, but outside the Florida Keys

**D5. Imagine that you discovered that you could not snorkel/SCUBA dive at this reef (from question #D1 above) for the next five years. What would you do?**

- 1 I would still snorkel/ SCUBA dive, but elsewhere in the Florida Keys
- 2 I would still snorkel/ SCUBA dive, but at a location outside of the Florida Keys
- 3 I would permanently participate in a different activity in the Florida Keys
- 4 I would permanently participate in a different activity, but outside the Florida Keys

**D6. Imagine that you discovered during your next snorkel/SCUBA dive trip that this reef (from question #D1 above) was more crowded than you normally find acceptable. What would you do?**

- 1 I would make an exception and still snorkel/ SCUBA dive on this reef
- 2 I would still snorkel/ SCUBA dive, but elsewhere in the Florida Keys
- 3 I would temporarily participate in a different activity in the Florida Keys
- 4 I would temporarily participate in a different activity, but outside the Florida Keys

**D7. Imagine that you discovered during your next snorkel/SCUBA dive trip that this reef (from question #D1 above) was more ecologically damaged (e.g., there wasn't enough healthy coral or fish) than normally find acceptable. What would you do?**

- 1 I would make an exception and snorkel/ SCUBA dive on this reef
- 2 I would still snorkel/ SCUBA dive, but elsewhere in the Florida Keys
- 3 I would temporarily participate in a different activity in the Florida Keys
- 4 I would temporarily participate in a different activity, but outside the Florida Keys

**D8. Imagine that you discovered during your next snorkel/SCUBA dive trip that user groups with whom you experience conflict are using this reef (from question #D1 above). What would you do?**

- 1 I would still snorkel/ SCUBA dive on this reef
- 2 I would still snorkel/ SCUBA dive, but elsewhere in the Florida Keys
- 3 I would temporarily participate in a different activity in the Florida Keys
- 4 I would temporarily participate in a different activity, but outside the Florida Keys

**D9. If you could not snorkel/SCUBA dive at this reef (from question #D1 above), how many other Florida Keys reefs do you think can offer you just as good an experience as your favorite reefs?**

\_\_\_\_\_ number of other Florida Keys reefs

Don't Know

**D10. If you could not snorkel/SCUBA dive at this reef (from question #D1 above), how many other Florida Keys reefs do you think can offer you a similar, but not quite as good, experience?**

\_\_\_\_\_ number of other Florida Keys reefs

Don't Know

**D11. Please rate how similar you think the snorkeling/SCUBA diving experience is at your best similar reef compared to this reef (from question #D1 above).**

1                      2                      3                      4                      5                      6                      7  
Not as Good                      Equivalent                      Better

**D12. There are many things that you might think about or consider when deciding to substitute one reef for another when snorkeling or SCUBA diving. Please indicate how important each of the following factors is in terms of deciding whether or not you would choose to snorkel/SCUBA dive at a substitute reef.**

	Not at all important	Somewhat important	Moderately important	Very important	Extremely important
a) The quality of other reefs.....	1	2	3	4	5
b) The difficulty of the diving conditions on other reefs.....	1	2	3	4	5
c) The distance to other reefs.....	1	2	3	4	5
d) My familiarity with various dive shops.....	1	2	3	4	5
e) The adequacy of my boat to get to other reefs.....	1	2	3	4	5
f) The number of fish at other reefs.....	1	2	3	4	5
g) The cost of fuel to get to other reefs.....	1	2	3	4	5
h) The level of crowding at other reefs.....	1	2	3	4	5
i) The amount of live coral at other reefs.....	1	2	3	4	5
j) Area closures at desirable reef locations.....	1	2	3	4	5
k) The presence of other groups that I don't like.....	1	2	3	4	5
l) Other.....	1	2	3	4	5

**D13. If you could not go snorkeling/SCUBA diving, either in the Florida Keys or elsewhere, are there any other recreation activities in the Florida Keys that would provide you with the same satisfaction and enjoyment that you receive from going snorkeling/SCUBA diving?**

Yes --- If yes, please go to question # D14 below

No --- If no, please go to question # D15 below

**D14. If you answered “yes” to question D13, please list up to three specific activities that you consider to be substitutes for snorkeling/SCUBA diving.**

\_\_\_\_\_ activity

\_\_\_\_\_ activity

\_\_\_\_\_ activity

**D15. There are reasons why people cannot participate as often as they would like in an activity they enjoy doing. Please indicate the extent to which you agree or disagree with each of the following statements as they relate to your ability to snorkel/SCUBA dive in the Florida Keys as often as you would like.**

	Completely disagree	Disagree	Neutral	Agree	Completely agree
a) I don't have enough leisure time.....	1	2	3	4	5
b) The equipment is too expensive.....	1	2	3	4	5
c) The cost of travel is too high.....	1	2	3	4	5
d) It is difficult to find snorkel/SCUBA diving partners.....	1	2	3	4	5
e) Fuel prices for my boat are too high.....	1	2	3	4	5
f) Snorkel/SCUBA diving areas are too crowded.....	1	2	3	4	5
g) Too many snorkel/SCUBA diving areas are off-limits.....	1	2	3	4	5
h) Dive boats are too expensive .....	1	2	3	4	5
i) Other.....	1	2	3	4	5

**D16. Below is a list of reasons why people snorkel/SCUBA dive in the Florida Keys. Please circle the number that indicates how important each item is to you as a reason for snorkel/SCUBA diving in the Florida Keys.**

	Not at all important	Somewhat important	Moderately important	Very important	Extremely important
a) To develop my skills.....	1	2	3	4	5
b) To experience excitement.....	1	2	3	4	5
c) For family recreation.....	1	2	3	4	5
d) To be with friends.....	1	2	3	4	5
e) To be outdoors.....	1	2	3	4	5
f) To experience new and different things.....	1	2	3	4	5
g) For the experience of the dive.....	1	2	3	4	5
h) To get away from the demands of other people.....	1	2	3	4	5
i) To get away from the regular routine.....	1	2	3	4	5
j) To see diverse underwater life.....	1	2	3	4	5
k) To teach underwater skills to other people.....	1	2	3	4	5
l) To obtain additional dive ratings.....	1	2	3	4	5
m) To experience natural surroundings.....	1	2	3	4	5
n) For solitude.....	1	2	3	4	5
o) For relaxation.....	1	2	3	4	5
p) For the challenge of the dive.....	1	2	3	4	5

There are many places to engage in fishing. In the next several questions, we are attempting to understand the reason you may choose to fish in one location versus another, or if necessary, engage in an activity other than fishing in the Florida Keys.

When answering the following questions, please think about a favorite or most common area that you fish in off the Florida Keys. If you do not have a favorite or most common area that you fish in off the Keys, please think about the last area that you fished in off the Florida Keys.

**D17. Please indicate which reef you are thinking of when responding to the following questions. (Please circle only one answer)**

- 1 My favorite reef to fish at
- 2 The most common area I fish at
- 3 The most recent area I fished in

**D18. Is this area:**

- 1 A flat
- 2 A natural coral reef
- 3 Hawk Channel
- 4 An artificial reef
- 5 Other (please list) \_\_\_\_\_

**D19. Are you able to recall the name of this area? If so, please list it below.**

\_\_\_\_\_ area

**D20. Imagine that you discovered that you could not fish in this area (from question #D17 above) during your next planned fishing trip. What would you do? (Please circle only one answer)**

- 1 I would still fish, but elsewhere in the Florida Keys
- 2 I would still fish, but at a location outside of the Florida Keys
- 3 I would temporarily participate in a different activity in the Florida Keys
- 4 I would temporarily participate in a different activity, but outside the Florida Keys

**D21. Imagine that you discovered that you could not fish in this area (from question #D17 above) for the next five years. What would you do?**

- 1 I would still fish, but elsewhere in the Florida Keys
- 2 I would still fish, but at a location outside of the Florida Keys
- 3 I would permanently participate in a different activity in the Florida Keys
- 4 I would permanently participate in a different activity, but outside the Florida Keys

**D22. Imagine that you discovered during your next fishing trip that this area (from question #D17 above) was more crowded than you normally find acceptable. What would you do?**

- 1 I would make an exception and still fish in this area
- 2 I would still fish, but elsewhere in the Florida Keys
- 3 I would temporarily participate in a different activity in the Florida Keys
- 4 I would temporarily participate in a different activity, but outside the Florida Keys

**D23. Imagine that you discovered during your next fishing trip that this area (from question #D17 above) was more ecologically damaged (e.g., there was no longer enough good fish habitat) than you normally find acceptable. What would you do?**

- 1 I would still fish in this area
- 2 I would still fish, but elsewhere in the Florida Keys
- 3 I would temporarily participate in a different activity in the Florida Keys
- 4 I would temporarily participate in a different activity, but outside the Florida Keys

**D24. Imagine that you discovered during your next fishing trip that other user groups with whom you experience conflict are using this area (from question #D17 above). What would you do?**

- 1 I would still fish in this area
- 2 I would still fish, but elsewhere in the Florida Keys
- 3 I would temporarily participate in a different activity in the Florida Keys
- 4 I would temporarily participate in a different activity, but outside the Florida Keys

**D25. If you could not fish in this area (from question #D17 above), how many other areas in the Florida Keys do you think can offer you an overall experience that is just as good?**

\_\_\_\_\_ number of other areas in the Florida Keys

Don't Know

**D26. If you could not fish in this area (from question #1 above), how many other areas in the Florida Keys do you think can offer you a similar, but not quite as good, overall experience?**

\_\_\_\_\_ number of other areas Florida Keys

Don't Know

**D27. Please rate how similar you think the fishing experience is at your best similar fishing area compared to this area.**

1                      2                      3                      4                      5                      6                      7  
Not as Good                      Equivalent                      Better

**D28. There are many things that you might think about or consider when deciding to substitute one fishing area for another. Please indicate how important each of the following factors is in terms of deciding whether or not you would choose to fish in a substitute area.**

	Not at all important	Slightly important	Moderately important	Very important	Extremely important
a) The number of fish at other areas.....	1	2	3	4	5
b) The difficulty of boating conditions.....	1	2	3	4	5
c) The distance to other areas.....	1	2	3	4	5
d) The charter boats and captains at other areas.....	1	2	3	4	5
e) The adequacy of my boat to get to other areas.....	1	2	3	4	5
f) The cost of fuel to get to other areas.....	1	2	3	4	5
g) The level of crowding at other areas.....	1	2	3	4	5
h) Area closures at desirable locations.....	1	2	3	4	5
i) The presence of other groups that I don't like.....	1	2	3	4	5
j) Other.....	1	2	3	4	5

**D29. If you could not go fishing, either in the Florida Keys or elsewhere, are there any other recreation activities in the Florida Keys that would provide you with the same satisfaction and enjoyment that you receive from going fishing?**

- Yes --- If yes, please go to question # D30 below
- No --- If no, please go to question # D31 below

**D30. If you answered “yes” to question D29, please list up to three specific activities that you consider to be substitutes for fishing in the Florida Keys.**

\_\_\_\_\_ activity

\_\_\_\_\_ activity

\_\_\_\_\_ activity

**D31. There are reasons why people cannot participate as often as they would like in an activity they enjoy doing. Please indicate the extent to which you agree or disagree with each of the following statements as they relate to your ability to fish in the Florida Keys as often as you would like.**

	Completely disagree	Disagree	Neutral	Agree	Completely agree
a) I don't have enough leisure time.....	1	2	3	4	5
b) The equipment is too expensive.....	1	2	3	4	5
c) The cost of travel is too high.....	1	2	3	4	5
d) It is difficult to find fishing partners.....	1	2	3	4	5
e) Fuel prices for my boat are too high.....	1	2	3	4	5
f) Fishing areas are too crowded.....	1	2	3	4	5
g) Too many fishing areas are off-limits.....	1	2	3	4	5
h) Fishing charters are too expensive.....	1	2	3	4	5
i) Other.....	1	2	3	4	5

**D32. Below is a list of reasons why people saltwater fish in the Florida Keys. Please circle the number that indicates how important each item is to you as a reason for saltwater fishing in the Florida Keys.**

	Not at all important	Somewhat important	Moderately important	Very important	Extremely important
a) To develop my skills.....	1	2	3	4	5
b) To experience excitement.....	1	2	3	4	5
c) For family recreation.....	1	2	3	4	5
d) To be with friends.....	1	2	3	4	5
e) To be outdoors.....	1	2	3	4	5
f) To experience new and different things.....	1	2	3	4	5
g) For the experience of the catch.....	1	2	3	4	5
h) To get away from the demands of other people.....	1	2	3	4	5
i) To get away from the regular routine.....	1	2	3	4	5
j) To catch a trophy fish.....	1	2	3	4	5
k) For the sport of fishing, not to obtain food to eat.....	1	2	3	4	5
l) For the fun of catching fish.....	1	2	3	4	5
m) To experience natural surroundings.....	1	2	3	4	5
n) For solitude.....	1	2	3	4	5
o) For relaxation.....	1	2	3	4	5
p) For the challenge of the catch.....	1	2	3	4	5
q) To obtain fish for eating, not for sport.....	1	2	3	4	5



## Part E: Management Alternatives

### Snorkeler / SCUBA diver

If not a snorkeler / SCUBA diver in the Florida Keys, but do recreational fishing, GO to page 22.

If not a snorkeler / SCUBA diver or recreational fisher in the Florida Keys, GO to page 27.

Please think about a recreational snorkeling / SCUBA diving experience on a reef in the Florida Keys when answering the questions on the following pages. You will be offered eight (8) choices of two diving trips. Each choice has different features for you to evaluate. Please read each choice carefully. Although they may look similar, trips in each question differ in at least one way.

There is an example below to assist you. Please note the following definitions before reviewing the example.

- Number of Snorkelers / Divers - the number of snorkelers / divers on a reef at any one time
- Restrictions- percent area of reef open to use
- Enforcement- the number of law enforcement patrols you observe per trip
- Number of Fish Species- the amount of different kinds of fish species observed on the reef
- Site Settings- the amount of live coral and/or algae on the reef
- Number of Fish- the overall amount of fish observed on the reef
- Size of Fish- the size of fish observed on the reef
- Travel cost / day – Travel cost that a snorkeler / diver spends for a diving trip per day (including gas and other trip expenses)

### Example

If you were planning a snorkel / SCUBA dive trip to the Florida Keys, which trip would you prefer: Trip A, Trip B, or neither?

ATTRIBUTE	Trip A	Trip B
<b>Number of Snorkelers / Divers</b>	<i>15% fewer snorkelers / divers</i>	<i>30% fewer snorkelers / divers</i>
<b>Site Settings</b>	<i>Mix of coral and algae cover</i>	<i>High live coral cover</i>
<b>Restrictions</b>	<i>25% of area closed</i>	<i>75 % of area closed</i>
<b>Number of Fish</b>	<i>40% more fish</i>	<i>No increase in numbers of fish</i>
<b>Size of Fish</b>	<i>40% more larger fish</i>	<i>20 % more larger fish</i>
<b>Species</b>	<i>No change in species numbers</i>	<i>Fewer species</i>
<b>Enforcement</b>	<i>Two additional patrols</i>	<i>No additional patrols</i>
<b>Travel Cost / Day</b>	<i>Your current total cost per day</i>	<i>10% more than your current total cost per day</i>

Which trip do you prefer? (check only one box below)

Trip A

Trip B

I would not take either trip

**E1.** If you were planning a snorkel / SCUBA dive trip to the Florida Keys, which trip would you prefer: Trip A, Trip B, or neither?

<b>ATTRIBUTE</b>	<b>Trip A</b>	<b>Trip B</b>
<b>Number of Snorkelers / Divers</b>	<i>The usual number of other snorkelers / divers at the site</i>	<i>The usual number of other snorkelers / divers at the site</i>
<b>Site Settings</b>	<i>High live coral cover</i>	<i>High algae cover</i>
<b>Restrictions</b>	<i>75% of area closed</i>	<i>No area closed</i>
<b>Number of Fish</b>	<i>40% more fish</i>	<i>40% more fish</i>
<b>Size of Fish</b>	<i>60% more larger fish</i>	<i>20% more larger fish</i>
<b>Species</b>	<i>Many species</i>	<i>Fewer species</i>
<b>Enforcement</b>	<i>Two additional patrols</i>	<i>Two additional patrols</i>
<b>Travel Cost / Day</b>	<i>Your current total cost per day</i>	<i>Your current total cost per day</i>

Which trip do you prefer? (check only one box below)

Trip A       Trip B       I would not take either trip

**E2.** If you were planning a snorkel / SCUBA dive trip to the Florida Keys, which trip would you prefer: Trip A, Trip B, or neither?

<b>ATTRIBUTE</b>	<b>Trip A</b>	<b>Trip B</b>
<b>Number of Snorkelers / Divers</b>	<i>30% fewer snorkelers / divers</i>	<i>30% fewer snorkelers / divers</i>
<b>Site Settings</b>	<i>High live coral cover</i>	<i>High algae cover</i>
<b>Restrictions</b>	<i>75% of area closed</i>	<i>50% of area closed</i>
<b>Number of Fish</b>	<i>20% more fish</i>	<i>No increase in numbers of fish</i>
<b>Size of Fish</b>	<i>40% more larger fish</i>	<i>No increase in larger fish</i>
<b>Species</b>	<i>Fewer species</i>	<i>No change in species numbers</i>
<b>Enforcement</b>	<i>Two additional patrols</i>	<i>One additional patrol</i>
<b>Travel Cost / Day</b>	<i>10% more than your current total cost per day</i>	<i>10% less than your current total cost per day</i>

Which trip do you prefer? (check only one box below)

Trip A       Trip B       I would not take either trip

**E3.** If you were planning a snorkel / SCUBA dive trip to the Florida Keys, which trip would you prefer: Trip A, Trip B, or neither?

<b>ATTRIBUTE</b>	<b>Trip A</b>	<b>Trip B</b>
<b>Number of Snorkelers / Divers</b>	<i>30% fewer snorkelers / divers</i>	<i>30% fewer snorkelers / divers</i>
<b>Site Settings</b>	<i>Mix of coral and algae cover</i>	<i>High algae cover</i>
<b>Restrictions</b>	<i>50% of area closed</i>	<i>75% of area closed</i>
<b>Number of Fish</b>	<i>No increase in numbers of fish</i>	<i>40% more fish</i>
<b>Size of Fish</b>	<i>No increase in larger fish</i>	<i>No increase in larger fish</i>
<b>Species</b>	<i>No change in species numbers</i>	<i>Fewer species</i>
<b>Enforcement</b>	<i>One additional patrol</i>	<i>No additional patrols</i>
<b>Travel Cost / Day</b>	<i>10% more than your current total cost per day</i>	<i>Your current total cost per day</i>

Which trip do you prefer? (check only one box below)

Trip A       Trip B       I would not take either trip

**E4.** If you were planning a snorkel / SCUBA dive trip to the Florida Keys, which trip would you prefer: Trip A, Trip B, or neither?

<b>ATTRIBUTE</b>	<b>Trip A</b>	<b>Trip B</b>
<b>Number of Snorkelers / Divers</b>	<i>15% fewer snorkelers / divers</i>	<i>The usual number of other snorkelers / divers at the site</i>
<b>Site Settings</b>	<i>Mix of coral and algae cover</i>	<i>Mix of coral and algae cover</i>
<b>Restrictions</b>	<i>25% of area closed</i>	<i>50% of area closed</i>
<b>Number of Fish</b>	<i>60% more fish</i>	<i>20% more fish</i>
<b>Size of Fish</b>	<i>No increase in larger fish</i>	<i>20% more larger fish</i>
<b>Species</b>	<i>No change in species numbers</i>	<i>Many species</i>
<b>Enforcement</b>	<i>Two additional patrols</i>	<i>No additional patrols</i>
<b>Travel Cost / Day</b>	<i>10% more than your current total cost per day</i>	<i>10% more than your current total cost per day</i>

Which trip do you prefer? (check only one box below)

Trip A       Trip B       I would not take either trip

**E5.** If you were planning a snorkel / SCUBA dive trip to the Florida Keys, which trip would you prefer: Trip A, Trip B, or neither?

<b>ATTRIBUTE</b>	<b>Trip A</b>	<b>Trip B</b>
<b>Number of Snorkelers / Divers</b>	<i>30% fewer snorkelers / divers</i>	<i>30% fewer snorkelers / divers</i>
<b>Site Settings</b>	<i>Mix of coral and algae cover</i>	<i>Mix of coral and algae cover</i>
<b>Restrictions</b>	<i>25% of area closed</i>	<i>No area closed</i>
<b>Number of Fish</b>	<i>20% more fish</i>	<i>40% more fish</i>
<b>Size of Fish</b>	<i>60% more larger fish</i>	<i>40% more larger fish</i>
<b>Species</b>	<i>Many species</i>	<i>Many species</i>
<b>Enforcement</b>	<i>No additional patrols</i>	<i>One additional patrol</i>
<b>Travel Cost / Day</b>	<i>10% less than your current total cost per day</i>	<i>10% more than your current total cost per day</i>

**Which trip do you prefer?** (check only one box below)

Trip A       Trip B       I would not take either trip

**E6.** If you were planning a snorkel / SCUBA dive trip to the Florida Keys, which trip would you prefer: Trip A, Trip B, or neither?

<b>ATTRIBUTE</b>	<b>Trip A</b>	<b>Trip B</b>
<b>Number of Snorkelers / Divers</b>	<i>The usual number of other snorkelers / divers at the site</i>	<i>30% fewer snorkelers / divers</i>
<b>Site Settings</b>	<i>Mix of coral and algae cover</i>	<i>High live coral cover</i>
<b>Restrictions</b>	<i>50% of area closed</i>	<i>No area closed</i>
<b>Number of Fish</b>	<i>No increase in numbers of fish</i>	<i>No increase in numbers of fish</i>
<b>Size of Fish</b>	<i>20% more larger fish</i>	<i>No increase in larger fish</i>
<b>Species</b>	<i>Fewer species</i>	<i>Many species</i>
<b>Enforcement</b>	<i>One additional patrol</i>	<i>No additional patrols</i>
<b>Travel Cost / Day</b>	<i>Your current total cost per day</i>	<i>10% less than your current total cost per day</i>

**Which trip do you prefer?** (check only one box below)

Trip A       Trip B       I would not take either trip

E7. If you were planning a snorkel / SCUBA dive trip to the Florida Keys, which trip would you prefer: Trip A, Trip B, or neither?

<b>ATTRIBUTE</b>	<b>Trip A</b>	<b>Trip B</b>
<b>Number of Snorkelers / Divers</b>	<i>The usual number of other snorkelers / divers at the site</i>	<i>15% fewer snorkelers / divers</i>
<b>Site Settings</b>	<i>High algae cover</i>	<i>High algae cover</i>
<b>Restrictions</b>	<i>No area closed</i>	<i>75% of area closed</i>
<b>Number of Fish</b>	<i>60% more fish</i>	<i>20% more fish</i>
<b>Size of Fish</b>	<i>20% more larger fish</i>	<i>60% more larger fish</i>
<b>Species</b>	<i>Fewer species</i>	<i>No change in species numbers</i>
<b>Enforcement</b>	<i>No additional patrols</i>	<i>Two additional patrols</i>
<b>Travel Cost / Day</b>	<i>10% more than your current total cost per day</i>	<i>Your current total cost per day</i>

Which trip do you prefer? (check only one box below)

Trip A       Trip B       I would not take either trip

E8. If you were planning a snorkel / SCUBA dive trip to the Florida Keys, which trip would you prefer: Trip A, Trip B, or neither?

<b>ATTRIBUTE</b>	<b>Trip A</b>	<b>Trip B</b>
<b>Number of Snorkelers / Divers</b>	<i>15% fewer snorkelers / divers</i>	<i>30% fewer snorkelers / divers</i>
<b>Site Settings</b>	<i>High algae cover</i>	<i>Mix of coral and algae cover</i>
<b>Restrictions</b>	<i>No area closed</i>	<i>25% of area closed</i>
<b>Number of Fish</b>	<i>40% more fish</i>	<i>No increase in numbers of fish</i>
<b>Size of Fish</b>	<i>No increase in larger fish</i>	<i>60% more larger fish</i>
<b>Species</b>	<i>Many species</i>	<i>Fewer species</i>
<b>Enforcement</b>	<i>One additional patrol</i>	<i>Two additional patrols</i>
<b>Travel Cost / Day</b>	<i>10% less than your current total cost per day</i>	<i>10% less than your current total cost per day</i>

Which trip do you prefer? (check only one box below)

Trip A       Trip B       I would not take either trip

**Recreational Fisher**

If not a Recreational fisher in the Florida Keys, GO to page 27 Part F.

Please think about a recreational fishing experience in the Florida Keys when answering the questions on the following pages. You will be offered eight (8) choices of two fishing trips. Each choice has different features for you to evaluate. Please read each choice carefully. Although they may look similar, trips in each question differ in at least one way.

There is an example below to assist you. Please note the following definitions before reviewing the example.

- Number of Recreational Fishing Boats- the number of recreational fishing boats near you at any one time
- Number of Non-fishing boats- the number of non-fishing boats near you at any one time
- Restrictions- the number of reefs closed to fishing per zone (upper Keys, middle Keys, lower Keys)
- Number of Fish Species- the amount of different kinds of fish species caught in a trip
- Number of Fish- the overall amount of fish caught on a trip
- Size of Fish- the number of legal sized fish caught on a trip
- Travel cost / day – Travel cost that an angler spends for a fishing trip per day (including gas and other trip expenses)

**Example**

Suppose that you could choose from the recreational fishing opportunities described below. Which of these fishing trips would you prefer?

<b>ATTRIBUTE</b>	<b>Trip A</b>	<b>Trip B</b>
<b>Number of Recreational Fishing Boats</b>	<i>30% fewer boats</i>	<i>The usual number of other boats near the location</i>
<b>Number of Non-fishing Boats</b>	<i>The usual number of other boats near the location</i>	<i>30% fewer boats</i>
<b>Restrictions</b>	<i>25% of area closed</i>	<i>25% of area closed</i>
<b>Number of Species</b>	<i>No change in species numbers</i>	<i>Fewer species fish caught</i>
<b>Number of fish</b>	<i>10% more fish caught</i>	<i>30% more fish caught</i>
<b>Size of Fish</b>	<i>60% more keepers</i>	<i>20% more keepers</i>
<b>Travel Cost / Day</b>	<i>10% more than your current total cost per day</i>	<i>10% less than your current total cost per day</i>

Which trip do you prefer? (check only one box below)

Trip A

Trip B

I would not take either trip

**E9.** Suppose that you could choose from the recreational fishing opportunities described below. Which of these fishing trips would you prefer?

<b>ATTRIBUTE</b>	<b>Trip A</b>	<b>Trip B</b>
<b>Number of Recreational Fishing Boats</b>	<i>The usual number of other boats near the location</i>	<i>The usual number of other boats near the location</i>
<b>Number of Non-fishing Boats</b>	<i>The usual number of other boats near the location</i>	<i>30% fewer boats</i>
<b>Restrictions</b>	<i>50% of area closed</i>	<i>50% of area closed</i>
<b>Number of Species</b>	<i>More species fish caught</i>	<i>No change in species numbers</i>
<b>Number of fish</b>	<i>20% more fish caught</i>	<i>20% more fish caught</i>
<b>Size of Fish</b>	<i>40% more keepers</i>	<i>40% more keepers</i>
<b>Travel Cost / Day</b>	<i>10% less than your current total cost per day</i>	<i>Your current total cost per day</i>

Which trip do you prefer? (check only one box below)

- Trip A     
 Trip B     
 I would not take either trip

**E10.** Suppose that you could choose from the recreational fishing opportunities described below. Which of these fishing trips would you prefer?

<b>ATTRIBUTE</b>	<b>Trip A</b>	<b>Trip B</b>
<b>Number of Recreational Fishing Boats</b>	<i>15% fewer boats</i>	<i>30% fewer boats</i>
<b>Number of Non-fishing Boats</b>	<i>30% fewer boats</i>	<i>30% fewer boats</i>
<b>Restrictions</b>	<i>No area closed</i>	<i>75% of area closed</i>
<b>Number of Species</b>	<i>More species fish caught</i>	<i>More species fish caught</i>
<b>Number of fish</b>	<i>10% more fish caught</i>	<i>No increase in numbers of fish caught</i>
<b>Size of Fish</b>	<i>40% more keepers</i>	<i>40% more keepers</i>
<b>Travel Cost / Day</b>	<i>10% more than your current total cost per day</i>	<i>10% more than your current total cost per day</i>

Which trip do you prefer? (check only one box below)

- Trip A     
 Trip B     
 I would not take either trip

**E11.** Suppose that you could choose from the recreational fishing opportunities described below. Which of these fishing trips would you prefer?

<b>ATTRIBUTE</b>	<b>Trip A</b>	<b>Trip B</b>
<b>Number of Recreational Fishing Boats</b>	<i>30% fewer boats</i>	<i>The usual number of other boats near the location</i>
<b>Number of Non-fishing Boats</b>	<i>15% fewer boats</i>	<i>15% fewer boats</i>
<b>Restrictions</b>	<i>50% of area closed</i>	<i>No area closed</i>
<b>Number of Species</b>	<i>More species fish caught</i>	<i>Fewer species fish caught</i>
<b>Number of fish</b>	<i>No increase in numbers of fish caught</i>	<i>20% more fish caught</i>
<b>Size of Fish</b>	<i>20% more keepers</i>	<i>60% more keepers</i>
<b>Travel Cost / Day</b>	<i>Your current total cost per day</i>	<i>10% less than your current total cost per day</i>

Which trip do you prefer? (check only one box below)

- Trip A     
 Trip B     
 I would not take either trip

**E12.** Suppose that you could choose from the recreational fishing opportunities described below. Which of these fishing trips would you prefer?

<b>ATTRIBUTE</b>	<b>Trip A</b>	<b>Trip B</b>
<b>Number of Recreational Fishing Boats</b>	<i>The usual number of other boats near the location</i>	<i>15% fewer boats</i>
<b>Number of Non-fishing Boats</b>	<i>15% fewer boats</i>	<i>15% fewer boats</i>
<b>Restrictions</b>	<i>75% of area closed</i>	<i>75% of area closed</i>
<b>Number of Species</b>	<i>Fewer species fish caught</i>	<i>Fewer species fish caught</i>
<b>Number of fish</b>	<i>30% more fish caught</i>	<i>30% more fish caught</i>
<b>Size of Fish</b>	<i>60% more keepers</i>	<i>60% more keepers</i>
<b>Travel Cost / Day</b>	<i>10% less than your current total cost per day</i>	<i>10% more than your current total cost per day</i>

Which trip do you prefer? (check only one box below)

- Trip A     
 Trip B     
 I would not take either trip



**E13.** Suppose that you could choose from the recreational fishing opportunities described below. Which of these fishing trips would you prefer?

<b>ATTRIBUTE</b>	<b>Trip A</b>	<b>Trip B</b>
<b>Number of Recreational Fishing Boats</b>	<i>30% fewer boats</i>	<i>15% fewer boats</i>
<b>Number of Non-fishing Boats</b>	<i>The usual number of other boats near the location</i>	<i>The usual number of other boats near the location</i>
<b>Restrictions</b>	<i>75% of area closed</i>	<i>25% of area closed</i>
<b>Number of Species</b>	<i>Fewer species fish caught</i>	<i>More species fish caught</i>
<b>Number of fish</b>	<i>10% more fish caught</i>	<i>30% more fish caught</i>
<b>Size of Fish</b>	<i>No increase in the number of caught kept</i>	<i>40% more keepers</i>
<b>Travel Cost / Day</b>	<i>10% more than your current total cost per day</i>	<i>10% less than your current total cost per day</i>

Which trip do you prefer? (check only one box below)

Trip A       Trip B       I would not take either trip

**E14.** Suppose that you could choose from the recreational fishing opportunities described below. Which of these fishing trips would you prefer?

<b>ATTRIBUTE</b>	<b>Trip A</b>	<b>Trip B</b>
<b>Number of Recreational Fishing Boats</b>	<i>15% fewer boats</i>	<i>15% fewer boats</i>
<b>Number of Non-fishing Boats</b>	<i>The usual number of other boats near the location</i>	<i>30% fewer boats</i>
<b>Restrictions</b>	<i>25% of area closed</i>	<i>50% of area closed</i>
<b>Number of Species</b>	<i>No change in species numbers</i>	<i>Fewer species fish caught</i>
<b>Number of fish</b>	<i>No increase in numbers of fish caught</i>	<i>10% more fish caught</i>
<b>Size of Fish</b>	<i>60% more keepers</i>	<i>60% more keepers</i>
<b>Travel Cost / Day</b>	<i>10% more than your current total cost per day</i>	<i>Your current total cost per day</i>

Which trip do you prefer? (check only one box below)

Trip A       Trip B       I would not take either trip

**E15.** Suppose that you could choose from the recreational fishing opportunities described below. Which of these fishing trips would you prefer?

<b>ATTRIBUTE</b>	<b>Trip A</b>	<b>Trip B</b>
<b>Number of Recreational Fishing Boats</b>	<i>The usual number of other boats near the location</i>	<i>30% fewer boats</i>
<b>Number of Non-fishing Boats</b>	<i>15% fewer boats</i>	<i>The usual number of other boats near the location</i>
<b>Restrictions</b>	<i>25% of area closed</i>	<i>25% of area closed</i>
<b>Number of Species</b>	<i>No change in species numbers</i>	<i>No change in species numbers</i>
<b>Number of fish</b>	<i>10% more fish caught</i>	<i>10% more fish caught</i>
<b>Size of Fish</b>	<i>20% more keepers</i>	<i>20% more keepers</i>
<b>Travel Cost / Day</b>	<i>Your current total cost per day</i>	<i>10% more than your current total cost per day</i>

Which trip do you prefer? (check only one box below)

Trip A       Trip B       I would not take either trip

**E16.** Suppose that you could choose from the recreational fishing opportunities described below. Which of these fishing trips would you prefer?

<b>ATTRIBUTE</b>	<b>Trip A</b>	<b>Trip B</b>
<b>Number of Recreational Fishing Boats</b>	<i>The usual number of other boats near the location</i>	<i>30% fewer boats</i>
<b>Number of Non-fishing Boats</b>	<i>The usual number of other boats near the location</i>	<i>The usual number of other boats near the location</i>
<b>Restrictions</b>	<i>No area closed</i>	<i>No area closed</i>
<b>Number of Species</b>	<i>Fewer species fish caught</i>	<i>Fewer species fish caught</i>
<b>Number of fish</b>	<i>No increase in numbers of fish caught</i>	<i>No increase in numbers of fish caught</i>
<b>Size of Fish</b>	<i>No increase in the number of caught kept</i>	<i>No increase in the number of caught kept</i>
<b>Travel Cost / Day</b>	<i>10% less than your current total cost per day</i>	<i>Your current total cost per day</i>

Which trip do you prefer? (check only one box below)

Trip A       Trip B       I would not take either trip

## Part F: Demographic Profile

In this final section, we need to know information about you and your household to make sure we have a representative sample of Monroe County residents.

Again, your privacy will be protected and any information identifying you or your household will not be revealed to anyone.

**F1. How many people in your household are permanent residents of Monroe County, Florida?**

\_\_\_\_\_ number of people

**F2. How many of these people are at least 16 years of age?** \_\_\_\_\_ number of people

**F3. What is the closest mile marker to your residence?** \_\_\_\_\_ mile marker number

**F4. Do you have access to the water from your residence?**  Yes  No

**F5. Do you own a boat?**  Yes  No

**F6. How many years have you lived in Monroe County?** \_\_\_\_\_ number of years

**F7. In what year were you born?** \_\_\_\_\_ year

**F8. Are you Hispanic, Latino, or of Spanish origin?**  Yes  No

**F9. What race do you consider yourself?**

Please circle one or more of the letter(s) that best describes you

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

**F10. What is the highest level of education that you have completed?**

Please circle the letter of the category that best describes you

- A 8th Grade or Less
- B 9th to 11th Grade
- C 12th Grade, High School Grad, GED
- D 13 to 15 Years (some college or vocational training)
- E College Graduate
- F Graduate School, Law School, Medical School

F11. What is your employment status?

Please circle the letter or letters of all those that apply

- |   |                    |   |                   |
|---|--------------------|---|-------------------|
| A | Unemployed         | E | Student           |
| B | Employed full-time | F | Homemaker         |
| C | Employed part-time | G | None of the above |
| D | Retired            |   | (specify) _____   |

F12. Do you work outside Monroe County?  Yes  No

F13. What is your zip code? \_\_\_\_\_

F14. What is your total household income, before taxes.

Please circle the letter corresponding to the category that best describes your household

- |   |                      |   |                        |
|---|----------------------|---|------------------------|
| A | Under \$5,000        | I | \$40,000 to \$44,999   |
| B | \$5,000 to \$9,999   | J | \$45,000 to \$49,999   |
| B | \$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 |   |                        |

# *Monroe County Resident Survey*

**Your answers are voluntary and confidential.**

Your name will never be released to anyone unless otherwise required by law. After the completion of the project all materials identifying you as an individual will be destroyed.

This is a cooperative research project of the Monroe County Tourist Development Council and the National Oceanic and Atmospheric Administration. Public reporting burden for this collection of information is estimated to average 1 hour including time for reviewing instructions, searching existing data sources, gathering and maintaining the data need, 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 this burden, to U.S. Department of Commerce, Clearance Officer, Office of Chief Information Officer, Rm. 6625, 14<sup>th</sup> and Constitution Avenue NW, Washington, DC 20230. Notwithstanding any other provisions of the law, no person is required to respond to, nor shall any person be subject to penalty for failure to comply with, a collection of information subject to requirements of the Paperwork Reduction Act, unless that collection of information displays a currently valid OMB Control Number.



## Resident Survey

1. Overall, how would you rate Monroe County as a place to live?

- a. Excellent
- b. Good
- c. Fair
- d. Poor

Please circle letter corresponding to your answer

2. There are many reasons that people choose to live where they do in Florida. What are the two most important reasons you chose to live in Monroe County?

- a. No special reason
- b. Born here
- c. Job or business
- d. Climate
- e. Environment
- f. Access to natural resources, such as natural settings and wildlife
- g. Opportunities for water activities, such as fishing or diving
- h. Low crime rate
- i. Cultural activities
- j. Retirement
- k. Some other reason (specify) \_\_\_\_\_

Please circle letters corresponding to the two most important reasons

3. In the past 12 months, have you done any outdoor recreation activities in the Florida Keys?

- a. Yes (Go to Part A)
- b. No (Go to Part G)

Please use the enclosed White Card-Activities List to see what we mean by outdoor recreation



**Part A: Outdoor recreation activities during the past 12 months in the Florida Keys**

Please use the enclosed Activities List and map to help you answer the questions in this section

- A1. Which of the activities on the enclosed Activities List did you or someone in your household do in the Florida Keys during the last 12 months?**
- A2. Pleas fill in the circle for each activity you, yourself did during the past 12 months in the Upper Keys, Islamorada, Marathon, Lower Keys and Key West?**
- A3. On how many different days did you, yourself participate in each activity in the Upper Keys, Islamorada, Marathon, Lower Keys and Key West?**

Only answer for those activities you listed with an A on the end of the activity number

- A4. How many others (excluding yourself) in your household did each activity in the Upper Keys, Islamorada, Marathon, Lower Keys and Key West?**

A1 Activity	Upper Keys			Islamorada			Marathon			Lower Keys			Key West		
	A2 Resp.	A3 # days	A4 # others	A2 Resp.	A3 # days	A4 # others	A2 Resp.	A3 # days	A4 # others	A2 Resp.	A3 # days	A4 # others	A2 Resp.	A3 # days	A4 # others
_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____
_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____
_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____
_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____
_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____
_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____
_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____
_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____
_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____
_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____
_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____
_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____
_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____
_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____
_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____
_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____
_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____
_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____
_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____
_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____
_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____
_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____

**A5. What would you say is the most important activity you did in the Florida Keys?**

**Most Important Activity** \_\_\_\_\_ (Activity List Number)

**No Activity Most Important (fill in box)**

**A6. On how many different days did you participate in outdoor recreation activities outside the Florida Keys during the past 12 months?** \_\_\_\_\_ (# of days)

**Part B: Reef use in the Florida Keys during the past 12 months. Both artificial and natural reefs.**

Please use Blue Card with Activities List for reef use and map of the Florida Keys in answering Part B

- B1. Which activities did you or someone in your household do on either artificial or natural reefs during the past 12 months in the Upper Keys, Islamorada, Marathon, Lower Keys and Key West?**

If you did not do anything in a region, check the box indicating no reef use in the region

- B2. Please fill in the circle for each activity you, yourself, did during the past 12 months in the Upper Keys, Islamorada, Marathon, Lower Keys and Key West.**
- B3. How many others in your household did each activity on the reefs in the Upper Keys, Islamorada, Marathon, Lower Keys and Key West during the past 12 months?**
- B4. On how many different days did you, yourself, participate in each activity on the reefs in the Upper Keys, Islamorada, Marathon, Lower Keys and Key West during the past 12 months?**
- B5. On how many different days did you, yourself, participate in each activity on the artificial reefs in the Upper Keys, Islamorada, Marathon, Lower Keys and Key West during the past 12 months?**
- B6. On how many different days did you, yourself, participate in each activity on the natural reefs in the Upper Keys, Islamorada, Marathon, Lower Keys and Key West during the past 12 months?**

Note: If you did part of a day on an artificial reef and part of a day on a natural reef, count one whole day on each type of reef

- B7. How many different dives did you, yourself, make for each type of diving activity you did on the reefs in the Upper Keys, Islamorada, Marathon, Lower Keys and Key West during the past 12 months?**

Diving activities include all snorkeling and scuba diving activities on the Blue Card-Activities List (Reef)

A dive is defined as an entry and exit from the water to snorkel or scuba dive

- B8. How many different dives did you, yourself, make for each type of diving activity you did on the artificial reefs in the Upper Keys, Islamorada, Marathon, Lower Keys and Key West during the past 12 months?**
- B9. How many different dives did you, yourself, make for each type of diving activity you did on the natural reefs in the Upper Keys, Islamorada, Marathon, Lower Keys and Key West during the past 12 months?**

Please refer to Questions B1 - B9 when filling in the tables on the following two pages

There is one table for each of the five regions of the Florida Keys (Upper Keys, Islamorada, Marathon, Lower Keys and Key West)

No Reef Use

Upper Keys

B1	B2	B3	B4	B5	B6	B7	B8	B9
Activity	Resp.	# Others	Respondent # of days	# days artificial	# days natural	Respondent # dives	# dives artificial	# dives natural
_____	○	_____	_____	_____	_____	_____	_____	_____
_____	○	_____	_____	_____	_____	_____	_____	_____
_____	○	_____	_____	_____	_____	_____	_____	_____
_____	○	_____	_____	_____	_____	_____	_____	_____
_____	○	_____	_____	_____	_____	_____	_____	_____
_____	○	_____	_____	_____	_____	_____	_____	_____
_____	○	_____	_____	_____	_____	_____	_____	_____
_____	○	_____	_____	_____	_____	_____	_____	_____
_____	○	_____	_____	_____	_____	_____	_____	_____

No Reef Use

Islamorada

B1	B2	B3	B4	B5	B6	B7	B8	B9
Activity	Resp.	# Others	Respondent # of days	# days artificial	# days natural	Respondent # dives	# dives artificial	# dives natural
_____	○	_____	_____	_____	_____	_____	_____	_____
_____	○	_____	_____	_____	_____	_____	_____	_____
_____	○	_____	_____	_____	_____	_____	_____	_____
_____	○	_____	_____	_____	_____	_____	_____	_____
_____	○	_____	_____	_____	_____	_____	_____	_____
_____	○	_____	_____	_____	_____	_____	_____	_____
_____	○	_____	_____	_____	_____	_____	_____	_____
_____	○	_____	_____	_____	_____	_____	_____	_____
_____	○	_____	_____	_____	_____	_____	_____	_____

No Reef Use

Marathon

B1	B2	B3	B4	B5	B6	B7	B8	B9
Activity	Resp.	# Others	Respondent # of days	# days artificial	# days natural	Respondent # dives	# dives artificial	# dives natural
_____	○	_____	_____	_____	_____	_____	_____	_____
_____	○	_____	_____	_____	_____	_____	_____	_____
_____	○	_____	_____	_____	_____	_____	_____	_____
_____	○	_____	_____	_____	_____	_____	_____	_____
_____	○	_____	_____	_____	_____	_____	_____	_____
_____	○	_____	_____	_____	_____	_____	_____	_____
_____	○	_____	_____	_____	_____	_____	_____	_____
_____	○	_____	_____	_____	_____	_____	_____	_____
_____	○	_____	_____	_____	_____	_____	_____	_____

No Reef Use

Lower Keys

B1	B2	B3	B4	B5	B6	B7	B8	B9
Activity	Resp.	# Others	Respondent # of days	# days artificial	# days natural	Respondent # dives	# dives artificial	# dives natural
_____	○	_____	_____	_____	_____	_____	_____	_____
_____	○	_____	_____	_____	_____	_____	_____	_____
_____	○	_____	_____	_____	_____	_____	_____	_____
_____	○	_____	_____	_____	_____	_____	_____	_____
_____	○	_____	_____	_____	_____	_____	_____	_____
_____	○	_____	_____	_____	_____	_____	_____	_____
_____	○	_____	_____	_____	_____	_____	_____	_____
_____	○	_____	_____	_____	_____	_____	_____	_____
_____	○	_____	_____	_____	_____	_____	_____	_____

No Reef Use

Key West

B1	B2	B3	B4	B5	B6	B7	B8	B9
Activity	Resp.	# Others	Respondent # of days	# days artificial	# days natural	Respondent # dives	# dives artificial	# dives natural
_____	○	_____	_____	_____	_____	_____	_____	_____
_____	○	_____	_____	_____	_____	_____	_____	_____
_____	○	_____	_____	_____	_____	_____	_____	_____
_____	○	_____	_____	_____	_____	_____	_____	_____
_____	○	_____	_____	_____	_____	_____	_____	_____
_____	○	_____	_____	_____	_____	_____	_____	_____
_____	○	_____	_____	_____	_____	_____	_____	_____
_____	○	_____	_____	_____	_____	_____	_____	_____
_____	○	_____	_____	_____	_____	_____	_____	_____

## Part C: Specialization

In this section, we are interested in learning more about your primary activity. Please answer the following questions based on the response you gave to QUESTION A5.

For the four questions below, please read the four choices and circle the one answer that best fits you for that question.

### C1. When I participate in my primary activity, I feel like:

- 1 a beginner. I don't really feel like I am part of the activity scene.
- 2 an occasional or irregular participant. Sometimes it is fun, entertaining or rewarding to do my activity.
- 3 a habitual and regular participant in the activity.
- 4 an insider to the sport. The activity is an important part of who I am.

### C2. During my activity, I can best be described as:

- 1 having very little understanding of the activity. I am often unsure about how to do certain things when I go.
- 2 having some understanding of the activity, but still in the process of learning more about the sport. I am becoming more familiar and comfortable with the activity.
- 3 being comfortable with the sport. I have a good understanding of what I can do, and how to do it.
- 4 a knowledgeable expert in the sport. I encourage, teach and enhance opportunities for others who are interested in the activity.

### C3. My relationships with others who do the activity are:

- 1 not established. I really don't know any other people who do the activity.
- 2 very limited. I know some others in the activity by sight and sometimes talk with them, but I don't know their names.
- 3 one of familiarity. I know the names of others who do the activity, and often speak with them.
- 4 close. I have personal and close relationships with others in the activity. These friendships often revolve around the activity.

### C4. My commitment to the activity is:

- 1 very slight. I have very little connection to the activity. I may or may not continue to participate in the sport in the future.
- 2 moderate. I will continue to do it as it is entertaining and provides the benefits I want.
- 3 fairly strong. I have a sense of being a member of the activity, and it is likely that I will continue to do it for a long time.
- 4 very strong. I am totally committed to the activity. I encourage others to participate in the sport and seek to ensure the activity continues into the future.

### C5. If you had to replace all of the equipment that you currently own for your primary activity with similar equipment, how much would it cost to replace?

\$ \_\_\_\_\_ AMOUNT TO REPLACE PRIMARY ACTIVITY EQUIPMENT

**C6. To what extent do you make use of the following for current information about your primary activity? Please circle the number that indicates your extent of use for each source of information.**

	No Use	Almost no use	A little use	Some use	A lot of use
a. Talking with others who participate in the activity.....	1	2	3	4	5
b. Magazines.....	1	2	3	4	5
c. Government agency publications.....	1	2	3	4	5
d. Conservation organization publications.....	1	2	3	4	5
e. Newspapers.....	1	2	3	4	5
f. Diving shops/companies.....	1	2	3	4	5
g. Club meetings.....	1	2	3	4	5
h. Television.....	1	2	3	4	5
i. Radio.....	1	2	3	4	5
j. Internet.....	1	2	3	4	5

**C7. Below is a list of reasons why people engage in recreation activities. Please circle the number that indicates how important each item is to you as a reason for participating in your primary activity.**

	Not at all important	Slightly important	Moderately important	Very important	Extremely important
a. To be outdoors.....	1	2	3	4	5
b. For family recreation.....	1	2	3	4	5
c. To experience new and different things.....	1	2	3	4	5
d. For relaxation.....	1	2	3	4	5
e. To be close to the water.....	1	2	3	4	5
f. To get away from the demands of other people.....	1	2	3	4	5
g. To be with friends.....	1	2	3	4	5
h. To develop my skills.....	1	2	3	4	5
i. To get away from the regular routine.....	1	2	3	4	5
j. To experience adventure and excitement.....	1	2	3	4	5
k. To experience natural surroundings.....	1	2	3	4	5

## Part D: Substitution

There are many places to engage in snorkeling/SCUBA diving activities. In the next several questions, we are attempting to understand the reason you may choose to snorkel/SCUBA dive on one reef versus another, or if necessary, choose to engage in activities other than snorkeling/SCUBA diving in the Florida Keys.

When answering the following questions, please think about a favorite or most common reef that you dive on in the Florida Keys. If you do not have a favorite or most common reef that you dive on in the Keys, please think about the last reef that you dove on in the Florida Keys. Read the choices and circle the number that indicates your answer for that question.

**D1. Please circle which reef you are thinking of when responding to the following questions. (Please circle only one answer)**

- 1 Favorite reef to snorkel/dive on
- 2 Most common reef I snorkel/dive on
- 3 Most recent reef I snorkeled/dove on

**D2. Is this reef a:**

- 1 Natural coral reef
- 2 Artificial reef

**D3. Are you able to recall the name of this reef? If so, please list in below.**

\_\_\_\_\_ reef

**D4. Imagine that you discovered that you could not snorkel/SCUBA dive at this reef (from question #D1 above) during your next planned snorkel/SCUBA dive trip. What would you do? (Please circle only one answer)**

- 1 I would still snorkel/ SCUBA dive, but elsewhere in the Florida Keys
- 2 I would still snorkel/ SCUBA dive, but at a location outside of the Florida Keys
- 3 I would temporarily participate in a different activity in the Florida Keys
- 4 I would temporarily participate in a different activity, but outside the Florida Keys

**D5. Imagine that you discovered that you could not snorkel/SCUBA dive at this reef (from question #D1 above) for the next five years. What would you do?**

- 1 I would still snorkel/ SCUBA dive, but elsewhere in the Florida Keys
- 2 I would still snorkel/ SCUBA dive, but at a location outside of the Florida Keys
- 3 I would permanently participate in a different activity in the Florida Keys
- 4 I would permanently participate in a different activity, but outside the Florida Keys



**D6. Imagine that you discovered during your next snorkel/SCUBA dive trip that this reef (from question #D1 above) was more crowded than you normally find acceptable. What would you do?**

- 1 I would make an exception and still snorkel/ SCUBA dive on this reef
- 2 I would still snorkel/ SCUBA dive, but elsewhere in the Florida Keys
- 3 I would temporarily participate in a different activity in the Florida Keys
- 4 I would temporarily participate in a different activity, but outside the Florida Keys

**D7. Imagine that you discovered during your next snorkel/SCUBA dive trip that this reef (from question #D1 above) was more ecologically damaged (e.g., there wasn't enough healthy coral or fish) than normally find acceptable. What would you do?**

- 1 I would make an exception and snorkel/ SCUBA dive on this reef
- 2 I would still snorkel/ SCUBA dive, but elsewhere in the Florida Keys
- 3 I would temporarily participate in a different activity in the Florida Keys
- 4 I would temporarily participate in a different activity, but outside the Florida Keys

**D8. Imagine that you discovered during your next snorkel/SCUBA dive trip that user groups with whom you experience conflict are using this reef (from question #D1 above). What would you do?**

- 1 I would still snorkel/ SCUBA dive on this reef
- 2 I would still snorkel/ SCUBA dive, but elsewhere in the Florida Keys
- 3 I would temporarily participate in a different activity in the Florida Keys
- 4 I would temporarily participate in a different activity, but outside the Florida Keys

**D9. If you could not snorkel/SCUBA dive at this reef (from question #D1 above), how many other Florida Keys reefs do you think can offer you just as good an experience as your favorite reefs?**

\_\_\_\_\_ number of other Florida Keys reefs

Don't Know

**D10. If you could not snorkel/SCUBA dive at this reef (from question #D1 above), how many other Florida Keys reefs do you think can offer you a similar, but not quite as good, experience?**

\_\_\_\_\_ number of other Florida Keys reefs

Don't Know

**D11. Please rate how similar you think the snorkeling/SCUBA diving experience is at your best similar reef compared to this reef (from question #D1 above).**

1                      2                      3                      4                      5                      6                      7  
Not as Good                      Equivalent                      Better

**D12. There are many things that you might think about or consider when deciding to substitute one reef for another when snorkeling or SCUBA diving. Please indicate how important each of the following factors is in terms of deciding whether or not you would choose to snorkel/SCUBA dive at a substitute reef.**

	Not at all important	Somewhat important	Moderately important	Very important	Extremely important
a) The quality of other reefs.....	1	2	3	4	5
b) The difficulty of the diving conditions on other reefs.....	1	2	3	4	5
c) The distance to other reefs.....	1	2	3	4	5
d) My familiarity with various dive shops.....	1	2	3	4	5
e) The adequacy of my boat to get to other reefs.....	1	2	3	4	5
f) The number of fish at other reefs.....	1	2	3	4	5
g) The cost of fuel to get to other reefs.....	1	2	3	4	5
h) The level of crowding at other reefs.....	1	2	3	4	5
i) The amount of live coral at other reefs.....	1	2	3	4	5
j) Area closures at desirable reef locations.....	1	2	3	4	5
k) The presence of other groups that I don't like.....	1	2	3	4	5
l) Other.....	1	2	3	4	5

**D13. If you could not go snorkeling/SCUBA diving, either in the Florida Keys or elsewhere, are there any other recreation activities in the Florida Keys that would provide you with the same satisfaction and enjoyment that you receive from going snorkeling/SCUBA diving?**

Yes --- If yes, please go to question # D14 below

No --- If no, please go to question # D15 below

**D14. If you answered “yes” to question D13, please list up to three specific activities that you consider to be substitutes for snorkeling/SCUBA diving.**

\_\_\_\_\_ activity

\_\_\_\_\_ activity

\_\_\_\_\_ activity

**D15. There are reasons why people cannot participate as often as they would like in an activity they enjoy doing. Please indicate the extent to which you agree or disagree with each of the following statements as they relate to your ability to snorkel/SCUBA dive in the Florida Keys as often as you would like.**

	Completely disagree	Disagree	Neutral	Agree	Completely agree
a) I don't have enough leisure time.....	1	2	3	4	5
b) The equipment is too expensive.....	1	2	3	4	5
c) The cost of travel is too high.....	1	2	3	4	5
d) It is difficult to find snorkel/SCUBA diving partners.....	1	2	3	4	5
e) Fuel prices for my boat are too high.....	1	2	3	4	5
f) Snorkel/SCUBA diving areas are too crowded.....	1	2	3	4	5
g) Too many snorkel/SCUBA diving areas are off-limits.....	1	2	3	4	5
h) Dive boats are too expensive .....	1	2	3	4	5
i) Other.....	1	2	3	4	5

**D16. Below is a list of reasons why people snorkel/SCUBA dive in the Florida Keys. Please circle the number that indicates how important each item is to you as a reason for snorkel/SCUBA diving in the Florida Keys.**

	Not at all important	Somewhat important	Moderately important	Very important	Extremely important
a) To develop my skills.....	1	2	3	4	5
b) To experience excitement.....	1	2	3	4	5
c) For family recreation.....	1	2	3	4	5
d) To be with friends.....	1	2	3	4	5
e) To be outdoors.....	1	2	3	4	5
f) To experience new and different things.....	1	2	3	4	5
g) For the experience of the dive.....	1	2	3	4	5
h) To get away from the demands of other people.....	1	2	3	4	5
i) To get away from the regular routine.....	1	2	3	4	5
j) To see diverse underwater life.....	1	2	3	4	5
k) To teach underwater skills to other people.....	1	2	3	4	5
l) To obtain additional dive ratings.....	1	2	3	4	5
m) To experience natural surroundings.....	1	2	3	4	5
n) For solitude.....	1	2	3	4	5
o) For relaxation.....	1	2	3	4	5
p) For the challenge of the dive.....	1	2	3	4	5

There are many places to engage in fishing. In the next several questions, we are attempting to understand the reason you may choose to fish in one location versus another, or if necessary, engage in an activity other than fishing in the Florida Keys.

When answering the following questions, please think about a favorite or most common area that you fish in off the Florida Keys. If you do not have a favorite or most common area that you fish in off the Keys, please think about the last area that you fished in off the Florida Keys.

**D17. Please indicate which reef you are thinking of when responding to the following questions. (Please circle only one answer)**

- 1 My favorite reef to fish at
- 2 The most common area I fish at
- 3 The most recent area I fished in

**D18. Is this area:**

- 1 A flat
- 2 A natural coral reef
- 3 Hawk Channel
- 4 An artificial reef
- 5 Other (please list)\_\_\_\_\_

**D19. Are you able to recall the name of this area? If so, please list it below.**

\_\_\_\_\_ area

**D20. Imagine that you discovered that you could not fish in this area (from question #D17 above) during your next planned fishing trip. What would you do? (Please circle only one answer)**

- 1 I would still fish, but elsewhere in the Florida Keys
- 2 I would still fish, but at a location outside of the Florida Keys
- 3 I would temporarily participate in a different activity in the Florida Keys
- 4 I would temporarily participate in a different activity, but outside the Florida Keys

**D21. Imagine that you discovered that you could not fish in this area (from question #D17 above) for the next five years. What would you do?**

- 1 I would still fish, but elsewhere in the Florida Keys
- 2 I would still fish, but at a location outside of the Florida Keys
- 3 I would permanently participate in a different activity in the Florida Keys
- 4 I would permanently participate in a different activity, but outside the Florida Keys

**D22. Imagine that you discovered during your next fishing trip that this area (from question #D17 above) was more crowded than you normally find acceptable. What would you do?**

- 1 I would make an exception and still fish in this area
- 2 I would still fish, but elsewhere in the Florida Keys
- 3 I would temporarily participate in a different activity in the Florida Keys
- 4 I would temporarily participate in a different activity, but outside the Florida Keys

**D23. Imagine that you discovered during your next fishing trip that this area (from question #D17 above) was more ecologically damaged (e.g., there was no longer enough good fish habitat) than you normally find acceptable. What would you do?**

- 1 I would still fish in this area
- 2 I would still fish, but elsewhere in the Florida Keys
- 3 I would temporarily participate in a different activity in the Florida Keys
- 4 I would temporarily participate in a different activity, but outside the Florida Keys

**D24. Imagine that you discovered during your next fishing trip that other user groups with whom you experience conflict are using this area (from question #D17 above). What would you do?**

- 1 I would still fish in this area
- 2 I would still fish, but elsewhere in the Florida Keys
- 3 I would temporarily participate in a different activity in the Florida Keys
- 4 I would temporarily participate in a different activity, but outside the Florida Keys

**D25. If you could not fish in this area (from question #D17 above), how many other areas in the Florida Keys do you think can offer you an overall experience that is just as good?**

\_\_\_\_\_ number of other areas in the Florida Keys

Don't Know

**D26. If you could not fish in this area (from question #1 above), how many other areas in the Florida Keys do you think can offer you a similar, but not quite as good, overall experience?**

\_\_\_\_\_ number of other areas Florida Keys

Don't Know

**D27. Please rate how similar you think the fishing experience is at your best similar fishing area compared to this area.**

- |             |   |   |            |   |   |        |
|-------------|---|---|------------|---|---|--------|
| 1           | 2 | 3 | 4          | 5 | 6 | 7      |
| Not as Good |   |   | Equivalent |   |   | Better |

**D28. There are many things that you might think about or consider when deciding to substitute one fishing area for another. Please indicate how important each of the following factors is in terms of deciding whether or not you would choose to fish in a substitute area.**

	Not at all important	Slightly important	Moderately important	Very important	Extremely important
a) The number of fish at other areas.....	1	2	3	4	5
b) The difficulty of boating conditions.....	1	2	3	4	5
c) The distance to other areas.....	1	2	3	4	5
d) The charter boats and captains at other areas.....	1	2	3	4	5
e) The adequacy of my boat to get to other areas.....	1	2	3	4	5
f) The cost of fuel to get to other areas.....	1	2	3	4	5
g) The level of crowding at other areas.....	1	2	3	4	5
h) Area closures at desirable locations.....	1	2	3	4	5
i) The presence of other groups that I don't like.....	1	2	3	4	5
j) Other.....	1	2	3	4	5

**D29. If you could not go fishing, either in the Florida Keys or elsewhere, are there any other recreation activities in the Florida Keys that would provide you with the same satisfaction and enjoyment that you receive from going fishing?**

- Yes --- If yes, please go to question # D30 below
- No --- If no, please go to question # D31 below

**D30. If you answered "yes" to question D29, please list up to three specific activities that you consider to be substitutes for fishing in the Florida Keys.**

\_\_\_\_\_ activity

\_\_\_\_\_ activity

\_\_\_\_\_ activity

**D31. There are reasons why people cannot participate as often as they would like in an activity they enjoy doing. Please indicate the extent to which you agree or disagree with each of the following statements as they relate to your ability to fish in the Florida Keys as often as you would like.**

	Completely disagree	Disagree	Neutral	Agree	Completely agree
a) I don't have enough leisure time.....	1	2	3	4	5
b) The equipment is too expensive.....	1	2	3	4	5
c) The cost of travel is too high.....	1	2	3	4	5
d) It is difficult to find fishing partners.....	1	2	3	4	5
e) Fuel prices for my boat are too high.....	1	2	3	4	5
f) Fishing areas are too crowded.....	1	2	3	4	5
g) Too many fishing areas are off-limits.....	1	2	3	4	5
h) Fishing charters are too expensive.....	1	2	3	4	5
i) Other.....	1	2	3	4	5

**D32. Below is a list of reasons why people saltwater fish in the Florida Keys. Please circle the number that indicates how important each item is to you as a reason for saltwater fishing in the Florida Keys.**

	Not at all important	Somewhat important	Moderately important	Very important	Extremely important
a) To develop my skills.....	1	2	3	4	5
b) To experience excitement.....	1	2	3	4	5
c) For family recreation.....	1	2	3	4	5
d) To be with friends.....	1	2	3	4	5
e) To be outdoors.....	1	2	3	4	5
f) To experience new and different things.....	1	2	3	4	5
g) For the experience of the catch.....	1	2	3	4	5
h) To get away from the demands of other people.....	1	2	3	4	5
i) To get away from the regular routine.....	1	2	3	4	5
j) To catch a trophy fish.....	1	2	3	4	5
k) For the sport of fishing, not to obtain food to eat.....	1	2	3	4	5
l) For the fun of catching fish.....	1	2	3	4	5
m) To experience natural surroundings.....	1	2	3	4	5
n) For solitude.....	1	2	3	4	5
o) For relaxation.....	1	2	3	4	5
p) For the challenge of the catch.....	1	2	3	4	5
q) To obtain fish for eating, not for sport.....	1	2	3	4	5

## Part E: Management Alternatives

### Snorkeler / SCUBA diver

If not a snorkeler / SCUBA diver in the Florida Keys, but do recreational fishing, GO to page 22.

If not a snorkeler / SCUBA diver or recreational fisher in the Florida Keys, GO to page 27.

Please think about a recreational snorkeling / SCUBA diving experience on a reef in the Florida Keys when answering the questions on the following pages. You will be offered eight (8) choices of two diving trips. Each choice has different features for you to evaluate. Please read each choice carefully. Although they may look similar, trips in each question differ in at least one way.

There is an example below to assist you. Please note the following definitions before reviewing the example.

- Number of Snorkelers / Divers - the number of snorkelers / divers on a reef at any one time
- Restrictions- percent area of reef open to use
- Enforcement- the number of law enforcement patrols you observe per trip
- Number of Fish Species- the amount of different kinds of fish species observed on the reef
- Site Settings- the amount of live coral and/or algae on the reef
- Number of Fish- the overall amount of fish observed on the reef
- Size of Fish- the size of fish observed on the reef
- Travel cost / day – Travel cost that a snorkeler / diver spends for a diving trip per day (including gas and other trip expenses)

### Example

If you were planning a snorkel / SCUBA dive trip to the Florida Keys, which trip would you prefer: Trip A, Trip B, or neither?

ATTRIBUTE	Trip A	Trip B
<b>Number of Snorkelers / Divers</b>	<i>15% fewer snorkelers / divers</i>	<i>30% fewer snorkelers / divers</i>
<b>Site Settings</b>	<i>Mix of coral and algae cover</i>	<i>High live coral cover</i>
<b>Restrictions</b>	<i>25% of area closed</i>	<i>75 % of area closed</i>
<b>Number of Fish</b>	<i>40% more fish</i>	<i>No increase in numbers of fish</i>
<b>Size of Fish</b>	<i>40% more larger fish</i>	<i>20 % more larger fish</i>
<b>Species</b>	<i>No change in species numbers</i>	<i>Fewer species</i>
<b>Enforcement</b>	<i>Two additional patrols</i>	<i>No additional patrols</i>
<b>Travel Cost / Day</b>	<i>Your current total cost per day</i>	<i>10% more than your current total cost per day</i>

Which trip do you prefer? (check only one box below)

Trip A

Trip B

I would not take either trip



E1. If you were planning a snorkel / SCUBA dive trip to the Florida Keys, which trip would you prefer: Trip A, Trip B, or neither?

<b>ATTRIBUTE</b>	<b>Trip A</b>	<b>Trip B</b>
<b>Number of Snorkelers / Divers</b>	<i>30% fewer snorkelers / divers</i>	<i>The usual number of other snorkelers / divers at the site</i>
<b>Site Settings</b>	<i>High algae cover</i>	<i>High algae cover</i>
<b>Restrictions</b>	<i>75% of area closed</i>	<i>25% of area closed</i>
<b>Number of Fish</b>	<i>60% more fish</i>	<i>No increase in numbers of fish</i>
<b>Size of Fish</b>	<i>20% more larger fish</i>	<i>40% more larger fish</i>
<b>Species</b>	<i>No change in species numbers</i>	<i>Many species</i>
<b>Enforcement</b>	<i>One additional patrol</i>	<i>No additional patrols</i>
<b>Travel Cost / Day</b>	<i>10% less than your current total cost per day</i>	<i>Your current total cost per day</i>

Which trip do you prefer? (check only one box below)

Trip A       Trip B       I would not take either trip

E2. If you were planning a snorkel / SCUBA dive trip to the Florida Keys, which trip would you prefer: Trip A, Trip B, or neither?

<b>ATTRIBUTE</b>	<b>Trip A</b>	<b>Trip B</b>
<b>Number of Snorkelers / Divers</b>	<i>The usual number of other snorkelers / divers at the site</i>	<i>30% fewer snorkelers / divers</i>
<b>Site Settings</b>	<i>High algae cover</i>	<i>High live coral cover</i>
<b>Restrictions</b>	<i>75% of area closed</i>	<i>No area closed</i>
<b>Number of Fish</b>	<i>60% more fish</i>	<i>60% more fish</i>
<b>Size of Fish</b>	<i>40% more larger fish</i>	<i>60% more larger fish</i>
<b>Species</b>	<i>Many species</i>	<i>Fewer species</i>
<b>Enforcement</b>	<i>No additional patrols</i>	<i>No additional patrols</i>
<b>Travel Cost / Day</b>	<i>Your current total cost per day</i>	<i>10% more than your current total cost per day</i>

Which trip do you prefer? (check only one box below)

Trip A       Trip B       I would not take either trip

**E3.** If you were planning a snorkel / SCUBA dive trip to the Florida Keys, which trip would you prefer: Trip A, Trip B, or neither?

<b>ATTRIBUTE</b>	<b>Trip A</b>	<b>Trip B</b>
<b>Number of Snorkelers / Divers</b>	<i>30% fewer snorkelers / divers</i>	<i>The usual number of other snorkelers / divers at the site</i>
<b>Site Settings</b>	<i>High live coral cover</i>	<i>Mix of coral and algae cover</i>
<b>Restrictions</b>	<i>No area closed</i>	<i>75% of area closed</i>
<b>Number of Fish</b>	<i>40% more fish</i>	<i>60% more fish</i>
<b>Size of Fish</b>	<i>60% more larger fish</i>	<i>No increase in larger fish</i>
<b>Species</b>	<i>Fewer species</i>	<i>Many species</i>
<b>Enforcement</b>	<i>No additional patrols</i>	<i>No additional patrols</i>
<b>Travel Cost / Day</b>	<i>10% more than your current total cost per day</i>	<i>Your current total cost per day</i>

Which trip do you prefer? (check only one box below)

Trip A       Trip B       I would not take either trip

**E4.** If you were planning a snorkel / SCUBA dive trip to the Florida Keys, which trip would you prefer: Trip A, Trip B, or neither?

<b>ATTRIBUTE</b>	<b>Trip A</b>	<b>Trip B</b>
<b>Number of Snorkelers / Divers</b>	<i>The usual number of other snorkelers / divers at the site</i>	<i>The usual number of other snorkelers / divers at the site</i>
<b>Site Settings</b>	<i>Mix of coral and algae cover</i>	<i>Mix of coral and algae cover</i>
<b>Restrictions</b>	<i>No area closed</i>	<i>50% of area closed</i>
<b>Number of Fish</b>	<i>20% more fish</i>	<i>20% more fish</i>
<b>Size of Fish</b>	<i>20% more larger fish</i>	<i>No increase in larger fish</i>
<b>Species</b>	<i>No change in species numbers</i>	<i>Fewer species</i>
<b>Enforcement</b>	<i>One additional patrol</i>	<i>Two additional patrols</i>
<b>Travel Cost / Day</b>	<i>Your current total cost per day</i>	<i>10% less than your current total cost per day</i>

Which trip do you prefer? (check only one box below)

Trip A       Trip B       I would not take either trip

**E5.** If you were planning a snorkel / SCUBA dive trip to the Florida Keys, which trip would you prefer: Trip A, Trip B, or neither?

<b>ATTRIBUTE</b>	<b>Trip A</b>	<b>Trip B</b>
<b>Number of Snorkelers / Divers</b>	<i>15% fewer snorkelers / divers</i>	<i>15% fewer snorkelers / divers</i>
<b>Site Settings</b>	<i>High live coral cover</i>	<i>Mix of coral and algae cover</i>
<b>Restrictions</b>	<i>50% of area closed</i>	<i>75% of area closed</i>
<b>Number of Fish</b>	<i>60% more fish</i>	<i>40% more fish</i>
<b>Size of Fish</b>	<i>40% more larger fish</i>	<i>No increase in larger fish</i>
<b>Species</b>	<i>Many species</i>	<i>Fewer species</i>
<b>Enforcement</b>	<i>Two additional patrols</i>	<i>Two additional patrols</i>
<b>Travel Cost / Day</b>	<i>10% less than your current total cost per day</i>	<i>10% more than your current total cost per day</i>

Which trip do you prefer? (check only one box below)

Trip A       Trip B       I would not take either trip

**E6.** If you were planning a snorkel / SCUBA dive trip to the Florida Keys, which trip would you prefer: Trip A, Trip B, or neither?

<b>ATTRIBUTE</b>	<b>Trip A</b>	<b>Trip B</b>
<b>Number of Snorkelers / Divers</b>	<i>15% fewer snorkelers / divers</i>	<i>15% fewer snorkelers / divers</i>
<b>Site Settings</b>	<i>High algae cover</i>	<i>High algae cover</i>
<b>Restrictions</b>	<i>No area closed</i>	<i>50% of area closed</i>
<b>Number of Fish</b>	<i>No increase in numbers of fish</i>	<i>60% more fish</i>
<b>Size of Fish</b>	<i>60% more larger fish</i>	<i>20% more larger fish</i>
<b>Species</b>	<i>Many species</i>	<i>Many species</i>
<b>Enforcement</b>	<i>One additional patrol</i>	<i>One additional patrol</i>
<b>Travel Cost / Day</b>	<i>10% more than your current total cost per day</i>	<i>10% less than your current total cost per day</i>

Which trip do you prefer? (check only one box below)

Trip A       Trip B       I would not take either trip

E7. If you were planning a snorkel / SCUBA dive trip to the Florida Keys, which trip would you prefer: Trip A, Trip B, or neither?

<b>ATTRIBUTE</b>	<b>Trip A</b>	<b>Trip B</b>
<b>Number of Snorkelers / Divers</b>	<i>30% fewer snorkelers / divers</i>	<i>15% fewer snorkelers / divers</i>
<b>Site Settings</b>	<i>High live coral cover</i>	<i>High live coral cover</i>
<b>Restrictions</b>	<i>No area closed</i>	<i>No area closed</i>
<b>Number of Fish</b>	<i>No increase in numbers of fish</i>	<i>No increase in numbers of fish</i>
<b>Size of Fish</b>	<i>No increase in larger fish</i>	<i>20% more larger fish</i>
<b>Species</b>	<i>No change in species numbers</i>	<i>No change in species numbers</i>
<b>Enforcement</b>	<i>Two additional patrols</i>	<i>One additional patrol</i>
<b>Travel Cost / Day</b>	<i>10% less than your current total cost per day</i>	<i>Your current total cost per day</i>

Which trip do you prefer? (check only one box below)

Trip A       Trip B       I would not take either trip

E8. If you were planning a snorkel / SCUBA dive trip to the Florida Keys, which trip would you prefer: Trip A, Trip B, or neither?

<b>ATTRIBUTE</b>	<b>Trip A</b>	<b>Trip B</b>
<b>Number of Snorkelers / Divers</b>	<i>The usual number of other snorkelers / divers at the site</i>	<i>30% fewer snorkelers / divers</i>
<b>Site Settings</b>	<i>High live coral cover</i>	<i>High algae cover</i>
<b>Restrictions</b>	<i>25% of area closed</i>	<i>25% of area closed</i>
<b>Number of Fish</b>	<i>No increase in numbers of fish</i>	<i>20% more fish</i>
<b>Size of Fish</b>	<i>60% more larger fish</i>	<i>40% more larger fish</i>
<b>Species</b>	<i>Fewer species</i>	<i>No change in species numbers</i>
<b>Enforcement</b>	<i>No additional patrols</i>	<i>Two additional patrols</i>
<b>Travel Cost / Day</b>	<i>Your current total cost per day</i>	<i>10% more than your current total cost per day</i>

Which trip do you prefer? (check only one box below)

Trip A       Trip B       I would not take either trip

**Recreational Fisher**

If not a Recreational fisher in the Florida Keys, GO to page 27 Part F.

Please think about a recreational fishing experience in the Florida Keys when answering the questions on the following pages. You will be offered eight (8) choices of two fishing trips. Each choice has different features for you to evaluate. Please read each choice carefully. Although they may look similar, trips in each question differ in at least one way.

There is an example below to assist you. Please note the following definitions before reviewing the example.

- Number of Recreational Fishing Boats- the number of recreational fishing boats near you at any one time
- Number of Non-fishing Boats- the number of non-fishing boats near you at any one time
- Restrictions- the number of reefs closed to fishing per zone (upper Keys, middle Keys, lower Keys)
- Number of Fish Species- the amount of different kinds of fish species caught in a trip
- Number of Fish- the overall amount of fish caught on a trip
- Size of Fish- the number of legal sized fish caught on a trip
- Travel cost / day – Travel cost that an angler spends for a fishing trip per day (including gas and other trip expenses)

**Example**

Suppose that you could choose from the recreational fishing opportunities described below. Which of these fishing trips would you prefer?

<b>ATTRIBUTE</b>	<b>Trip A</b>	<b>Trip B</b>
<b>Number of Recreational Fishing Boats</b>	<i>30% fewer boats</i>	<i>The usual number of other boats near the location</i>
<b>Number of Non-fishing Boats</b>	<i>The usual number of other boats near the location</i>	<i>30% fewer boats</i>
<b>Restrictions</b>	<i>25% of area closed</i>	<i>25% of area closed</i>
<b>Number of Species</b>	<i>No change in species numbers</i>	<i>Fewer species fish caught</i>
<b>Number of fish</b>	<i>10% more fish caught</i>	<i>30% more fish caught</i>
<b>Size of Fish</b>	<i>60% more keepers</i>	<i>20% more keepers</i>
<b>Travel Cost / Day</b>	<i>10% more than your current total cost per day</i>	<i>10% less than your current total cost per day</i>

Which trip do you prefer? (check only one box below)

Trip A

Trip B

I would not take either trip

**E9.** Suppose that you could choose from the recreational fishing opportunities described below. Which of these fishing trips would you prefer?

<b>ATTRIBUTE</b>	<b>Trip A</b>	<b>Trip B</b>
<b>Number of Recreational Fishing Boats</b>	<i>15% fewer boats</i>	<i>30% fewer boats</i>
<b>Number of Non-fishing Boats</b>	<i>15% fewer boats</i>	<i>15% fewer boats</i>
<b>Restrictions</b>	<i>75% of area closed</i>	<i>50% of area closed</i>
<b>Number of Species</b>	<i>Fewer species fish caught</i>	<i>More species fish caught</i>
<b>Number of fish</b>	<i>No increase in numbers of fish caught</i>	<i>No increase in numbers of fish caught</i>
<b>Size of Fish</b>	<i>40% more keepers</i>	<i>20% more keepers</i>
<b>Travel Cost / Day</b>	<i>10% more than your current total cost per day</i>	<i>Your current total cost per day</i>

Which trip do you prefer? (check only one box below)

Trip A       Trip B       I would not take either trip

**E10.** Suppose that you could choose from the recreational fishing opportunities described below. Which of these fishing trips would you prefer?

<b>ATTRIBUTE</b>	<b>Trip A</b>	<b>Trip B</b>
<b>Number of Recreational Fishing Boats</b>	<i>The usual number of other boats near the location</i>	<i>The usual number of other boats near the location</i>
<b>Number of Non-fishing Boats</b>	<i>The usual number of other boats near the location</i>	<i>15% fewer boats</i>
<b>Restrictions</b>	<i>25% of area closed</i>	<i>50% of area closed</i>
<b>Number of Species</b>	<i>Fewer species fish caught</i>	<i>More species fish caught</i>
<b>Number of fish</b>	<i>10% more fish caught</i>	<i>20% more fish caught</i>
<b>Size of Fish</b>	<i>20% more keepers</i>	<i>40% more keepers</i>
<b>Travel Cost / Day</b>	<i>10% less than your current total cost per day</i>	<i>10% more than your current total cost per day</i>

Which trip do you prefer? (check only one box below)

Trip A       Trip B       I would not take either trip

**E11.** Suppose that you could choose from the recreational fishing opportunities described below. Which of these fishing trips would you prefer?

<b>ATTRIBUTE</b>	<b>Trip A</b>	<b>Trip B</b>
<b>Number of Recreational Fishing Boats</b>	<i>30% fewer boats</i>	<i>30% fewer boats</i>
<b>Number of Non-fishing Boats</b>	<i>15% fewer boats</i>	<i>The usual number of other boats near the location</i>
<b>Restrictions</b>	<i>No area closed</i>	<i>25% of area closed</i>
<b>Number of Species</b>	<i>Fewer species fish caught</i>	<i>Fewer species fish caught</i>
<b>Number of fish</b>	<i>20% more fish caught</i>	<i>20% more fish caught</i>
<b>Size of Fish</b>	<i>60% more keepers</i>	<i>No increase in the number of caught kept</i>
<b>Travel Cost / Day</b>	<i>10% more than your current total cost per day</i>	<i>Your current total cost per day</i>

Which trip do you prefer? (check only one box below)

- Trip A     
 Trip B     
 I would not take either trip

**E12.** Suppose that you could choose from the recreational fishing opportunities described below. Which of these fishing trips would you prefer?

<b>ATTRIBUTE</b>	<b>Trip A</b>	<b>Trip B</b>
<b>Number of Recreational Fishing Boats</b>	<i>15% fewer boats</i>	<i>15% fewer boats</i>
<b>Number of Non-fishing Boats</b>	<i>The usual number of other boats near the location</i>	<i>The usual number of other boats near the location</i>
<b>Restrictions</b>	<i>75% of area closed</i>	<i>No area closed</i>
<b>Number of Species</b>	<i>More species fish caught</i>	<i>Fewer species fish caught</i>
<b>Number of fish</b>	<i>No increase in numbers of fish caught</i>	<i>10% more fish caught</i>
<b>Size of Fish</b>	<i>40% more keepers</i>	<i>40% more keepers</i>
<b>Travel Cost / Day</b>	<i>Your current total cost per day</i>	<i>10% more than your current total cost per day</i>

Which trip do you prefer? (check only one box below)

- Trip A     
 Trip B     
 I would not take either trip

**E13.** Suppose that you could choose from the recreational fishing opportunities described below. Which of these fishing trips would you prefer?

<b>ATTRIBUTE</b>	<b>Trip A</b>	<b>Trip B</b>
<b>Number of Recreational Fishing Boats</b>	<i>The usual number of other boats near the location</i>	<i>The usual number of other boats near the location</i>
<b>Number of Non-fishing Boats</b>	<i>30% fewer boats</i>	<i>15% fewer boats</i>
<b>Restrictions</b>	<i>No area closed</i>	<i>75% of area closed</i>
<b>Number of Species</b>	<i>More species fish caught</i>	<i>No change in species numbers</i>
<b>Number of fish</b>	<i>No increase in numbers of fish caught</i>	<i>30% more fish caught</i>
<b>Size of Fish</b>	<i>No increase in the number of caught kept</i>	<i>60% more keepers</i>
<b>Travel Cost / Day</b>	<i>10% more than your current total cost per day</i>	<i>10% more than your current total cost per day</i>

Which trip do you prefer? (check only one box below)

Trip A       Trip B       I would not take either trip

**E14.** Suppose that you could choose from the recreational fishing opportunities described below. Which of these fishing trips would you prefer?

<b>ATTRIBUTE</b>	<b>Trip A</b>	<b>Trip B</b>
<b>Number of Recreational Fishing Boats</b>	<i>30% fewer boats</i>	<i>30% fewer boats</i>
<b>Number of Non-fishing Boats</b>	<i>30% fewer boats</i>	<i>30% fewer boats</i>
<b>Restrictions</b>	<i>25% of area closed</i>	<i>75% of area closed</i>
<b>Number of Species</b>	<i>No change in species numbers</i>	<i>No change in species numbers</i>
<b>Number of fish</b>	<i>30% more fish caught</i>	<i>10% more fish caught</i>
<b>Size of Fish</b>	<i>40% more keepers</i>	<i>No increase in the number of caught kept</i>
<b>Travel Cost / Day</b>	<i>10% less than your current total cost per day</i>	<i>10% less than your current total cost per day</i>

Which trip do you prefer? (check only one box below)

Trip A       Trip B       I would not take either trip



**E15.** Suppose that you could choose from the recreational fishing opportunities described below. Which of these fishing trips would you prefer?

<b>ATTRIBUTE</b>	<b>Trip A</b>	<b>Trip B</b>
<b>Number of Recreational Fishing Boats</b>	<i>15% fewer boats</i>	<i>15% fewer boats</i>
<b>Number of Non-fishing Boats</b>	<i>The usual number of other boats near the location</i>	<i>15% fewer boats</i>
<b>Restrictions</b>	<i>50% of area closed</i>	<i>25% of area closed</i>
<b>Number of Species</b>	<i>No change in species numbers</i>	<i>More species fish caught</i>
<b>Number of fish</b>	<i>30% more fish caught</i>	<i>20% more fish caught</i>
<b>Size of Fish</b>	<i>No increase in the number of caught kept</i>	<i>No increase in the number of caught kept</i>
<b>Travel Cost / Day</b>	<i>Your current total cost per day</i>	<i>10% more than your current total cost per day</i>

Which trip do you prefer? (check only one box below)

- Trip A     
 Trip B     
 I would not take either trip

**E16.** Suppose that you could choose from the recreational fishing opportunities described below. Which of these fishing trips would you prefer?

<b>ATTRIBUTE</b>	<b>Trip A</b>	<b>Trip B</b>
<b>Number of Recreational Fishing Boats</b>	<i>15% fewer boats</i>	<i>The usual number of other boats near the location</i>
<b>Number of Non-fishing Boats</b>	<i>30% fewer boats</i>	<i>30% fewer boats</i>
<b>Restrictions</b>	<i>75% of area closed</i>	<i>No area closed</i>
<b>Number of Species</b>	<i>Fewer species fish caught</i>	<i>No change in species numbers</i>
<b>Number of fish</b>	<i>20% more fish caught</i>	<i>30% more fish caught</i>
<b>Size of Fish</b>	<i>20% more keepers</i>	<i>20% more keepers</i>
<b>Travel Cost / Day</b>	<i>10% less than your current total cost per day</i>	<i>Your current total cost per day</i>

Which trip do you prefer? (check only one box below)

- Trip A     
 Trip B     
 I would not take either trip

## Part F: Demographic Profile

In this final section, we need to know information about you and your household to make sure we have a representative sample of Monroe County residents.

Again, your privacy will be protected and any information identifying you or your household will not be revealed to anyone.

**F1. How many people in your household are permanent residents of Monroe County, Florida?**

\_\_\_\_\_ number of people

**F2. How many of these people are at least 16 years of age?** \_\_\_\_\_ number of people

**F3. What is the closest mile marker to your residence?** \_\_\_\_\_ mile marker number

**F4. Do you have access to the water from your residence?**  Yes  No

**F5. Do you own a boat?**  Yes  No

**F6. How many years have you lived in Monroe County?** \_\_\_\_\_ number of years

**F7. In what year were you born?** \_\_\_\_\_ year

**F8. Are you Hispanic, Latino, or of Spanish origin?**  Yes  No

**F9. What race do you consider yourself?**

Please circle one or more of the letter(s) that best describes you

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

**F10. What is the highest level of education that you have completed?**

Please circle the letter of the category that best describes you

- A 8th Grade or Less
- B 9th to 11th Grade
- C 12th Grade, High School Grad, GED
- D 13 to 15 Years (some college or vocational training)
- E College Graduate
- F Graduate School, Law School, Medical School

F11. What is your employment status?

Please circle the letter or letters of all those that apply

- |   |                    |   |                   |
|---|--------------------|---|-------------------|
| A | Unemployed         | E | Student           |
| B | Employed full-time | F | Homemaker         |
| C | Employed part-time | G | None of the above |
| D | Retired            |   | (specify) _____   |

F12. Do you work outside Monroe County?  Yes  No

F13. What is your zip code? \_\_\_\_\_

F14. What is your total household income, before taxes.

Please circle the letter corresponding to the category that best describes your household

- |   |                      |   |                        |
|---|----------------------|---|------------------------|
| A | Under \$5,000        | I | \$40,000 to \$44,999   |
| B | \$5,000 to \$9,999   | J | \$45,000 to \$49,999   |
| B | \$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 |   |                        |

# *Monroe County Resident Survey*

**Your answers are voluntary and confidential.**

Your name will never be released to anyone unless otherwise required by law. After the completion of the project all materials identifying you as an individual will be destroyed.

This is a cooperative research project of the Monroe County Tourist Development Council and the National Oceanic and Atmospheric Administration. Public reporting burden for this collection of information is estimated to average 1 hour including time for reviewing instructions, searching existing data sources, gathering and maintaining the data need, 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 this burden, to U.S. Department of Commerce, Clearance Officer, Office of Chief Information Officer, Rm. 6625, 14<sup>th</sup> and Constitution Avenue NW, Washington, DC 20230. Notwithstanding any other provisions of the law, no person is required to respond to, nor shall any person be subject to penalty for failure to comply with, a collection of information subject to requirements of the Paperwork Reduction Act, unless that collection of information displays a currently valid OMB Control Number.



## Resident Survey

1. Overall, how would you rate Monroe County as a place to live?

- a. Excellent
- b. Good
- c. Fair
- d. Poor

Please circle letter corresponding to your answer

2. There are many reasons that people choose to live where they do in Florida. What are the two most important reasons you chose to live in Monroe County?

- a. No special reason
- b. Born here
- c. Job or business
- d. Climate
- e. Environment
- f. Access to natural resources, such as natural settings and wildlife
- g. Opportunities for water activities, such as fishing or diving
- h. Low crime rate
- i. Cultural activities
- j. Retirement
- k. Some other reason (specify) \_\_\_\_\_

Please circle letters corresponding to the two most important reasons

3. In the past 12 months, have you done any outdoor recreation activities in the Florida Keys?

- a. Yes (Go to Part A)
- b. No (Go to Part G)

Please use the enclosed White Card-Activities List to see what we mean by outdoor recreation

## Part A: Outdoor recreation activities during the past 12 months in the Florida Keys

Please use the enclosed Activities List and map to help you answer the questions in this section

- A1. Which of the activities on the enclosed Activities List did you or someone in your household do in the Florida Keys during the last 12 months?**
- A2. Pleas fill in the circle for each activity you, yourself did during the past 12 months in the Upper Keys, Islamorada, Marathon, Lower Keys and Key West?**
- A3. On how many different days did you, yourself participate in each activity in the Upper Keys, Islamorada, Marathon, Lower Keys and Key West?**

Only answer for those activities you listed with an A on the end of the activity number

- A4. How many others (excluding yourself) in your household did each activity in the Upper Keys, Islamorada, Marathon, Lower Keys and Key West?**

A1 Activity	Upper Keys			Islamorada			Marathon			Lower Keys			Key West		
	A2	A3	A4	A2	A3	A4	A2	A3	A4	A2	A3	A4	A2	A3	A4
	Resp. days	#	others	Resp. days	#	others	Resp. days	#	others	Resp. days	#	others	Resp. days	#	others
_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____
_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____
_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____
_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____
_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____
_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____
_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____
_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____
_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____
_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____
_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____
_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____
_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____
_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____
_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____
_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____
_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____
_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____
_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____
_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____
_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____	<input type="radio"/>	_____	_____



**A5. What would you say is the most important activity you did in the Florida Keys?**

**Most Important Activity** \_\_\_\_\_ (Activity List Number)

**No Activity Most Important (fill in box)**

**A6. On how many different days did you participate in outdoor recreation activities outside the Florida Keys during the past 12 months?** \_\_\_\_\_ (# of days)

**Part B: Reef use in the Florida Keys during the past 12 months. Both artificial and natural reefs.**

Please use Blue Card with Activities List for reef use and map of the Florida Keys in answering Part B

- B1. Which activities did you or someone in your household do on either artificial or natural reefs during the past 12 months in the Upper Keys, Islamorada, Marathon, Lower Keys and Key West?**

If you did not do anything in a region, check the box indicating no reef use in the region

- B2. Please fill in the circle for each activity you, yourself, did during the past 12 months in the Upper Keys, Islamorada, Marathon, Lower Keys and Key West.**
- B3. How many others in your household did each activity on the reefs in the Upper Keys, Islamorada, Marathon, Lower Keys and Key West during the past 12 months?**
- B4. On how many different days did you, yourself, participate in each activity on the reefs in the Upper Keys, Islamorada, Marathon, Lower Keys and Key West during the past 12 months?**
- B5. On how many different days did you, yourself, participate in each activity on the artificial reefs in the Upper Keys, Islamorada, Marathon, Lower Keys and Key West during the past 12 months?**
- B6. On how many different days did you, yourself, participate in each activity on the natural reefs in the Upper Keys, Islamorada, Marathon, Lower Keys and Key West during the past 12 months?**

Note: If you did part of a day on an artificial reef and part of a day on a natural reef, count one whole day on each type of reef

- B7. How many different dives did you, yourself, make for each type of diving activity you did on the reefs in the Upper Keys, Islamorada, Marathon, Lower Keys and Key West during the past 12 months?**

Diving activities include all snorkeling and scuba diving activities on the Blue Card-Activities List (Reef)

A dive is defined as an entry and exit from the water to snorkel or scuba dive

- B8. How many different dives did you, yourself, make for each type of diving activity you did on the artificial reefs in the Upper Keys, Islamorada, Marathon, Lower Keys and Key West during the past 12 months?**
- B9. How many different dives did you, yourself, make for each type of diving activity you did on the natural reefs in the Upper Keys, Islamorada, Marathon, Lower Keys and Key West during the past 12 months?**

Please refer to Questions B1 - B9 when filling in the tables on the following two pages

There is one table for each of the five regions of the Florida Keys (Upper Keys, Islamorada, Marathon, Lower Keys and Key West)

No Reef Use

Upper Keys

B1	B2	B3	B4	B5	B6	B7	B8	B9
Activity	Resp.	# Others	Respondent # of days	# days artificial	# days natural	Respondent # dives	# dives artificial	# dives natural
_____	○	_____	_____	_____	_____	_____	_____	_____
_____	○	_____	_____	_____	_____	_____	_____	_____
_____	○	_____	_____	_____	_____	_____	_____	_____
_____	○	_____	_____	_____	_____	_____	_____	_____
_____	○	_____	_____	_____	_____	_____	_____	_____
_____	○	_____	_____	_____	_____	_____	_____	_____
_____	○	_____	_____	_____	_____	_____	_____	_____
_____	○	_____	_____	_____	_____	_____	_____	_____
_____	○	_____	_____	_____	_____	_____	_____	_____

No Reef Use

Islamorada

B1	B2	B3	B4	B5	B6	B7	B8	B9
Activity	Resp.	# Others	Respondent # of days	# days artificial	# days natural	Respondent # dives	# dives artificial	# dives natural
_____	○	_____	_____	_____	_____	_____	_____	_____
_____	○	_____	_____	_____	_____	_____	_____	_____
_____	○	_____	_____	_____	_____	_____	_____	_____
_____	○	_____	_____	_____	_____	_____	_____	_____
_____	○	_____	_____	_____	_____	_____	_____	_____
_____	○	_____	_____	_____	_____	_____	_____	_____
_____	○	_____	_____	_____	_____	_____	_____	_____
_____	○	_____	_____	_____	_____	_____	_____	_____
_____	○	_____	_____	_____	_____	_____	_____	_____

No Reef Use

Marathon

B1	B2	B3	B4	B5	B6	B7	B8	B9
Activity	Resp.	# Others	Respondent # of days	# days artificial	# days natural	Respondent # dives	# dives artificial	# dives natural
_____	○	_____	_____	_____	_____	_____	_____	_____
_____	○	_____	_____	_____	_____	_____	_____	_____
_____	○	_____	_____	_____	_____	_____	_____	_____
_____	○	_____	_____	_____	_____	_____	_____	_____
_____	○	_____	_____	_____	_____	_____	_____	_____
_____	○	_____	_____	_____	_____	_____	_____	_____
_____	○	_____	_____	_____	_____	_____	_____	_____
_____	○	_____	_____	_____	_____	_____	_____	_____
_____	○	_____	_____	_____	_____	_____	_____	_____

No Reef Use

Lower Keys

B1	B2	B3	B4	B5	B6	B7	B8	B9
Activity	Resp.	# Others	Respondent # of days	# days artificial	# days natural	Respondent # dives	# dives artificial	# dives natural
_____	○	_____	_____	_____	_____	_____	_____	_____
_____	○	_____	_____	_____	_____	_____	_____	_____
_____	○	_____	_____	_____	_____	_____	_____	_____
_____	○	_____	_____	_____	_____	_____	_____	_____
_____	○	_____	_____	_____	_____	_____	_____	_____
_____	○	_____	_____	_____	_____	_____	_____	_____
_____	○	_____	_____	_____	_____	_____	_____	_____
_____	○	_____	_____	_____	_____	_____	_____	_____
_____	○	_____	_____	_____	_____	_____	_____	_____

No Reef Use

Key West

B1	B2	B3	B4	B5	B6	B7	B8	B9
Activity	Resp.	# Others	Respondent # of days	# days artificial	# days natural	Respondent # dives	# dives artificial	# dives natural
_____	○	_____	_____	_____	_____	_____	_____	_____
_____	○	_____	_____	_____	_____	_____	_____	_____
_____	○	_____	_____	_____	_____	_____	_____	_____
_____	○	_____	_____	_____	_____	_____	_____	_____
_____	○	_____	_____	_____	_____	_____	_____	_____
_____	○	_____	_____	_____	_____	_____	_____	_____
_____	○	_____	_____	_____	_____	_____	_____	_____
_____	○	_____	_____	_____	_____	_____	_____	_____
_____	○	_____	_____	_____	_____	_____	_____	_____

## Part C: Specialization

In this section, we are interested in learning more about your primary activity. Please answer the following questions based on the response you gave to QUESTION A5.

For the four questions below, please read the four choices and circle the one answer that best fits you for that question.

### C1. When I participate in my primary activity, I feel like:

- 1 a beginner. I don't really feel like I am part of the activity scene.
- 2 an occasional or irregular participant. Sometimes it is fun, entertaining or rewarding to do my activity.
- 3 a habitual and regular participant in the activity.
- 4 an insider to the sport. The activity is an important part of who I am.

### C2. During my activity, I can best be described as:

- 1 having very little understanding of the activity. I am often unsure about how to do certain things when I go.
- 2 having some understanding of the activity, but still in the process of learning more about the sport. I am becoming more familiar and comfortable with the activity.
- 3 being comfortable with the sport. I have a good understanding of what I can do, and how to do it.
- 4 a knowledgeable expert in the sport. I encourage, teach and enhance opportunities for others who are interested in the activity.

### C3. My relationships with others who do the activity are:

- 1 not established. I really don't know any other people who do the activity.
- 2 very limited. I know some others in the activity by sight and sometimes talk with them, but I don't know their names.
- 3 one of familiarity. I know the names of others who do the activity, and often speak with them.
- 4 close. I have personal and close relationships with others in the activity. These friendships often revolve around the activity.

### C4. My commitment to the activity is:

- 1 very slight. I have very little connection to the activity. I may or may not continue to participate in the sport in the future.
- 2 moderate. I will continue to do it as it is entertaining and provides the benefits I want.
- 3 fairly strong. I have a sense of being a member of the activity, and it is likely that I will continue to do it for a long time.
- 4 very strong. I am totally committed to the activity. I encourage others to participate in the sport and seek to ensure the activity continues into the future.

### C5. If you had to replace all of the equipment that you currently own for your primary activity with similar equipment, how much would it cost to replace?

\$ \_\_\_\_\_ AMOUNT TO REPLACE PRIMARY ACTIVITY EQUIPMENT

**C6. To what extent do you make use of the following for current information about your primary activity? Please circle the number that indicates your extent of use for each source of information.**

	No Use	Almost no use	A little use	Some use	A lot of use
a. Talking with others who participate in the activity.....	1	2	3	4	5
b. Magazines.....	1	2	3	4	5
c. Government agency publications.....	1	2	3	4	5
d. Conservation organization publications.....	1	2	3	4	5
e. Newspapers.....	1	2	3	4	5
f. Diving shops/companies.....	1	2	3	4	5
g. Club meetings.....	1	2	3	4	5
h. Television.....	1	2	3	4	5
i. Radio.....	1	2	3	4	5
j. Internet.....	1	2	3	4	5

**C7. Below is a list of reasons why people engage in recreation activities. Please circle the number that indicates how important each item is to you as a reason for participating in your primary activity.**

	Not at all important	Slightly important	Moderately important	Very important	Extremely important
a. To be outdoors.....	1	2	3	4	5
b. For family recreation.....	1	2	3	4	5
c. To experience new and different things.....	1	2	3	4	5
d. For relaxation.....	1	2	3	4	5
e. To be close to the water.....	1	2	3	4	5
f. To get away from the demands of other people.....	1	2	3	4	5
g. To be with friends.....	1	2	3	4	5
h. To develop my skills.....	1	2	3	4	5
i. To get away from the regular routine.....	1	2	3	4	5
j. To experience adventure and excitement.....	1	2	3	4	5
k. To experience natural surroundings.....	1	2	3	4	5

## Part D: Substitution

There are many places to engage in snorkeling/SCUBA diving activities. In the next several questions, we are attempting to understand the reason you may choose to snorkel/SCUBA dive on one reef versus another, or if necessary, choose to engage in activities other than snorkeling/SCUBA diving in the Florida Keys.

When answering the following questions, please think about a favorite or most common reef that you dive on in the Florida Keys. If you do not have a favorite or most common reef that you dive on in the Keys, please think about the last reef that you dove on in the Florida Keys. Read the choices and circle the number that indicates your answer for that question.

**D1. Please circle which reef you are thinking of when responding to the following questions. (Please circle only one answer)**

- 1 Favorite reef to snorkel/dive on
- 2 Most common reef I snorkel/dive on
- 3 Most recent reef I snorkeled/dove on

**D2. Is this reef a:**

- 1 Natural coral reef
- 2 Artificial reef

**D3. Are you able to recall the name of this reef? If so, please list in below.**

\_\_\_\_\_ reef

**D4. Imagine that you discovered that you could not snorkel/SCUBA dive at this reef (from question #D1 above) during your next planned snorkel/SCUBA dive trip. What would you do? (Please circle only one answer)**

- 1 I would still snorkel/ SCUBA dive, but elsewhere in the Florida Keys
- 2 I would still snorkel/ SCUBA dive, but at a location outside of the Florida Keys
- 3 I would temporarily participate in a different activity in the Florida Keys
- 4 I would temporarily participate in a different activity, but outside the Florida Keys

**D5. Imagine that you discovered that you could not snorkel/SCUBA dive at this reef (from question #D1 above) for the next five years. What would you do?**

- 1 I would still snorkel/ SCUBA dive, but elsewhere in the Florida Keys
- 2 I would still snorkel/ SCUBA dive, but at a location outside of the Florida Keys
- 3 I would permanently participate in a different activity in the Florida Keys
- 4 I would permanently participate in a different activity, but outside the Florida Keys

**D6. Imagine that you discovered during your next snorkel/SCUBA dive trip that this reef (from question #D1 above) was more crowded than you normally find acceptable. What would you do?**

- 1 I would make an exception and still snorkel/ SCUBA dive on this reef
- 2 I would still snorkel/ SCUBA dive, but elsewhere in the Florida Keys
- 3 I would temporarily participate in a different activity in the Florida Keys
- 4 I would temporarily participate in a different activity, but outside the Florida Keys

**D7. Imagine that you discovered during your next snorkel/SCUBA dive trip that this reef (from question #D1 above) was more ecologically damaged (e.g., there wasn't enough healthy coral or fish) than normally find acceptable. What would you do?**

- 1 I would make an exception and snorkel/ SCUBA dive on this reef
- 2 I would still snorkel/ SCUBA dive, but elsewhere in the Florida Keys
- 3 I would temporarily participate in a different activity in the Florida Keys
- 4 I would temporarily participate in a different activity, but outside the Florida Keys

**D8. Imagine that you discovered during your next snorkel/SCUBA dive trip that user groups with whom you experience conflict are using this reef (from question #D1 above). What would you do?**

- 1 I would still snorkel/ SCUBA dive on this reef
- 2 I would still snorkel/ SCUBA dive, but elsewhere in the Florida Keys
- 3 I would temporarily participate in a different activity in the Florida Keys
- 4 I would temporarily participate in a different activity, but outside the Florida Keys

**D9. If you could not snorkel/SCUBA dive at this reef (from question #D1 above), how many other Florida Keys reefs do you think can offer you just as good an experience as your favorite reefs?**

\_\_\_\_\_ number of other Florida Keys reefs

Don't Know

**D10. If you could not snorkel/SCUBA dive at this reef (from question #D1 above), how many other Florida Keys reefs do you think can offer you a similar, but not quite as good, experience?**

\_\_\_\_\_ number of other Florida Keys reefs

Don't Know

**D11. Please rate how similar you think the snorkeling/SCUBA diving experience is at your best similar reef compared to this reef (from question #D1 above).**

1                      2                      3                      4                      5                      6                      7  
Not as Good                      Equivalent                      Better



**D12. There are many things that you might think about or consider when deciding to substitute one reef for another when snorkeling or SCUBA diving. Please indicate how important each of the following factors is in terms of deciding whether or not you would choose to snorkel/SCUBA dive at a substitute reef.**

	Not at all important	Somewhat important	Moderately important	Very important	Extremely important
a) The quality of other reefs.....	1	2	3	4	5
b) The difficulty of the diving conditions on other reefs.....	1	2	3	4	5
c) The distance to other reefs.....	1	2	3	4	5
d) My familiarity with various dive shops.....	1	2	3	4	5
e) The adequacy of my boat to get to other reefs.....	1	2	3	4	5
f) The number of fish at other reefs.....	1	2	3	4	5
g) The cost of fuel to get to other reefs.....	1	2	3	4	5
h) The level of crowding at other reefs.....	1	2	3	4	5
i) The amount of live coral at other reefs.....	1	2	3	4	5
j) Area closures at desirable reef locations.....	1	2	3	4	5
k) The presence of other groups that I don't like.....	1	2	3	4	5
l) Other.....	1	2	3	4	5

**D13. If you could not go snorkeling/SCUBA diving, either in the Florida Keys or elsewhere, are there any other recreation activities in the Florida Keys that would provide you with the same satisfaction and enjoyment that you receive from going snorkeling/SCUBA diving?**

Yes --- If yes, please go to question # D14 below

No --- If no, please go to question # D15 below

**D14. If you answered “yes” to question D13, please list up to three specific activities that you consider to be substitutes for snorkeling/SCUBA diving.**

\_\_\_\_\_ activity

\_\_\_\_\_ activity

\_\_\_\_\_ activity

**D15. There are reasons why people cannot participate as often as they would like in an activity they enjoy doing. Please indicate the extent to which you agree or disagree with each of the following statements as they relate to your ability to snorkel/SCUBA dive in the Florida Keys as often as you would like.**

	Completely disagree	Disagree	Neutral	Agree	Completely agree
a) I don't have enough leisure time.....	1	2	3	4	5
b) The equipment is too expensive.....	1	2	3	4	5
c) The cost of travel is too high.....	1	2	3	4	5
d) It is difficult to find snorkel/SCUBA diving partners.....	1	2	3	4	5
e) Fuel prices for my boat are too high.....	1	2	3	4	5
f) Snorkel/SCUBA diving areas are too crowded.....	1	2	3	4	5
g) Too many snorkel/SCUBA diving areas are off-limits.....	1	2	3	4	5
h) Dive boats are too expensive .....	1	2	3	4	5
i) Other.....	1	2	3	4	5

**D16. Below is a list of reasons why people snorkel/SCUBA dive in the Florida Keys. Please circle the number that indicates how important each item is to you as a reason for snorkel/SCUBA diving in the Florida Keys.**

	Not at all important	Somewhat important	Moderately important	Very important	Extremely important
a) To develop my skills.....	1	2	3	4	5
b) To experience excitement.....	1	2	3	4	5
c) For family recreation.....	1	2	3	4	5
d) To be with friends.....	1	2	3	4	5
e) To be outdoors.....	1	2	3	4	5
f) To experience new and different things.....	1	2	3	4	5
g) For the experience of the dive.....	1	2	3	4	5
h) To get away from the demands of other people.....	1	2	3	4	5
i) To get away from the regular routine.....	1	2	3	4	5
j) To see diverse underwater life.....	1	2	3	4	5
k) To teach underwater skills to other people.....	1	2	3	4	5
l) To obtain additional dive ratings.....	1	2	3	4	5
m) To experience natural surroundings.....	1	2	3	4	5
n) For solitude.....	1	2	3	4	5
o) For relaxation.....	1	2	3	4	5
p) For the challenge of the dive.....	1	2	3	4	5

There are many places to engage in fishing. In the next several questions, we are attempting to understand the reason you may choose to fish in one location versus another, or if necessary, engage in an activity other than fishing in the Florida Keys.

When answering the following questions, please think about a favorite or most common area that you fish in off the Florida Keys. If you do not have a favorite or most common area that you fish in off the Keys, please think about the last area that you fished in off the Florida Keys.

**D17. Please indicate which reef you are thinking of when responding to the following questions. (Please circle only one answer)**

- 1 My favorite reef to fish at
- 2 The most common area I fish at
- 3 The most recent area I fished in

**D18. Is this area:**

- 1 A flat
- 2 A natural coral reef
- 3 Hawk Channel
- 4 An artificial reef
- 5 Other (please list)\_\_\_\_\_

**D19. Are you able to recall the name of this area? If so, please list it below.**

\_\_\_\_\_ area

**D20. Imagine that you discovered that you could not fish in this area (from question #D17 above) during your next planned fishing trip. What would you do? (Please circle only one answer)**

- 1 I would still fish, but elsewhere in the Florida Keys
- 2 I would still fish, but at a location outside of the Florida Keys
- 3 I would temporarily participate in a different activity in the Florida Keys
- 4 I would temporarily participate in a different activity, but outside the Florida Keys

**D21. Imagine that you discovered that you could not fish in this area (from question #D17 above) for the next five years. What would you do?**

- 1 I would still fish, but elsewhere in the Florida Keys
- 2 I would still fish, but at a location outside of the Florida Keys
- 3 I would permanently participate in a different activity in the Florida Keys
- 4 I would permanently participate in a different activity, but outside the Florida Keys



**D28. There are many things that you might think about or consider when deciding to substitute one fishing area for another. Please indicate how important each of the following factors is in terms of deciding whether or not you would choose to fish in a substitute area.**

	Not at all important	Slightly important	Moderately important	Very important	Extremely important
a) The number of fish at other areas.....	1	2	3	4	5
b) The difficulty of boating conditions.....	1	2	3	4	5
c) The distance to other areas.....	1	2	3	4	5
d) The charter boats and captains at other areas.....	1	2	3	4	5
e) The adequacy of my boat to get to other areas.....	1	2	3	4	5
f) The cost of fuel to get to other areas.....	1	2	3	4	5
g) The level of crowding at other areas.....	1	2	3	4	5
h) Area closures at desirable locations.....	1	2	3	4	5
i) The presence of other groups that I don't like.....	1	2	3	4	5
j) Other.....	1	2	3	4	5

**D29. If you could not go fishing, either in the Florida Keys or elsewhere, are there any other recreation activities in the Florida Keys that would provide you with the same satisfaction and enjoyment that you receive from going fishing?**

- Yes --- If yes, please go to question # D30 below
- No --- If no, please go to question # D31 below

**D30. If you answered “yes” to question D29, please list up to three specific activities that you consider to be substitutes for fishing in the Florida Keys.**

\_\_\_\_\_ activity

\_\_\_\_\_ activity

\_\_\_\_\_ activity

**D31. There are reasons why people cannot participate as often as they would like in an activity they enjoy doing. Please indicate the extent to which you agree or disagree with each of the following statements as they relate to your ability to fish in the Florida Keys as often as you would like.**

	Completely disagree	Disagree	Neutral	Agree	Completely agree
a) I don't have enough leisure time.....	1	2	3	4	5
b) The equipment is too expensive.....	1	2	3	4	5
c) The cost of travel is too high.....	1	2	3	4	5
d) It is difficult to find fishing partners.....	1	2	3	4	5
e) Fuel prices for my boat are too high.....	1	2	3	4	5
f) Fishing areas are too crowded.....	1	2	3	4	5
g) Too many fishing areas are off-limits.....	1	2	3	4	5
h) Fishing charters are too expensive.....	1	2	3	4	5
i) Other.....	1	2	3	4	5

**D32. Below is a list of reasons why people saltwater fish in the Florida Keys. Please circle the number that indicates how important each item is to you as a reason for saltwater fishing in the Florida Keys.**

	Not at all important	Somewhat important	Moderately important	Very important	Extremely important
a) To develop my skills.....	1	2	3	4	5
b) To experience excitement.....	1	2	3	4	5
c) For family recreation.....	1	2	3	4	5
d) To be with friends.....	1	2	3	4	5
e) To be outdoors.....	1	2	3	4	5
f) To experience new and different things.....	1	2	3	4	5
g) For the experience of the catch.....	1	2	3	4	5
h) To get away from the demands of other people.....	1	2	3	4	5
i) To get away from the regular routine.....	1	2	3	4	5
j) To catch a trophy fish.....	1	2	3	4	5
k) For the sport of fishing, not to obtain food to eat.....	1	2	3	4	5
l) For the fun of catching fish.....	1	2	3	4	5
m) To experience natural surroundings.....	1	2	3	4	5
n) For solitude.....	1	2	3	4	5
o) For relaxation.....	1	2	3	4	5
p) For the challenge of the catch.....	1	2	3	4	5
q) To obtain fish for eating, not for sport.....	1	2	3	4	5

## Part E: Management Alternatives

### Snorkeler / SCUBA diver

If not a snorkeler / SCUBA diver in the Florida Keys, but do recreational fishing, GO to page 22.

If not a snorkeler / SCUBA diver or recreational fisher in the Florida Keys, GO to page 27.

Please think about a recreational snorkeling / SCUBA diving experience on a reef in the Florida Keys when answering the questions on the following pages. You will be offered eight (8) choices of two diving trips. Each choice has different features for you to evaluate. Please read each choice carefully. Although they may look similar, trips in each question differ in at least one way.

There is an example below to assist you. Please note the following definitions before reviewing the example.

- Number of Snorkelers / Divers - the number of snorkelers / divers on a reef at any one time
- Restrictions- percent area of reef open to use
- Enforcement- the number of law enforcement patrols you observe per trip
- Number of Fish Species- the amount of different kinds of fish species observed on the reef
- Site Settings- the amount of live coral and/or algae on the reef
- Number of Fish- the overall amount of fish observed on the reef
- Size of Fish- the size of fish observed on the reef
- Travel cost / day – Travel cost that a snorkeler / diver spends for a diving trip per day (including gas and other trip expenses)

### Example

If you were planning a snorkel / SCUBA dive trip to the Florida Keys, which trip would you prefer: Trip A, Trip B, or neither?

ATTRIBUTE	Trip A	Trip B
<b>Number of Snorkelers / Divers</b>	<i>15% fewer snorkelers / divers</i>	<i>30% fewer snorkelers / divers</i>
<b>Site Settings</b>	<i>Mix of coral and algae cover</i>	<i>High live coral cover</i>
<b>Restrictions</b>	<i>25% of area closed</i>	<i>75 % of area closed</i>
<b>Number of Fish</b>	<i>40% more fish</i>	<i>No increase in numbers of fish</i>
<b>Size of Fish</b>	<i>40% more larger fish</i>	<i>20 % more larger fish</i>
<b>Species</b>	<i>No change in species numbers</i>	<i>Fewer species</i>
<b>Enforcement</b>	<i>Two additional patrols</i>	<i>No additional patrols</i>
<b>Travel Cost / Day</b>	<i>Your current total cost per day</i>	<i>10% more than your current total cost per day</i>

Which trip do you prefer? (check only one box below)

Trip A       Trip B       I would not take either trip

E1. If you were planning a snorkel / SCUBA dive trip to the Florida Keys, which trip would you prefer: Trip A, Trip B, or neither?

<b>ATTRIBUTE</b>	<b>Trip A</b>	<b>Trip B</b>
<b>Number of Snorkelers / Divers</b>	<i>The usual number of other snorkelers / divers at the site</i>	<i>15% fewer snorkelers / divers</i>
<b>Site Settings</b>	<i>Mix of coral and algae cover</i>	<i>High algae cover</i>
<b>Restrictions</b>	<i>75% of area closed</i>	<i>50% of area closed</i>
<b>Number of Fish</b>	<i>40% more fish</i>	<i>60% more fish</i>
<b>Size of Fish</b>	<i>No increase in larger fish</i>	<i>40% more larger fish</i>
<b>Species</b>	<i>Fewer species</i>	<i>Fewer species</i>
<b>Enforcement</b>	<i>One additional patrol</i>	<i>One additional patrol</i>
<b>Travel Cost / Day</b>	<i>10% less than your current total cost per day</i>	<i>10% more than your current total cost per day</i>

Which trip do you prefer? (check only one box below)

Trip A       Trip B       I would not take either trip

E2. If you were planning a snorkel / SCUBA dive trip to the Florida Keys, which trip would you prefer: Trip A, Trip B, or neither?

<b>ATTRIBUTE</b>	<b>Trip A</b>	<b>Trip B</b>
<b>Number of Snorkelers / Divers</b>	<i>15% fewer snorkelers / divers</i>	<i>30% fewer snorkelers / divers</i>
<b>Site Settings</b>	<i>High algae cover</i>	<i>High live coral cover</i>
<b>Restrictions</b>	<i>25% of area closed</i>	<i>50% of area closed</i>
<b>Number of Fish</b>	<i>60% more fish</i>	<i>60% more fish</i>
<b>Size of Fish</b>	<i>60% more larger fish</i>	<i>No increase in larger fish</i>
<b>Species</b>	<i>No change in species numbers</i>	<i>No change in species numbers</i>
<b>Enforcement</b>	<i>Two additional patrols</i>	<i>Two additional patrols</i>
<b>Travel Cost / Day</b>	<i>10% less than your current total cost per day</i>	<i>Your current total cost per day</i>

Which trip do you prefer? (check only one box below)

Trip A       Trip B       I would not take either trip



**E3.** If you were planning a snorkel / SCUBA dive trip to the Florida Keys, which trip would you prefer: Trip A, Trip B, or neither?

<b>ATTRIBUTE</b>	<b>Trip A</b>	<b>Trip B</b>
<b>Number of Snorkelers / Divers</b>	<i>30% fewer snorkelers / divers</i>	<i>15% fewer snorkelers / divers</i>
<b>Site Settings</b>	<i>Mix of coral and algae cover</i>	<i>High live coral cover</i>
<b>Restrictions</b>	<i>No area closed</i>	<i>25% of area closed</i>
<b>Number of Fish</b>	<i>60% more fish</i>	<i>40% more fish</i>
<b>Size of Fish</b>	<i>40% more larger fish</i>	<i>60% more larger fish</i>
<b>Species</b>	<i>Fewer species</i>	<i>Many species</i>
<b>Enforcement</b>	<i>Two additional patrols</i>	<i>Two additional patrols</i>
<b>Travel Cost / Day</b>	<i>Your current total cost per day</i>	<i>10% less than your current total cost per day</i>

Which trip do you prefer? (check only one box below)

Trip A       Trip B       I would not take either trip

**E4.** If you were planning a snorkel / SCUBA dive trip to the Florida Keys, which trip would you prefer: Trip A, Trip B, or neither?

<b>ATTRIBUTE</b>	<b>Trip A</b>	<b>Trip B</b>
<b>Number of Snorkelers / Divers</b>	<i>The usual number of other snorkelers / divers at the site</i>	<i>The usual number of other snorkelers / divers at the site</i>
<b>Site Settings</b>	<i>High algae cover</i>	<i>Mix of coral and algae cover</i>
<b>Restrictions</b>	<i>25% of area closed</i>	<i>25% of area closed</i>
<b>Number of Fish</b>	<i>No increase in numbers of fish</i>	<i>40% more fish</i>
<b>Size of Fish</b>	<i>40% more larger fish</i>	<i>20% more larger fish</i>
<b>Species</b>	<i>Fewer species</i>	<i>Fewer species</i>
<b>Enforcement</b>	<i>No additional patrols</i>	<i>One additional patrol</i>
<b>Travel Cost / Day</b>	<i>10% more than your current total cost per day</i>	<i>Your current total cost per day</i>

Which trip do you prefer? (check only one box below)

Trip A       Trip B       I would not take either trip

**E5.** If you were planning a snorkel / SCUBA dive trip to the Florida Keys, which trip would you prefer: Trip A, Trip B, or neither?

<b>ATTRIBUTE</b>	<b>Trip A</b>	<b>Trip B</b>
<b>Number of Snorkelers / Divers</b>	<i>30% fewer snorkelers / divers</i>	<i>15% fewer snorkelers / divers</i>
<b>Site Settings</b>	<i>Mix of coral and algae cover</i>	<i>Mix of coral and algae cover</i>
<b>Restrictions</b>	<i>50% of area closed</i>	<i>50% of area closed</i>
<b>Number of Fish</b>	<i>60% more fish</i>	<i>No increase in numbers of fish</i>
<b>Size of Fish</b>	<i>60% more larger fish</i>	<i>20% more larger fish</i>
<b>Species</b>	<i>Many species</i>	<i>No change in species numbers</i>
<b>Enforcement</b>	<i>No additional patrols</i>	<i>No additional patrols</i>
<b>Travel Cost / Day</b>	<i>Your current total cost per day</i>	<i>Your current total cost per day</i>

Which trip do you prefer? (check only one box below)

Trip A       Trip B       I would not take either trip

**E6.** If you were planning a snorkel / SCUBA dive trip to the Florida Keys, which trip would you prefer: Trip A, Trip B, or neither?

<b>ATTRIBUTE</b>	<b>Trip A</b>	<b>Trip B</b>
<b>Number of Snorkelers / Divers</b>	<i>15% fewer snorkelers / divers</i>	<i>The usual number of other snorkelers / divers at the site</i>
<b>Site Settings</b>	<i>Mix of coral and algae cover</i>	<i>High live coral cover</i>
<b>Restrictions</b>	<i>75% of area closed</i>	<i>No area closed</i>
<b>Number of Fish</b>	<i>40% more fish</i>	<i>20% more fish</i>
<b>Size of Fish</b>	<i>40% more larger fish</i>	<i>40% more larger fish</i>
<b>Species</b>	<i>No change in species numbers</i>	<i>No change in species numbers</i>
<b>Enforcement</b>	<i>No additional patrols</i>	<i>Two additional patrols</i>
<b>Travel Cost / Day</b>	<i>10% more than your current total cost per day</i>	<i>10% less than your current total cost per day</i>

Which trip do you prefer? (check only one box below)

Trip A       Trip B       I would not take either trip

E7. If you were planning a snorkel / SCUBA dive trip to the Florida Keys, which trip would you prefer: Trip A, Trip B, or neither?

<b>ATTRIBUTE</b>	<b>Trip A</b>	<b>Trip B</b>
<b>Number of Snorkelers / Divers</b>	<i>30% fewer snorkelers / divers</i>	<i>The usual number of other snorkelers / divers at the site</i>
<b>Site Settings</b>	<i>High live coral cover</i>	<i>High algae cover</i>
<b>Restrictions</b>	<i>25% of area closed</i>	<i>75% of area closed</i>
<b>Number of Fish</b>	<i>20% more fish</i>	<i>No increase in numbers of fish</i>
<b>Size of Fish</b>	<i>No increase in larger fish</i>	<i>60% more larger fish</i>
<b>Species</b>	<i>Many species</i>	<i>No change in species numbers</i>
<b>Enforcement</b>	<i>One additional patrol</i>	<i>No additional patrols</i>
<b>Travel Cost / Day</b>	<i>Your current total cost per day</i>	<i>10% more than your current total cost per day</i>

Which trip do you prefer? (check only one box below)

Trip A       Trip B       I would not take either trip

E8. If you were planning a snorkel / SCUBA dive trip to the Florida Keys, which trip would you prefer: Trip A, Trip B, or neither?

<b>ATTRIBUTE</b>	<b>Trip A</b>	<b>Trip B</b>
<b>Number of Snorkelers / Divers</b>	<i>The usual number of other snorkelers / divers at the site</i>	<i>30% fewer snorkelers / divers</i>
<b>Site Settings</b>	<i>High live coral cover</i>	<i>High live coral cover</i>
<b>Restrictions</b>	<i>50% of area closed</i>	<i>50% of area closed</i>
<b>Number of Fish</b>	<i>40% more fish</i>	<i>20% more fish</i>
<b>Size of Fish</b>	<i>20% more larger fish</i>	<i>60% more larger fish</i>
<b>Species</b>	<i>Many species</i>	<i>Many species</i>
<b>Enforcement</b>	<i>Two additional patrols</i>	<i>One additional patrol</i>
<b>Travel Cost / Day</b>	<i>10% more than your current total cost per day</i>	<i>Your current total cost per day</i>

Which trip do you prefer? (check only one box below)

Trip A       Trip B       I would not take either trip

**Recreational Fisher**

If not a Recreational fisher in the Florida Keys, GO to page 27 Part F.

Please think about a recreational fishing experience in the Florida Keys when answering the questions on the following pages. You will be offered eight (8) choices of two fishing trips. Each choice has different features for you to evaluate. Please read each choice carefully. Although they may look similar, trips in each question differ in at least one way.

There is an example below to assist you. Please note the following definitions before reviewing the example.

- Number of Recreational Fishing Boats- the number of recreational fishing boats near you at any one time
- Number of Non-fishing Boats- the number of non-fishing boats near you at any one time
- Restrictions- the number of reefs closed to fishing per zone (upper Keys, middle Keys, lower Keys)
- Number of Fish Species- the amount of different kinds of fish species caught in a trip
- Number of Fish- the overall amount of fish caught on a trip
- Size of Fish- the number of legal sized fish caught on a trip
- Travel cost / day – Travel cost that an angler spends for a fishing trip per day (including gas and other trip expenses)

**Example**

Suppose that you could choose from the recreational fishing opportunities described below. Which of these fishing trips would you prefer?

<b>ATTRIBUTE</b>	<b>Trip A</b>	<b>Trip B</b>
<b>Number of Recreational Fishing Boats</b>	<i>30% fewer boats</i>	<i>The usual number of other boats near the location</i>
<b>Number of Non-fishing Boats</b>	<i>The usual number of other boats near the location</i>	<i>30% fewer boats</i>
<b>Restrictions</b>	<i>25% of area closed</i>	<i>25% of area closed</i>
<b>Number of Species</b>	<i>No change in species numbers</i>	<i>Fewer species fish caught</i>
<b>Number of fish</b>	<i>10% more fish caught</i>	<i>30% more fish caught</i>
<b>Size of Fish</b>	<i>60% more keepers</i>	<i>20% more keepers</i>
<b>Travel Cost / Day</b>	<i>10% more than your current total cost per day</i>	<i>10% less than your current total cost per day</i>

Which trip do you prefer? (check only one box below)

Trip A

Trip B

I would not take either trip

**E9.** Suppose that you could choose from the recreational fishing opportunities described below. Which of these fishing trips would you prefer?

<b>ATTRIBUTE</b>	<b>Trip A</b>	<b>Trip B</b>
<b>Number of Recreational Fishing Boats</b>	<i>15% fewer boats</i>	<i>The usual number of other boats near the location</i>
<b>Number of Non-fishing Boats</b>	<i>The usual number of other boats near the location</i>	<i>The usual number of other boats near the location</i>
<b>Restrictions</b>	<i>No area closed</i>	<i>75% of area closed</i>
<b>Number of Species</b>	<i>No change in species numbers</i>	<i>Fewer species fish caught</i>
<b>Number of fish</b>	<i>30% more fish caught</i>	<i>20% more fish caught</i>
<b>Size of Fish</b>	<i>20% more keepers</i>	<i>20% more keepers</i>
<b>Travel Cost / Day</b>	<i>10% more than your current total cost per day</i>	<i>10% more than your current total cost per day</i>

Which trip do you prefer? (check only one box below)

Trip A       Trip B       I would not take either trip

**E10.** Suppose that you could choose from the recreational fishing opportunities described below. Which of these fishing trips would you prefer?

<b>ATTRIBUTE</b>	<b>Trip A</b>	<b>Trip B</b>
<b>Number of Recreational Fishing Boats</b>	<i>30% fewer boats</i>	<i>15% fewer boats</i>
<b>Number of Non-fishing Boats</b>	<i>The usual number of other boats near the location</i>	<i>15% fewer boats</i>
<b>Restrictions</b>	<i>No area closed</i>	<i>50% of area closed</i>
<b>Number of Species</b>	<i>No change in species numbers</i>	<i>No change in species numbers</i>
<b>Number of fish</b>	<i>20% more fish caught</i>	<i>No increase in numbers of fish caught</i>
<b>Size of Fish</b>	<i>60% more keepers</i>	<i>20% more keepers</i>
<b>Travel Cost / Day</b>	<i>Your current total cost per day</i>	<i>10% less than your current total cost per day</i>

Which trip do you prefer? (check only one box below)

Trip A       Trip B       I would not take either trip

**E11.** Suppose that you could choose from the recreational fishing opportunities described below. Which of these fishing trips would you prefer?

<b>ATTRIBUTE</b>	<b>Trip A</b>	<b>Trip B</b>
<b>Number of Recreational Fishing Boats</b>	<i>The usual number of other boats near the location</i>	<i>The usual number of other boats near the location</i>
<b>Number of Non-fishing Boats</b>	<i>15% fewer boats</i>	<i>30% fewer boats</i>
<b>Restrictions</b>	<i>No area closed</i>	<i>25% of area closed</i>
<b>Number of Species</b>	<i>More species fish caught</i>	<i>More species fish caught</i>
<b>Number of fish</b>	<i>No increase in numbers of fish caught</i>	<i>10% more fish caught</i>
<b>Size of Fish</b>	<i>No increase in the number of caught kept</i>	<i>20% more keepers</i>
<b>Travel Cost / Day</b>	<i>10% less than your current total cost per day</i>	<i>Your current total cost per day</i>

Which trip do you prefer? (check only one box below)

- Trip A     
 Trip B     
 I would not take either trip

**E12.** Suppose that you could choose from the recreational fishing opportunities described below. Which of these fishing trips would you prefer?

<b>ATTRIBUTE</b>	<b>Trip A</b>	<b>Trip B</b>
<b>Number of Recreational Fishing Boats</b>	<i>The usual number of other boats near the location</i>	<i>15% fewer boats</i>
<b>Number of Non-fishing Boats</b>	<i>30% fewer boats</i>	<i>15% fewer boats</i>
<b>Restrictions</b>	<i>25% of area closed</i>	<i>No area closed</i>
<b>Number of Species</b>	<i>More species fish caught</i>	<i>Fewer species fish caught</i>
<b>Number of fish</b>	<i>10% more fish caught</i>	<i>No increase in numbers of fish caught</i>
<b>Size of Fish</b>	<i>20% more keepers</i>	<i>No increase in the number of caught kept</i>
<b>Travel Cost / Day</b>	<i>10% more than your current total cost per day</i>	<i>Your current total cost per day</i>

Which trip do you prefer? (check only one box below)

- Trip A     
 Trip B     
 I would not take either trip

**E13.** Suppose that you could choose from the recreational fishing opportunities described below. Which of these fishing trips would you prefer?

<b>ATTRIBUTE</b>	<b>Trip A</b>	<b>Trip B</b>
<b>Number of Recreational Fishing Boats</b>	<i>15% fewer boats</i>	<i>The usual number of other boats near the location</i>
<b>Number of Non-fishing Boats</b>	<i>30% fewer boats</i>	<i>The usual number of other boats near the location</i>
<b>Restrictions</b>	<i>50% of area closed</i>	<i>25% of area closed</i>
<b>Number of Species</b>	<i>More species fish caught</i>	<i>More species fish caught</i>
<b>Number of fish</b>	<i>10% more fish caught</i>	<i>No increase in numbers of fish caught</i>
<b>Size of Fish</b>	<i>60% more keepers</i>	<i>60% more keepers</i>
<b>Travel Cost / Day</b>	<i>10% less than your current total cost per day</i>	<i>10% less than your current total cost per day</i>

Which trip do you prefer? (check only one box below)

Trip A       Trip B       I would not take either trip

**E14.** Suppose that you could choose from the recreational fishing opportunities described below. Which of these fishing trips would you prefer?

<b>ATTRIBUTE</b>	<b>Trip A</b>	<b>Trip B</b>
<b>Number of Recreational Fishing Boats</b>	<i>The usual number of other boats near the location</i>	<i>30% fewer boats</i>
<b>Number of Non-fishing Boats</b>	<i>15% fewer boats</i>	<i>The usual number of other boats near the location</i>
<b>Restrictions</b>	<i>50% of area closed</i>	<i>75% of area closed</i>
<b>Number of Species</b>	<i>No change in species numbers</i>	<i>More species fish caught</i>
<b>Number of fish</b>	<i>20% more fish caught</i>	<i>30% more fish caught</i>
<b>Size of Fish</b>	<i>40% more keepers</i>	<i>60% more keepers</i>
<b>Travel Cost / Day</b>	<i>Your current total cost per day</i>	<i>Your current total cost per day</i>

Which trip do you prefer? (check only one box below)

Trip A       Trip B       I would not take either trip

**E15.** Suppose that you could choose from the recreational fishing opportunities described below. Which of these fishing trips would you prefer?

<b>ATTRIBUTE</b>	<b>Trip A</b>	<b>Trip B</b>
<b>Number of Recreational Fishing Boats</b>	<i>30% fewer boats</i>	<i>30% fewer boats</i>
<b>Number of Non-fishing Boats</b>	<i>30% fewer boats</i>	<i>30% fewer boats</i>
<b>Restrictions</b>	<i>50% of area closed</i>	<i>50% of area closed</i>
<b>Number of Species</b>	<i>Fewer species fish caught</i>	<i>More species fish caught</i>
<b>Number of fish</b>	<i>No increase in numbers of fish caught</i>	<i>30% more fish caught</i>
<b>Size of Fish</b>	<i>20% more keepers</i>	<i>No increase in the number of caught kept</i>
<b>Travel Cost / Day</b>	<i>Your current total cost per day</i>	<i>10% more than your current total cost per day</i>

Which trip do you prefer? (check only one box below)

Trip A       Trip B       I would not take either trip

**E16.** Suppose that you could choose from the recreational fishing opportunities described below. Which of these fishing trips would you prefer?

<b>ATTRIBUTE</b>	<b>Trip A</b>	<b>Trip B</b>
<b>Number of Recreational Fishing Boats</b>	<i>15% fewer boats</i>	<i>30% fewer boats</i>
<b>Number of Non-fishing Boats</b>	<i>15% fewer boats</i>	<i>15% fewer boats</i>
<b>Restrictions</b>	<i>50% of area closed</i>	<i>No area closed</i>
<b>Number of Species</b>	<i>Fewer species fish caught</i>	<i>No change in species numbers</i>
<b>Number of fish</b>	<i>30% more fish caught</i>	<i>10% more fish caught</i>
<b>Size of Fish</b>	<i>No increase in the number of keeps caught</i>	<i>40% more keepers</i>
<b>Travel Cost / Day</b>	<i>10% more than your current total cost per day</i>	<i>10% less than your current total cost per day</i>

Which trip do you prefer? (check only one box below)

Trip A       Trip B       I would not take either trip



## Part F: Demographic Profile

In this final section, we need to know information about you and your household to make sure we have a representative sample of Monroe County residents.

Again, your privacy will be protected and any information identifying you or your household will not be revealed to anyone.

**F1. How many people in your household are permanent residents of Monroe County, Florida?**

\_\_\_\_\_ number of people

**F2. How many of these people are at least 16 years of age?** \_\_\_\_\_ number of people

**F3. What is the closest mile marker to your residence?** \_\_\_\_\_ mile marker number

**F4. Do you have access to the water from your residence?**  Yes  No

**F5. Do you own a boat?**  Yes  No

**F6. How many years have you lived in Monroe County?** \_\_\_\_\_ number of years

**F7. In what year were you born?** \_\_\_\_\_ year

**F8. Are you Hispanic, Latino, or of Spanish origin?**  Yes  No

**F9. What race do you consider yourself?**

Please circle one or more of the letter(s) that best describes you

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

**F10. What is the highest level of education that you have completed?**

Please circle the letter of the category that best describes you

- A 8th Grade or Less
- B 9th to 11th Grade
- C 12th Grade, High School Grad, GED
- D 13 to 15 Years (some college or vocational training)
- E College Graduate
- F Graduate School, Law School, Medical School

F11. What is your employment status?

Please circle the letter or letters of all those that apply

- |   |                    |   |                   |
|---|--------------------|---|-------------------|
| A | Unemployed         | E | Student           |
| B | Employed full-time | F | Homemaker         |
| C | Employed part-time | G | None of the above |
| D | Retired            |   | (specify) _____   |

F12. Do you work outside Monroe County?  Yes  No

F13. What is your zip code? \_\_\_\_\_

F14. What is your total household income, before taxes.

Please circle the letter corresponding to the category that best describes your household

- |   |                      |   |                        |
|---|----------------------|---|------------------------|
| A | Under \$5,000        | I | \$40,000 to \$44,999   |
| B | \$5,000 to \$9,999   | J | \$45,000 to \$49,999   |
| B | \$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 |   |                        |

# *Monroe County Resident Survey*

**Your answers are voluntary and confidential.**

Your name will never be released to anyone unless otherwise required by law. After the completion of the project all materials identifying you as an individual will be destroyed.

This is a cooperative research project of the Monroe County Tourist Development Council and the National Oceanic and Atmospheric Administration. Public reporting burden for this collection of information is estimated to average 1 hour including time for reviewing instructions, searching existing data sources, gathering and maintaining the data need, 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 this burden, to U.S. Department of Commerce, Clearance Officer, Office of Chief Information Officer, Rm. 6625, 14<sup>th</sup> and Constitution Avenue NW, Washington, DC 20230. Notwithstanding any other provisions of the law, no person is required to respond to, nor shall any person be subject to penalty for failure to comply with, a collection of information subject to requirements of the Paperwork Reduction Act, unless that collection of information displays a currently valid OMB Control Number.



## Resident Survey

1. Overall, how would you rate Monroe County as a place to live?

- a. Excellent
- b. Good
- c. Fair
- d. Poor

Please circle letter corresponding to your answer

2. There are many reasons that people choose to live where they do in Florida. What are the two most important reasons you chose to live in Monroe County?

- a. No special reason
- b. Born here
- c. Job or business
- d. Climate
- e. Environment
- f. Access to natural resources, such as natural settings and wildlife
- g. Opportunities for water activities, such as fishing or diving
- h. Low crime rate
- i. Cultural activities
- j. Retirement
- k. Some other reason (specify) \_\_\_\_\_

Please circle letters corresponding to the two most important reasons

3. In the past 12 months, have you done any outdoor recreation activities in the Florida Keys?

- a. Yes (Go to Part A)
- b. No (Go to Part G)

Please use the enclosed White Card-Activities List to see what we mean by outdoor recreation



**A5. What would you say is the most important activity you did in the Florida Keys?**

**Most Important Activity** \_\_\_\_\_ (Activity List Number)

**No Activity Most Important (fill in box)**

**A6. On how many different days did you participate in outdoor recreation activities outside the Florida Keys during the past 12 months?** \_\_\_\_\_ (# of days)



**Part B: Reef use in the Florida Keys during the past 12 months. Both artificial and natural reefs.**

Please use Blue Card with Activities List for reef use and map of the Florida Keys in answering Part B

- B1. Which activities did you or someone in your household do on either artificial or natural reefs during the past 12 months in the Upper Keys, Islamorada, Marathon, Lower Keys and Key West?**

If you did not do anything in a region, check the box indicating no reef use in the region

- B2. Please fill in the circle for each activity you, yourself, did during the past 12 months in the Upper Keys, Islamorada, Marathon, Lower Keys and Key West.**
- B3. How many others in your household did each activity on the reefs in the Upper Keys, Islamorada, Marathon, Lower Keys and Key West during the past 12 months?**
- B4. On how many different days did you, yourself, participate in each activity on the reefs in the Upper Keys, Islamorada, Marathon, Lower Keys and Key West during the past 12 months?**
- B5. On how many different days did you, yourself, participate in each activity on the artificial reefs in the Upper Keys, Islamorada, Marathon, Lower Keys and Key West during the past 12 months?**
- B6. On how many different days did you, yourself, participate in each activity on the natural reefs in the Upper Keys, Islamorada, Marathon, Lower Keys and Key West during the past 12 months?**

Note: If you did part of a day on an artificial reef and part of a day on a natural reef, count one whole day on each type of reef

- B7. How many different dives did you, yourself, make for each type of diving activity you did on the reefs in the Upper Keys, Islamorada, Marathon, Lower Keys and Key West during the past 12 months?**

Diving activities include all snorkeling and scuba diving activities on the Blue Card-Activities List (Reef)

A dive is defined as an entry and exit from the water to snorkel or scuba dive

- B8. How many different dives did you, yourself, make for each type of diving activity you did on the artificial reefs in the Upper Keys, Islamorada, Marathon, Lower Keys and Key West during the past 12 months?**
- B9. How many different dives did you, yourself, make for each type of diving activity you did on the natural reefs in the Upper Keys, Islamorada, Marathon, Lower Keys and Key West during the past 12 months?**

Please refer to Questions B1 - B9 when filling in the tables on the following two pages

There is one table for each of the five regions of the Florida Keys (Upper Keys, Islamorada, Marathon, Lower Keys and Key West)

No Reef Use

Upper Keys

B1	B2	B3	B4	B5	B6	B7	B8	B9
Activity	Resp.	# Others	Respondent # of days	# days artificial	# days natural	Respondent # dives	# dives artificial	# dives natural
_____	○	_____	_____	_____	_____	_____	_____	_____
_____	○	_____	_____	_____	_____	_____	_____	_____
_____	○	_____	_____	_____	_____	_____	_____	_____
_____	○	_____	_____	_____	_____	_____	_____	_____
_____	○	_____	_____	_____	_____	_____	_____	_____
_____	○	_____	_____	_____	_____	_____	_____	_____
_____	○	_____	_____	_____	_____	_____	_____	_____
_____	○	_____	_____	_____	_____	_____	_____	_____
_____	○	_____	_____	_____	_____	_____	_____	_____

No Reef Use

Islamorada

B1	B2	B3	B4	B5	B6	B7	B8	B9
Activity	Resp.	# Others	Respondent # of days	# days artificial	# days natural	Respondent # dives	# dives artificial	# dives natural
_____	○	_____	_____	_____	_____	_____	_____	_____
_____	○	_____	_____	_____	_____	_____	_____	_____
_____	○	_____	_____	_____	_____	_____	_____	_____
_____	○	_____	_____	_____	_____	_____	_____	_____
_____	○	_____	_____	_____	_____	_____	_____	_____
_____	○	_____	_____	_____	_____	_____	_____	_____
_____	○	_____	_____	_____	_____	_____	_____	_____
_____	○	_____	_____	_____	_____	_____	_____	_____
_____	○	_____	_____	_____	_____	_____	_____	_____

No Reef Use

Marathon

B1	B2	B3	B4	B5	B6	B7	B8	B9
Activity	Resp.	# Others	Respondent # of days	# days artificial	# days natural	Respondent # dives	# dives artificial	# dives natural
_____	○	_____	_____	_____	_____	_____	_____	_____
_____	○	_____	_____	_____	_____	_____	_____	_____
_____	○	_____	_____	_____	_____	_____	_____	_____
_____	○	_____	_____	_____	_____	_____	_____	_____
_____	○	_____	_____	_____	_____	_____	_____	_____
_____	○	_____	_____	_____	_____	_____	_____	_____
_____	○	_____	_____	_____	_____	_____	_____	_____
_____	○	_____	_____	_____	_____	_____	_____	_____
_____	○	_____	_____	_____	_____	_____	_____	_____

No Reef Use

Lower Keys

B1	B2	B3	B4	B5	B6	B7	B8	B9
Activity	Resp.	# Others	Respondent # of days	# days artificial	# days natural	Respondent # dives	# dives artificial	# dives natural
_____	○	_____	_____	_____	_____	_____	_____	_____
_____	○	_____	_____	_____	_____	_____	_____	_____
_____	○	_____	_____	_____	_____	_____	_____	_____
_____	○	_____	_____	_____	_____	_____	_____	_____
_____	○	_____	_____	_____	_____	_____	_____	_____
_____	○	_____	_____	_____	_____	_____	_____	_____
_____	○	_____	_____	_____	_____	_____	_____	_____
_____	○	_____	_____	_____	_____	_____	_____	_____
_____	○	_____	_____	_____	_____	_____	_____	_____

No Reef Use

Key West

B1	B2	B3	B4	B5	B6	B7	B8	B9
Activity	Resp.	# Others	Respondent # of days	# days artificial	# days natural	Respondent # dives	# dives artificial	# dives natural
_____	○	_____	_____	_____	_____	_____	_____	_____
_____	○	_____	_____	_____	_____	_____	_____	_____
_____	○	_____	_____	_____	_____	_____	_____	_____
_____	○	_____	_____	_____	_____	_____	_____	_____
_____	○	_____	_____	_____	_____	_____	_____	_____
_____	○	_____	_____	_____	_____	_____	_____	_____
_____	○	_____	_____	_____	_____	_____	_____	_____
_____	○	_____	_____	_____	_____	_____	_____	_____
_____	○	_____	_____	_____	_____	_____	_____	_____

## Part C: Specialization

In this section, we are interested in learning more about your primary activity. Please answer the following questions based on the response you gave to QUESTION A5.

For the four questions below, please read the four choices and circle the one answer that best fits you for that question.

### C1. When I participate in my primary activity, I feel like:

- 1 a beginner. I don't really feel like I am part of the activity scene.
- 2 an occasional or irregular participant. Sometimes it is fun, entertaining or rewarding to do my activity.
- 3 a habitual and regular participant in the activity.
- 4 an insider to the sport. The activity is an important part of who I am.

### C2. During my activity, I can best be described as:

- 1 having very little understanding of the activity. I am often unsure about how to do certain things when I go.
- 2 having some understanding of the activity, but still in the process of learning more about the sport. I am becoming more familiar and comfortable with the activity.
- 3 being comfortable with the sport. I have a good understanding of what I can do, and how to do it.
- 4 a knowledgeable expert in the sport. I encourage, teach and enhance opportunities for others who are interested in the activity.

### C3. My relationships with others who do the activity are:

- 1 not established. I really don't know any other people who do the activity.
- 2 very limited. I know some others in the activity by sight and sometimes talk with them, but I don't know their names.
- 3 one of familiarity. I know the names of others who do the activity, and often speak with them.
- 4 close. I have personal and close relationships with others in the activity. These friendships often revolve around the activity.

### C4. My commitment to the activity is:

- 1 very slight. I have very little connection to the activity. I may or may not continue to participate in the sport in the future.
- 2 moderate. I will continue to do it as it is entertaining and provides the benefits I want.
- 3 fairly strong. I have a sense of being a member of the activity, and it is likely that I will continue to do it for a long time.
- 4 very strong. I am totally committed to the activity. I encourage others to participate in the sport and seek to ensure the activity continues into the future.

### C5. If you had to replace all of the equipment that you currently own for your primary activity with similar equipment, how much would it cost to replace?

\$ \_\_\_\_\_ AMOUNT TO REPLACE PRIMARY ACTIVITY EQUIPMENT

**C6. To what extent do you make use of the following for current information about your primary activity? Please circle the number that indicates your extent of use for each source of information.**

	No Use	Almost no use	A little use	Some use	A lot of use
a. Talking with others who participate in the activity.....	1	2	3	4	5
b. Magazines.....	1	2	3	4	5
c. Government agency publications.....	1	2	3	4	5
d. Conservation organization publications.....	1	2	3	4	5
e. Newspapers.....	1	2	3	4	5
f. Diving shops/companies.....	1	2	3	4	5
g. Club meetings.....	1	2	3	4	5
h. Television.....	1	2	3	4	5
i. Radio.....	1	2	3	4	5
j. Internet.....	1	2	3	4	5

**C7. Below is a list of reasons why people engage in recreation activities. Please circle the number that indicates how important each item is to you as a reason for participating in your primary activity.**

	Not at all important	Slightly important	Moderately important	Very important	Extremely important
a. To be outdoors.....	1	2	3	4	5
b. For family recreation.....	1	2	3	4	5
c. To experience new and different things.....	1	2	3	4	5
d. For relaxation.....	1	2	3	4	5
e. To be close to the water.....	1	2	3	4	5
f. To get away from the demands of other people.....	1	2	3	4	5
g. To be with friends.....	1	2	3	4	5
h. To develop my skills.....	1	2	3	4	5
i. To get away from the regular routine.....	1	2	3	4	5
j. To experience adventure and excitement.....	1	2	3	4	5
k. To experience natural surroundings.....	1	2	3	4	5

## Part D: Substitution

There are many places to engage in snorkeling/SCUBA diving activities. In the next several questions, we are attempting to understand the reason you may choose to snorkel/SCUBA dive on one reef versus another, or if necessary, choose to engage in activities other than snorkeling/SCUBA diving in the Florida Keys.

When answering the following questions, please think about a favorite or most common reef that you dive on in the Florida Keys. If you do not have a favorite or most common reef that you dive on in the Keys, please think about the last reef that you dove on in the Florida Keys. Read the choices and circle the number that indicates your answer for that question.

**D1. Please circle which reef you are thinking of when responding to the following questions. (Please circle only one answer)**

- 1 Favorite reef to snorkel/dive on
- 2 Most common reef I snorkel/dive on
- 3 Most recent reef I snorkeled/dove on

**D2. Is this reef a:**

- 1 Natural coral reef
- 2 Artificial reef

**D3. Are you able to recall the name of this reef? If so, please list in below.**

\_\_\_\_\_ reef

**D4. Imagine that you discovered that you could not snorkel/SCUBA dive at this reef (from question #D1 above) during your next planned snorkel/SCUBA dive trip. What would you do? (Please circle only one answer)**

- 1 I would still snorkel/ SCUBA dive, but elsewhere in the Florida Keys
- 2 I would still snorkel/ SCUBA dive, but at a location outside of the Florida Keys
- 3 I would temporarily participate in a different activity in the Florida Keys
- 4 I would temporarily participate in a different activity, but outside the Florida Keys

**D5. Imagine that you discovered that you could not snorkel/SCUBA dive at this reef (from question #D1 above) for the next five years. What would you do?**

- 1 I would still snorkel/ SCUBA dive, but elsewhere in the Florida Keys
- 2 I would still snorkel/ SCUBA dive, but at a location outside of the Florida Keys
- 3 I would permanently participate in a different activity in the Florida Keys
- 4 I would permanently participate in a different activity, but outside the Florida Keys

**D6. Imagine that you discovered during your next snorkel/SCUBA dive trip that this reef (from question #D1 above) was more crowded than you normally find acceptable. What would you do?**

- 1 I would make an exception and still snorkel/ SCUBA dive on this reef
- 2 I would still snorkel/ SCUBA dive, but elsewhere in the Florida Keys
- 3 I would temporarily participate in a different activity in the Florida Keys
- 4 I would temporarily participate in a different activity, but outside the Florida Keys

**D7. Imagine that you discovered during your next snorkel/SCUBA dive trip that this reef (from question #D1 above) was more ecologically damaged (e.g., there wasn't enough healthy coral or fish) than normally find acceptable. What would you do?**

- 1 I would make an exception and snorkel/ SCUBA dive on this reef
- 2 I would still snorkel/ SCUBA dive, but elsewhere in the Florida Keys
- 3 I would temporarily participate in a different activity in the Florida Keys
- 4 I would temporarily participate in a different activity, but outside the Florida Keys

**D8. Imagine that you discovered during your next snorkel/SCUBA dive trip that user groups with whom you experience conflict are using this reef (from question #D1 above). What would you do?**

- 1 I would still snorkel/ SCUBA dive on this reef
- 2 I would still snorkel/ SCUBA dive, but elsewhere in the Florida Keys
- 3 I would temporarily participate in a different activity in the Florida Keys
- 4 I would temporarily participate in a different activity, but outside the Florida Keys

**D9. If you could not snorkel/SCUBA dive at this reef (from question #D1 above), how many other Florida Keys reefs do you think can offer you just as good an experience as your favorite reefs?**

\_\_\_\_\_ number of other Florida Keys reefs

Don't Know

**D10. If you could not snorkel/SCUBA dive at this reef (from question #D1 above), how many other Florida Keys reefs do you think can offer you a similar, but not quite as good, experience?**

\_\_\_\_\_ number of other Florida Keys reefs

Don't Know

**D11. Please rate how similar you think the snorkeling/SCUBA diving experience is at your best similar reef compared to this reef (from question #D1 above).**

1                      2                      3                      4                      5                      6                      7  
Not as Good                      Equivalent                      Better

**D12. There are many things that you might think about or consider when deciding to substitute one reef for another when snorkeling or SCUBA diving. Please indicate how important each of the following factors is in terms of deciding whether or not you would choose to snorkel/SCUBA dive at a substitute reef.**

	Not at all important	Somewhat important	Moderately important	Very important	Extremely important
a) The quality of other reefs.....	1	2	3	4	5
b) The difficulty of the diving conditions on other reefs.....	1	2	3	4	5
c) The distance to other reefs.....	1	2	3	4	5
d) My familiarity with various dive shops.....	1	2	3	4	5
e) The adequacy of my boat to get to other reefs.....	1	2	3	4	5
f) The number of fish at other reefs.....	1	2	3	4	5
g) The cost of fuel to get to other reefs.....	1	2	3	4	5
h) The level of crowding at other reefs.....	1	2	3	4	5
i) The amount of live coral at other reefs.....	1	2	3	4	5
j) Area closures at desirable reef locations.....	1	2	3	4	5
k) The presence of other groups that I don't like.....	1	2	3	4	5
l) Other.....	1	2	3	4	5

**D13. If you could not go snorkeling/SCUBA diving, either in the Florida Keys or elsewhere, are there any other recreation activities in the Florida Keys that would provide you with the same satisfaction and enjoyment that you receive from going snorkeling/SCUBA diving?**

Yes --- If yes, please go to question # D14 below

No --- If no, please go to question # D15 below

**D14. If you answered “yes” to question D13, please list up to three specific activities that you consider to be substitutes for snorkeling/SCUBA diving.**

\_\_\_\_\_ activity

\_\_\_\_\_ activity

\_\_\_\_\_ activity



**D15. There are reasons why people cannot participate as often as they would like in an activity they enjoy doing. Please indicate the extent to which you agree or disagree with each of the following statements as they relate to your ability to snorkel/SCUBA dive in the Florida Keys as often as you would like.**

	Completely disagree	Disagree	Neutral	Agree	Completely agree
a) I don't have enough leisure time.....	1	2	3	4	5
b) The equipment is too expensive.....	1	2	3	4	5
c) The cost of travel is too high.....	1	2	3	4	5
d) It is difficult to find snorkel/SCUBA diving partners.....	1	2	3	4	5
e) Fuel prices for my boat are too high.....	1	2	3	4	5
f) Snorkel/SCUBA diving areas are too crowded.....	1	2	3	4	5
g) Too many snorkel/SCUBA diving areas are off-limits.....	1	2	3	4	5
h) Dive boats are too expensive .....	1	2	3	4	5
i) Other.....	1	2	3	4	5

**D16. Below is a list of reasons why people snorkel/SCUBA dive in the Florida Keys. Please circle the number that indicates how important each item is to you as a reason for snorkel/SCUBA diving in the Florida Keys.**

	Not at all important	Somewhat important	Moderately important	Very important	Extremely important
a) To develop my skills.....	1	2	3	4	5
b) To experience excitement.....	1	2	3	4	5
c) For family recreation.....	1	2	3	4	5
d) To be with friends.....	1	2	3	4	5
e) To be outdoors.....	1	2	3	4	5
f) To experience new and different things.....	1	2	3	4	5
g) For the experience of the dive.....	1	2	3	4	5
h) To get away from the demands of other people.....	1	2	3	4	5
i) To get away from the regular routine.....	1	2	3	4	5
j) To see diverse underwater life.....	1	2	3	4	5
k) To teach underwater skills to other people.....	1	2	3	4	5
l) To obtain additional dive ratings.....	1	2	3	4	5
m) To experience natural surroundings.....	1	2	3	4	5
n) For solitude.....	1	2	3	4	5
o) For relaxation.....	1	2	3	4	5
p) For the challenge of the dive.....	1	2	3	4	5

There are many places to engage in fishing. In the next several questions, we are attempting to understand the reason you may choose to fish in one location versus another, or if necessary, engage in an activity other than fishing in the Florida Keys.

When answering the following questions, please think about a favorite or most common area that you fish in off the Florida Keys. If you do not have a favorite or most common area that you fish in off the Keys, please think about the last area that you fished in off the Florida Keys.

**D17. Please indicate which reef you are thinking of when responding to the following questions. (Please circle only one answer)**

- 1 My favorite reef to fish at
- 2 The most common area I fish at
- 3 The most recent area I fished in

**D18. Is this area:**

- 1 A flat
- 2 A natural coral reef
- 3 Hawk Channel
- 4 An artificial reef
- 5 Other (please list) \_\_\_\_\_

**D19. Are you able to recall the name of this area? If so, please list it below.**

\_\_\_\_\_ area

**D20. Imagine that you discovered that you could not fish in this area (from question #D17 above) during your next planned fishing trip. What would you do? (Please circle only one answer)**

- 1 I would still fish, but elsewhere in the Florida Keys
- 2 I would still fish, but at a location outside of the Florida Keys
- 3 I would temporarily participate in a different activity in the Florida Keys
- 4 I would temporarily participate in a different activity, but outside the Florida Keys

**D21. Imagine that you discovered that you could not fish in this area (from question #D17 above) for the next five years. What would you do?**

- 1 I would still fish, but elsewhere in the Florida Keys
- 2 I would still fish, but at a location outside of the Florida Keys
- 3 I would permanently participate in a different activity in the Florida Keys
- 4 I would permanently participate in a different activity, but outside the Florida Keys

**D22. Imagine that you discovered during your next fishing trip that this area (from question #D17 above) was more crowded than you normally find acceptable. What would you do?**

- 1 I would make an exception and still fish in this area
- 2 I would still fish, but elsewhere in the Florida Keys
- 3 I would temporarily participate in a different activity in the Florida Keys
- 4 I would temporarily participate in a different activity, but outside the Florida Keys

**D23. Imagine that you discovered during your next fishing trip that this area (from question #D17 above) was more ecologically damaged (e.g., there was no longer enough good fish habitat) than you normally find acceptable. What would you do?**

- 1 I would still fish in this area
- 2 I would still fish, but elsewhere in the Florida Keys
- 3 I would temporarily participate in a different activity in the Florida Keys
- 4 I would temporarily participate in a different activity, but outside the Florida Keys

**D24. Imagine that you discovered during your next fishing trip that other user groups with whom you experience conflict are using this area (from question #D17 above). What would you do?**

- 1 I would still fish in this area
- 2 I would still fish, but elsewhere in the Florida Keys
- 3 I would temporarily participate in a different activity in the Florida Keys
- 4 I would temporarily participate in a different activity, but outside the Florida Keys

**D25. If you could not fish in this area (from question #D17 above), how many other areas in the Florida Keys do you think can offer you an overall experience that is just as good?**

\_\_\_\_\_ number of other areas in the Florida Keys

Don't Know

**D26. If you could not fish in this area (from question #1 above), how many other areas in the Florida Keys do you think can offer you a similar, but not quite as good, overall experience?**

\_\_\_\_\_ number of other areas Florida Keys

Don't Know

**D27. Please rate how similar you think the fishing experience is at your best similar fishing area compared to this area.**

- 1                      2                      3                      4                      5                      6                      7  
Not as Good                      Equivalent                      Better

**D28. There are many things that you might think about or consider when deciding to substitute one fishing area for another. Please indicate how important each of the following factors is in terms of deciding whether or not you would choose to fish in a substitute area.**

	Not at all important	Slightly important	Moderately important	Very important	Extremely important
a) The number of fish at other areas.....	1	2	3	4	5
b) The difficulty of boating conditions.....	1	2	3	4	5
c) The distance to other areas.....	1	2	3	4	5
d) The charter boats and captains at other areas.....	1	2	3	4	5
e) The adequacy of my boat to get to other areas.....	1	2	3	4	5
f) The cost of fuel to get to other areas.....	1	2	3	4	5
g) The level of crowding at other areas.....	1	2	3	4	5
h) Area closures at desirable locations.....	1	2	3	4	5
i) The presence of other groups that I don't like.....	1	2	3	4	5
j) Other.....	1	2	3	4	5

**D29. If you could not go fishing, either in the Florida Keys or elsewhere, are there any other recreation activities in the Florida Keys that would provide you with the same satisfaction and enjoyment that you receive from going fishing?**

- Yes --- If yes, please go to question # D30 below
- No --- If no, please go to question # D31 below

**D30. If you answered “yes” to question D29, please list up to three specific activities that you consider to be substitutes for fishing in the Florida Keys.**

\_\_\_\_\_ activity

\_\_\_\_\_ activity

\_\_\_\_\_ activity

**D31. There are reasons why people cannot participate as often as they would like in an activity they enjoy doing. Please indicate the extent to which you agree or disagree with each of the following statements as they relate to your ability to fish in the Florida Keys as often as you would like.**

	Completely disagree	Disagree	Neutral	Agree	Completely agree
a) I don't have enough leisure time.....	1	2	3	4	5
b) The equipment is too expensive.....	1	2	3	4	5
c) The cost of travel is too high.....	1	2	3	4	5
d) It is difficult to find fishing partners.....	1	2	3	4	5
e) Fuel prices for my boat are too high.....	1	2	3	4	5
f) Fishing areas are too crowded.....	1	2	3	4	5
g) Too many fishing areas are off-limits.....	1	2	3	4	5
h) Fishing charters are too expensive.....	1	2	3	4	5
i) Other.....	1	2	3	4	5

**D32. Below is a list of reasons why people saltwater fish in the Florida Keys. Please circle the number that indicates how important each item is to you as a reason for saltwater fishing in the Florida Keys.**

	Not at all important	Somewhat important	Moderately important	Very important	Extremely important
a) To develop my skills.....	1	2	3	4	5
b) To experience excitement.....	1	2	3	4	5
c) For family recreation.....	1	2	3	4	5
d) To be with friends.....	1	2	3	4	5
e) To be outdoors.....	1	2	3	4	5
f) To experience new and different things.....	1	2	3	4	5
g) For the experience of the catch.....	1	2	3	4	5
h) To get away from the demands of other people.....	1	2	3	4	5
i) To get away from the regular routine.....	1	2	3	4	5
j) To catch a trophy fish.....	1	2	3	4	5
k) For the sport of fishing, not to obtain food to eat.....	1	2	3	4	5
l) For the fun of catching fish.....	1	2	3	4	5
m) To experience natural surroundings.....	1	2	3	4	5
n) For solitude.....	1	2	3	4	5
o) For relaxation.....	1	2	3	4	5
p) For the challenge of the catch.....	1	2	3	4	5
q) To obtain fish for eating, not for sport.....	1	2	3	4	5

## Part E: Management Alternatives

### Snorkeler / SCUBA diver

If not a snorkeler / SCUBA diver in the Florida Keys, but do recreational fishing, GO to page 22.

If not a snorkeler / SCUBA diver or recreational fisher in the Florida Keys, GO to page 27.

Please think about a recreational snorkeling / SCUBA diving experience on a reef in the Florida Keys when answering the questions on the following pages. You will be offered eight (8) choices of two diving trips. Each choice has different features for you to evaluate. Please read each choice carefully. Although they may look similar, trips in each question differ in at least one way.

There is an example below to assist you. Please note the following definitions before reviewing the example.

- Number of Snorkelers / Divers - the number of snorkelers / divers on a reef at any one time
- Restrictions- percent area of reef open to use
- Enforcement- the number of law enforcement patrols you observe per trip
- Number of Fish Species- the amount of different kinds of fish species observed on the reef
- Site Settings- the amount of live coral and/or algae on the reef
- Number of Fish- the overall amount of fish observed on the reef
- Size of Fish- the size of fish observed on the reef
- Travel cost / day – Travel cost that a snorkeler / diver spends for a diving trip per day (including gas and other trip expenses)

### Example

If you were planning a snorkel / SCUBA dive trip to the Florida Keys, which trip would you prefer: Trip A, Trip B, or neither?

ATTRIBUTE	Trip A	Trip B
<b>Number of Snorkelers / Divers</b>	<i>15% fewer snorkelers / divers</i>	<i>30% fewer snorkelers / divers</i>
<b>Site Settings</b>	<i>Mix of coral and algae cover</i>	<i>High live coral cover</i>
<b>Restrictions</b>	<i>25% of area closed</i>	<i>75 % of area closed</i>
<b>Number of Fish</b>	<i>40% more fish</i>	<i>No increase in numbers of fish</i>
<b>Size of Fish</b>	<i>40% more larger fish</i>	<i>20 % more larger fish</i>
<b>Species</b>	<i>No change in species numbers</i>	<i>Fewer species</i>
<b>Enforcement</b>	<i>Two additional patrols</i>	<i>No additional patrols</i>
<b>Travel Cost / Day</b>	<i>Your current total cost per day</i>	<i>10% more than your current total cost per day</i>

Which trip do you prefer? (check only one box below)

Trip A

Trip B

I would not take either trip

**E1.** If you were planning a snorkel / SCUBA dive trip to the Florida Keys, which trip would you prefer: Trip A, Trip B, or neither?

<b>ATTRIBUTE</b>	<b>Trip A</b>	<b>Trip B</b>
<b>Number of Snorkelers / Divers</b>	<i>The usual number of other snorkelers / divers at the site</i>	<i>15% fewer snorkelers / divers</i>
<b>Site Settings</b>	<i>High live coral cover</i>	<i>Mix of coral and algae cover</i>
<b>Restrictions</b>	<i>50% of area closed</i>	<i>25% of area closed</i>
<b>Number of Fish</b>	<i>20% more fish</i>	<i>60% more fish</i>
<b>Size of Fish</b>	<i>No increase in larger fish</i>	<i>40% more larger fish</i>
<b>Species</b>	<i>No change in species numbers</i>	<i>Many species</i>
<b>Enforcement</b>	<i>Two additional patrols</i>	<i>No additional patrols</i>
<b>Travel Cost / Day</b>	<i>10% more than your current total cost per day</i>	<i>10% less than your current total cost per day</i>

Which trip do you prefer? (check only one box below)

Trip A       Trip B       I would not take either trip

**E2.** If you were planning a snorkel / SCUBA dive trip to the Florida Keys, which trip would you prefer: Trip A, Trip B, or neither?

<b>ATTRIBUTE</b>	<b>Trip A</b>	<b>Trip B</b>
<b>Number of Snorkelers / Divers</b>	<i>15% fewer snorkelers / divers</i>	<i>30% fewer snorkelers / divers</i>
<b>Site Settings</b>	<i>High live coral cover</i>	<i>High algae cover</i>
<b>Restrictions</b>	<i>50% of area closed</i>	<i>No area closed</i>
<b>Number of Fish</b>	<i>60% more fish</i>	<i>20% more fish</i>
<b>Size of Fish</b>	<i>No increase in larger fish</i>	<i>20% more larger fish</i>
<b>Species</b>	<i>Fewer species</i>	<i>Fewer species</i>
<b>Enforcement</b>	<i>No additional patrols</i>	<i>One additional patrol</i>
<b>Travel Cost / Day</b>	<i>10% less than your current total cost per day</i>	<i>10% less than your current total cost per day</i>

Which trip do you prefer? (check only one box below)

Trip A       Trip B       I would not take either trip

**E3.** If you were planning a snorkel / SCUBA dive trip to the Florida Keys, which trip would you prefer: Trip A, Trip B, or neither?

<b>ATTRIBUTE</b>	<b>Trip A</b>	<b>Trip B</b>
<b>Number of Snorkelers / Divers</b>	<i>15% fewer snorkelers / divers</i>	<i>The usual number of other snorkelers / divers at the site</i>
<b>Site Settings</b>	<i>Mix of coral and algae cover</i>	<i>Mix of coral and algae cover</i>
<b>Restrictions</b>	<i>50% of area closed</i>	<i>No area closed</i>
<b>Number of Fish</b>	<i>20% more fish</i>	<i>60% more fish</i>
<b>Size of Fish</b>	<i>40% more larger fish</i>	<i>60% more larger fish</i>
<b>Species</b>	<i>Fewer species</i>	<i>No change in species numbers</i>
<b>Enforcement</b>	<i>One additional patrol</i>	<i>One additional patrol</i>
<b>Travel Cost / Day</b>	<i>10% less than your current total cost per day</i>	<i>Your current total cost per day</i>

Which trip do you prefer? (check only one box below)

Trip A       Trip B       I would not take either trip

**E4.** If you were planning a snorkel / SCUBA dive trip to the Florida Keys, which trip would you prefer: Trip A, Trip B, or neither?

<b>ATTRIBUTE</b>	<b>Trip A</b>	<b>Trip B</b>
<b>Number of Snorkelers / Divers</b>	<i>30% fewer snorkelers / divers</i>	<i>30% fewer snorkelers / divers</i>
<b>Site Settings</b>	<i>High algae cover</i>	<i>Mix of coral and algae cover</i>
<b>Restrictions</b>	<i>75% of area closed</i>	<i>75% of area closed</i>
<b>Number of Fish</b>	<i>No increase in numbers of fish</i>	<i>20% more fish</i>
<b>Size of Fish</b>	<i>60% more larger fish</i>	<i>60% more larger fish</i>
<b>Species</b>	<i>No change in species numbers</i>	<i>Fewer species</i>
<b>Enforcement</b>	<i>Two additional patrols</i>	<i>One additional patrol</i>
<b>Travel Cost / Day</b>	<i>Your current total cost per day</i>	<i>10% less than your current total cost per day</i>

Which trip do you prefer? (check only one box below)

Trip A       Trip B       I would not take either trip



**E5.** If you were planning a snorkel / SCUBA dive trip to the Florida Keys, which trip would you prefer: Trip A, Trip B, or neither?

<b>ATTRIBUTE</b>	<b>Trip A</b>	<b>Trip B</b>
<b>Number of Snorkelers / Divers</b>	<i>15% fewer snorkelers / divers</i>	<i>30% fewer snorkelers / divers</i>
<b>Site Settings</b>	<i>Mix of coral and algae cover</i>	<i>High live coral cover</i>
<b>Restrictions</b>	<i>No area closed</i>	<i>25% of area closed</i>
<b>Number of Fish</b>	<i>40% more fish</i>	<i>40% more fish</i>
<b>Size of Fish</b>	<i>20% more larger fish</i>	<i>20% more larger fish</i>
<b>Species</b>	<i>Many species</i>	<i>No change in species numbers</i>
<b>Enforcement</b>	<i>Two additional patrols</i>	<i>No additional patrols</i>
<b>Travel Cost / Day</b>	<i>10% more than your current total cost per day</i>	<i>10% more than your current total cost per day</i>

Which trip do you prefer? (check only one box below)

Trip A       Trip B       I would not take either trip

**E6.** If you were planning a snorkel / SCUBA dive trip to the Florida Keys, which trip would you prefer: Trip A, Trip B, or neither?

<b>ATTRIBUTE</b>	<b>Trip A</b>	<b>Trip B</b>
<b>Number of Snorkelers / Divers</b>	<i>30% fewer snorkelers / divers</i>	<i>15% fewer snorkelers / divers</i>
<b>Site Settings</b>	<i>High live coral cover</i>	<i>High live coral cover</i>
<b>Restrictions</b>	<i>25% of area closed</i>	<i>50% of area closed</i>
<b>Number of Fish</b>	<i>No increase in numbers of fish</i>	<i>20% more fish</i>
<b>Size of Fish</b>	<i>40% more larger fish</i>	<i>40% more larger fish</i>
<b>Species</b>	<i>Many species</i>	<i>Fewer species</i>
<b>Enforcement</b>	<i>One additional patrol</i>	<i>Two additional patrols</i>
<b>Travel Cost / Day</b>	<i>10% more than your current total cost per day</i>	<i>Your current total cost per day</i>

Which trip do you prefer? (check only one box below)

Trip A       Trip B       I would not take either trip

E7. If you were planning a snorkel / SCUBA dive trip to the Florida Keys, which trip would you prefer: Trip A, Trip B, or neither?

<b>ATTRIBUTE</b>	<b>Trip A</b>	<b>Trip B</b>
<b>Number of Snorkelers / Divers</b>	<i>The usual number of other snorkelers / divers at the site</i>	<i>The usual number of other snorkelers / divers at the site</i>
<b>Site Settings</b>	<i>High algae cover</i>	<i>High algae cover</i>
<b>Restrictions</b>	<i>No area closed</i>	<i>No area closed</i>
<b>Number of Fish</b>	<i>No increase in numbers of fish</i>	<i>20% more fish</i>
<b>Size of Fish</b>	<i>40% more larger fish</i>	<i>No increase in larger fish</i>
<b>Species</b>	<i>Many species</i>	<i>Many species</i>
<b>Enforcement</b>	<i>Two additional patrols</i>	<i>No additional patrols</i>
<b>Travel Cost / Day</b>	<i>10% less than your current total cost per day</i>	<i>10% more than your current total cost per day</i>

Which trip do you prefer? (check only one box below)

Trip A       Trip B       I would not take either trip

E8. If you were planning a snorkel / SCUBA dive trip to the Florida Keys, which trip would you prefer: Trip A, Trip B, or neither?

<b>ATTRIBUTE</b>	<b>Trip A</b>	<b>Trip B</b>
<b>Number of Snorkelers / Divers</b>	<i>15% fewer snorkelers / divers</i>	<i>15% fewer snorkelers / divers</i>
<b>Site Settings</b>	<i>High algae cover</i>	<i>High live coral cover</i>
<b>Restrictions</b>	<i>75% of area closed</i>	<i>75% of area closed</i>
<b>Number of Fish</b>	<i>20% more fish</i>	<i>No increase in numbers of fish</i>
<b>Size of Fish</b>	<i>No increase in larger fish</i>	<i>No increase in larger fish</i>
<b>Species</b>	<i>Many species</i>	<i>Many species</i>
<b>Enforcement</b>	<i>No additional patrols</i>	<i>One additional patrol</i>
<b>Travel Cost / Day</b>	<i>Your current total cost per day</i>	<i>Your current total cost per day</i>

Which trip do you prefer? (check only one box below)

Trip A       Trip B       I would not take either trip

**Recreational Fisher**

If not a Recreational fisher in the Florida Keys, GO to page 27 Part F.

Please think about a recreational fishing experience in the Florida Keys when answering the questions on the following pages. You will be offered eight (8) choices of two fishing trips. Each choice has different features for you to evaluate. Please read each choice carefully. Although they may look similar, trips in each question differ in at least one way.

There is an example below to assist you. Please note the following definitions before reviewing the example.

- Number of Recreational Fishing Boats- the number of recreational fishing boats near you at any one time
- Number of Non-fishing boats- the number of non-fishing boats near you at any one time
- Restrictions- the number of reefs closed to fishing per zone (upper Keys, middle Keys, lower Keys)
- Number of Fish Species- the amount of different kinds of fish species caught in a trip
- Number of Fish- the overall amount of fish caught on a trip
- Size of Fish- the number of legal sized fish caught on a trip
- Travel cost / day – Travel cost that an angler spends for a fishing trip per day (including gas and other trip expenses)

**Example**

Suppose that you could choose from the recreational fishing opportunities described below. Which of these fishing trips would you prefer?

<b>ATTRIBUTE</b>	<b>Trip A</b>	<b>Trip B</b>
<b>Number of Recreational Fishing Boats</b>	<i>30% fewer boats</i>	<i>The usual number of other boats near the location</i>
<b>Number of Non-fishing Boats</b>	<i>The usual number of other boats near the location</i>	<i>30% fewer boats</i>
<b>Restrictions</b>	<i>25% of area closed</i>	<i>25% of area closed</i>
<b>Number of Species</b>	<i>No change in species numbers</i>	<i>Fewer species fish caught</i>
<b>Number of fish</b>	<i>10% more fish caught</i>	<i>30% more fish caught</i>
<b>Size of Fish</b>	<i>60% more keepers</i>	<i>20% more keepers</i>
<b>Travel Cost / Day</b>	<i>10% more than your current total cost per day</i>	<i>10% less than your current total cost per day</i>

Which trip do you prefer? (check only one box below)

Trip A

Trip B

I would not take either trip

**E9.** Suppose that you could choose from the recreational fishing opportunities described below. Which of these fishing trips would you prefer?

<b>ATTRIBUTE</b>	<b>Trip A</b>	<b>Trip B</b>
<b>Number of Recreational Fishing Boats</b>	<i>15% fewer boats</i>	<i>30% fewer boats</i>
<b>Number of Non-fishing Boats</b>	<i>The usual number of other boats near the location</i>	<i>30% fewer boats</i>
<b>Restrictions</b>	<i>75% of area closed</i>	<i>25% of area closed</i>
<b>Number of Species</b>	<i>More species fish caught</i>	<i>No change in species numbers</i>
<b>Number of fish</b>	<i>20% more fish caught</i>	<i>No increase in numbers of fish caught</i>
<b>Size of Fish</b>	<i>20% more keepers</i>	<i>60% more keepers</i>
<b>Travel Cost / Day</b>	<i>Your current total cost per day</i>	<i>10% more than your current total cost per day</i>

Which trip do you prefer? (check only one box below)

Trip A       Trip B       I would not take either trip

**E10.** Suppose that you could choose from the recreational fishing opportunities described below. Which of these fishing trips would you prefer?

<b>ATTRIBUTE</b>	<b>Trip A</b>	<b>Trip B</b>
<b>Number of Recreational Fishing Boats</b>	<i>The usual number of other boats near the location</i>	<i>30% fewer boats</i>
<b>Number of Non-fishing Boats</b>	<i>30% fewer boats</i>	<i>15% fewer boats</i>
<b>Restrictions</b>	<i>75% of area closed</i>	<i>50% of area closed</i>
<b>Number of Species</b>	<i>More species fish caught</i>	<i>No change in species numbers</i>
<b>Number of fish</b>	<i>30% more fish caught</i>	<i>20% more fish caught</i>
<b>Size of Fish</b>	<i>60% more keepers</i>	<i>40% more keepers</i>
<b>Travel Cost / Day</b>	<i>Your current total cost per day</i>	<i>Your current total cost per day</i>

Which trip do you prefer? (check only one box below)

Trip A       Trip B       I would not take either trip

**E11.** Suppose that you could choose from the recreational fishing opportunities described below. Which of these fishing trips would you prefer?

<b>ATTRIBUTE</b>	<b>Trip A</b>	<b>Trip B</b>
<b>Number of Recreational Fishing Boats</b>	<i>15% fewer boats</i>	<i>The usual number of other boats near the location</i>
<b>Number of Non-fishing Boats</b>	<i>15% fewer boats</i>	<i>15% fewer boats</i>
<b>Restrictions</b>	<i>No area closed</i>	<i>50% of area closed</i>
<b>Number of Species</b>	<i>No change in species numbers</i>	<i>Fewer species fish caught</i>
<b>Number of fish</b>	<i>10% more fish caught</i>	<i>30% more fish caught</i>
<b>Size of Fish</b>	<i>40% more keepers</i>	<i>No increase in the number of caught kept</i>
<b>Travel Cost / Day</b>	<i>10% less than your current total cost per day</i>	<i>10% less than your current total cost per day</i>

Which trip do you prefer? (check only one box below)

- Trip A     
 Trip B     
 I would not take either trip

**E12.** Suppose that you could choose from the recreational fishing opportunities described below. Which of these fishing trips would you prefer?

<b>ATTRIBUTE</b>	<b>Trip A</b>	<b>Trip B</b>
<b>Number of Recreational Fishing Boats</b>	<i>30% fewer boats</i>	<i>The usual number of other boats near the location</i>
<b>Number of Non-fishing Boats</b>	<i>30% fewer boats</i>	<i>15% fewer boats</i>
<b>Restrictions</b>	<i>No area closed</i>	<i>No area closed</i>
<b>Number of Species</b>	<i>No change in species numbers</i>	<i>More species fish caught</i>
<b>Number of fish</b>	<i>20% more fish caught</i>	<i>10% more fish caught</i>
<b>Size of Fish</b>	<i>60% more keepers</i>	<i>40% more keepers</i>
<b>Travel Cost / Day</b>	<i>10% more than your current total cost per day</i>	<i>10% more than your current total cost per day</i>

Which trip do you prefer? (check only one box below)

- Trip A     
 Trip B     
 I would not take either trip

**E13.** Suppose that you could choose from the recreational fishing opportunities described below. Which of these fishing trips would you prefer?

<b>ATTRIBUTE</b>	<b>Trip A</b>	<b>Trip B</b>
<b>Number of Recreational Fishing Boats</b>	<i>30% fewer boats</i>	<i>15% fewer boats</i>
<b>Number of Non-fishing Boats</b>	<i>15% fewer boats</i>	<i>The usual number of other boats near the location</i>
<b>Restrictions</b>	<i>50% of area closed</i>	<i>75% of area closed</i>
<b>Number of Species</b>	<i>No change in species numbers</i>	<i>No change in species numbers</i>
<b>Number of fish</b>	<i>No increase in numbers of fish caught</i>	<i>No increase in numbers of fish caught</i>
<b>Size of Fish</b>	<i>20% more keepers</i>	<i>40% more keepers</i>
<b>Travel Cost / Day</b>	<i>10% less than your current total cost per day</i>	<i>Your current total cost per day</i>

Which trip do you prefer? (check only one box below)

Trip A       Trip B       I would not take either trip

**E14.** Suppose that you could choose from the recreational fishing opportunities described below. Which of these fishing trips would you prefer?

<b>ATTRIBUTE</b>	<b>Trip A</b>	<b>Trip B</b>
<b>Number of Recreational Fishing Boats</b>	<i>30% fewer boats</i>	<i>The usual number of other boats near the location</i>
<b>Number of Non-fishing Boats</b>	<i>The usual number of other boats near the location</i>	<i>The usual number of other boats near the location</i>
<b>Restrictions</b>	<i>25% of area closed</i>	<i>No area closed</i>
<b>Number of Species</b>	<i>More species fish caught</i>	<i>More species fish caught</i>
<b>Number of fish</b>	<i>30% more fish caught</i>	<i>30% more fish caught</i>
<b>Size of Fish</b>	<i>40% more keepers</i>	<i>20% more keepers</i>
<b>Travel Cost / Day</b>	<i>Your current total cost per day</i>	<i>Your current total cost per day</i>

Which trip do you prefer? (check only one box below)

Trip A       Trip B       I would not take either trip

**E15.** Suppose that you could choose from the recreational fishing opportunities described below. Which of these fishing trips would you prefer?

<b>ATTRIBUTE</b>	<b>Trip A</b>	<b>Trip B</b>
<b>Number of Recreational Fishing Boats</b>	<i>The usual number of other boats near the location</i>	<i>15% fewer boats</i>
<b>Number of Non-fishing Boats</b>	<i>30% fewer boats</i>	<i>15% fewer boats</i>
<b>Restrictions</b>	<i>50% of area closed</i>	<i>25% of area closed</i>
<b>Number of Species</b>	<i>Fewer species fish caught</i>	<i>Fewer species fish caught</i>
<b>Number of fish</b>	<i>20% more fish caught</i>	<i>10% more fish caught</i>
<b>Size of Fish</b>	<i>40% more keepers</i>	<i>20% more keepers</i>
<b>Travel Cost / Day</b>	<i>10% more than your current total cost per day</i>	<i>10% more than your current total cost per day</i>

Which trip do you prefer? (check only one box below)

- Trip A     
 Trip B     
 I would not take either trip

**E16.** Suppose that you could choose from the recreational fishing opportunities described below. Which of these fishing trips would you prefer?

<b>ATTRIBUTE</b>	<b>Trip A</b>	<b>Trip B</b>
<b>Number of Recreational Fishing Boats</b>	<i>30% fewer boats</i>	<i>15% fewer boats</i>
<b>Number of Non-fishing Boats</b>	<i>15% fewer boats</i>	<i>30% fewer boats</i>
<b>Restrictions</b>	<i>75% of area closed</i>	<i>75% of area closed</i>
<b>Number of Species</b>	<i>More species fish caught</i>	<i>Fewer species fish caught</i>
<b>Number of fish</b>	<i>10% more fish caught</i>	<i>20% more fish caught</i>
<b>Size of Fish</b>	<i>No increase in the number of caught kept</i>	<i>20% more keepers</i>
<b>Travel Cost / Day</b>	<i>10% more than your current total cost per day</i>	<i>Your current total cost per day</i>

Which trip do you prefer? (check only one box below)

- Trip A     
 Trip B     
 I would not take either trip

## Part F: Demographic Profile

In this final section, we need to know information about you and your household to make sure we have a representative sample of Monroe County residents.

Again, your privacy will be protected and any information identifying you or your household will not be revealed to anyone.

**F1. How many people in your household are permanent residents of Monroe County, Florida?**

\_\_\_\_\_ number of people

**F2. How many of these people are at least 16 years of age?** \_\_\_\_\_ number of people

**F3. What is the closest mile marker to your residence?** \_\_\_\_\_ mile marker number

**F4. Do you have access to the water from your residence?**  Yes  No

**F5. Do you own a boat?**  Yes  No

**F6. How many years have you lived in Monroe County?** \_\_\_\_\_ number of years

**F7. In what year were you born?** \_\_\_\_\_ year

**F8. Are you Hispanic, Latino, or of Spanish origin?**  Yes  No

**F9. What race do you consider yourself?**

Please circle one or more of the letter(s) that best describes you

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

**F10. What is the highest level of education that you have completed?**

Please circle the letter of the category that best describes you

- A 8th Grade or Less
- B 9th to 11th Grade
- C 12th Grade, High School Grad, GED
- D 13 to 15 Years (some college or vocational training)
- E College Graduate
- F Graduate School, Law School, Medical School



F11. What is your employment status?

Please circle the letter or letters of all those that apply

- |   |                    |   |                   |
|---|--------------------|---|-------------------|
| A | Unemployed         | E | Student           |
| B | Employed full-time | F | Homemaker         |
| C | Employed part-time | G | None of the above |
| D | Retired            |   | (specify) _____   |

F12. Do you work outside Monroe County?  Yes  No

F13. What is your zip code? \_\_\_\_\_

F14. What is your total household income, before taxes.

Please circle the letter corresponding to the category that best describes your household

- |   |                      |   |                        |
|---|----------------------|---|------------------------|
| A | Under \$5,000        | I | \$40,000 to \$44,999   |
| B | \$5,000 to \$9,999   | J | \$45,000 to \$49,999   |
| B | \$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 |   |                        |

## **VISITOR: AUTO, AIR and CRUISE SHIP SURVEY**

- **On-site Survey**
  - Questionnaire
  - Recreation/Tourists Activities (Blue Card)
  - Respondent Card (Green Card)
  - Activities List (White Card)
  - Map (Five Regions)
  - Auto Survey Tally Sheet
  - Air Survey Tally Sheet
  - Cruise Ship Tally Sheet
  
- **Expenditure Mailback**
  - Questionnaire – Long Version
  - Questionnaire – Short Version (Cruise Ship and Day-trippers)
  
- **Satisfaction Mailback**
  - Questionnaire

### Auto, Air and Cruise Ship Survey

On-site Survey Number: \_\_\_\_\_

Screening Criteria: 1) NOT a resident of Monroe County  
(See Tally Sheet) 2) Visiting Keys and did some recreation/tourist activity \_\_\_\_\_

Auto: U.S. 1

Time of interview:

Air: Key West   
Marathon

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

Cruise Ship: Mallory Square   
Truman Annex   
Navy Mole

Number of People in Vehicle or Party:

\_\_\_\_\_  
# People

1. How many people in your vehicle (party) are age 16 or older? \_\_\_\_\_ (# People)

(b) How many people in your vehicle (party) are under 16? \_\_\_\_\_ (# People)

2. Where is your primary residence?

\_\_\_\_\_  
City or Nearest City County State Zipcode

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

- U.S.A
- Canada
- Mexico
- Central Am./South Am.
- Australia/Oceania
- Japan
- Other Far East
- United Kingdom
- Other Europe
- Middle East
- Africa
- Other

3. On this trip to the Florida Keys, when did you first arrive? \_\_\_\_\_  
Month Day Time

4. Including this trip, how many times have you visited the Florida Keys for all recreation/tourist activities in the last 12 months, that is since (date last year)?

\_\_\_\_\_  
Times

5. Including this trip, how many days have you spent in the Florida Keys where you did some recreation/tourist activity in the last 12 months?

\_\_\_\_\_  
Days

If overnight visitor, hand respondent map of Florida Keys. If not overnight visitor, skip to next section.

6. Looking at the map, could you tell me how many nights you spent **on this trip** to the Florida Keys in the

Upper Keys \_\_\_\_\_ Islamorada \_\_\_\_\_ Marathon \_\_\_\_\_ Lower Keys \_\_\_\_\_ Key West \_\_\_\_\_  
# nights # nights # nights # nights # nights

Interviewer: Make sure if answer to Q.4. is greater than one, that answer to Q.6. is not equal to Q.5.



**Auto, Air and Cruise Ship Survey**

10. Please refer to the yellow Events Card. The events are listed by date to help you skip down the list.

Did you attend any of these events on this trip to the Florida Keys?

Yes (continue)       No (skip to Q. 12)

11a. Please refer to Section 1 on your green card and tell me how important was the event in planning your trip to the Florida Keys?

DK    A    B    C    D    E  
NI    SI    I    VI    EI

11b. Did attending any of these events extend your length of stay in the Florida Keys?

Yes (continue)       No (skip to Q. 12)

11c. How many days longer did you extend your stay? \_\_\_\_\_ (# days)

12. Please refer to Section 2 on your green card and tell me which reason best describes the primary purpose of your trip to the Florida Keys.

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

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

13. In what year were you born? (code last two digits) \_\_\_\_ \_\_\_\_

14. Sex    male       female

15a. Are you Spanish, Hispanic, or Latino?       Yes       No

15b. Please refer to Section 3 on your green card and tell me the one or more letter(s) that best describes you.

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




16. Please refer to Section 4 on your green card and tell me which of the income categories best describes your annual household income last year before taxes. Please give the letter on the card that is the closest.

a  b  c  d  e  f  g  h  i  j  k  l  m  n  o       refused  
 don't know

17. Do you own a second home or time share in the Florida Keys?

Yes       No

18. On this trip, are you paying your own expenses, sharing expenses, or is someone else paying your expenses?

own expenses \_\_\_\_\_  Beside your own expenses, how many other people are you paying for on this trip? \_\_\_\_\_  
 shared expenses \_\_\_\_\_  With how many people are you sharing expenses? \_\_\_\_\_  
 someone else paying expenses \_\_\_\_\_ 

## Auto, Air and Cruise Ship Survey

We would like to collect some additional information on your (expenditures or satisfaction) with the Florida Keys during your trip. Please take this (satisfaction or expenditure) questionnaire and return it to us in the mail. The questionnaire has a business reply page, and postage is pre-paid. It will cost you nothing to return it to us. The information gained from these questionnaires is very important to all those responsible for making your trip to the Florida Keys an enjoyable experience. As an incentive to return your questionnaires, a sweepstakes has been organized by the local business community. **Hand brochure describing sweepstakes** By returning your questionnaire with your name and address, we enter you in the sweepstakes.

Reminder: Your answers are voluntary. After the survey is completed and the sweepstakes prizes awarded, all name and address information will be destroyed. No one will be allowed to use this information for contacting you about any promotions.

19. Will you complete this questionnaire?

Yes

No → This concludes our interview. Thank you for your time. In appreciation for your participation we would like to offer you this gift.

### Satisfaction

We suggest completing the satisfaction questionnaire on your way home while your thoughts about your trip to the Florida Keys are fresh.

### Expenditure

The expenditure survey should be completed after your trip is over and you have returned home.

Interviewer: Code on-site survey number and location on mailback

Show example of mailback questionnaire, where to start, the types of questions that are asked, and how to seal it to mail it back

20. Please give us your name and address. In the event that we do not receive the take home questionnaire we will send you another.

Satisfaction name and address

Name: \_\_\_\_\_

Address: \_\_\_\_\_

City: \_\_\_\_\_ State: \_\_\_\_\_ Zip: \_\_\_\_\_

21. If someone other than yourself paid for all your expenses on this trip to the Florida Keys, we would like that person to answer the questionnaire. Will you please give us the name and address of that person?

Expenditure name and address

Name: \_\_\_\_\_

Address: \_\_\_\_\_

City: \_\_\_\_\_ State: \_\_\_\_\_ Zip: \_\_\_\_\_

This concludes our interview. Thank you for your time. In appreciation for your participation, we would like to offer you this gift.

**Recreation/Tourist Activities**

---

**Snorkeling**

**Scuba diving**

**Fishing**

**Swimming**

**Boating (including personal watercraft – jet skis, wave runners, etc.)**

**Nature Study or Viewing Wildlife**

**Windsurfing, Parasailing or Hang gliding**

**Beach Activities**

**Visiting Museums and Historic Areas**

**Sightseeing or Tourist Attractions**

**Attending Outdoor Festivals and Events**

**Camping, Picnicking, Hiking**

**Horseback Riding, Bicycling**

**Participation in Outdoor Sports (Tennis, Golf, or other sports)**

**Sunset Cruises**

**Spa, Fitness, Wellness activities**

**RESPONDENT CARD****PAPERWORK REDUCTION ACT AND CONFIDENTIALITY STATEMENT**

Your participation in this interview is voluntary. There are no penalties for not answering some or all of the questions, but since each interviewed person will represent many others not interviewed, your cooperation is extremely important. This study is being conducted by the University of Massachusetts-Amherst for the Monroe County Tourist Development Council and the National Oceanic and Atmospheric Administration. Uses of the information include the evaluation of present recreation uses and planning for future visitation. At the end of the study any materials identifying you as an individual will be destroyed.

This is a cooperative research project of the Monroe County Tourist Development Council 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, searching existing data sources, gathering and maintaining the data need, 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 this burden, to U.S. Department of Commerce, Clearance Officer, Office of Chief Information Officer, Rm. 6625, 14th and Constitution Avenue NW, Washington, DC 20230. Notwithstanding any other provisions of the law, no person is required to respond to, nor shall any person be subject to penalty for failure to comply with, a collection of information subject to requirements of the Paperwork Reduction Act, unless that collection of information displays a currently valid OMB Control Number.

**SECTION 1: Importance of Special Events in Trip Planning**

**DK**  
specify)

**SECTION 3: Race**

- A White**
- B Black or African American**
- C American Indian or Alaskan Native**
- D Asian**
- E Native Hawaiian or Other Pacific Islander**

**SECTION 4: HOUSEHOLD INCOME CATEGORIES (Annual Income before taxes)**

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



## ACTIVITIES LIST

Number	<b>Activities Using Boats and Personal Watercraft</b>
	<b>Snorkeling</b>
100A	Snorkeling from charter/party boat (pay operation)
101A	Snorkeling from a rental boat
102A	Snorkeling from private boat (your boat or friend or relatives boat)
	<b>Scuba Diving</b>
200A	Scuba diving from charter/party boat (pay operation)
201A	Scuba diving from a rental boat
202A	Scuba diving from a private boat (your boat or friend or relatives boat)
	<b>Special Activities while Snorkeling or Scuba Diving</b>
300	Diving for lobsters
301	Underwater photography
302	Wreck diving
303	Spear fishing
	<b>Fishing – Offshore</b>
400A	Fishing from charter boat (pay operation, usually six persons or less) - offshore
401A	Fishing from party or head boat (pay operation, charge per person) - offshore
402A	Fishing from a rental boat – off shore
403A	Fishing from a private boat (your boat or friend or relatives boat) – offshore
	<b>Fishing – Flats or Back Country</b>
404A	Fishing from charter/party boat or guide (pay operation) – flats or back country
405A	Fishing from rental boat – flats or back country
406A	Fishing from a private boat (your boat or friend or relatives boat) – flats or back country
	<b>Other Fishing</b>
407A	Other fishing from charter boat (pay operation, usually six persons or less)
408A	Other fishing from party or head boat (pay operation, charge per person)
409A	Other fishing from a rental boat
410A	Other fishing from a private boat (your boat or friends or relatives boat)
	<b>Viewing Nature and Wildlife</b>
500A	Glass bottom boat rides (pay operation)
501A	Back country boat excursions (pay operation/guided service/NOT FISHING)
502A	Viewing nature and wildlife from private or rental boat
	<b>Personal Watercraft (jet skis, wave runners, etc.)</b>
600A	Personal watercraft – rental
601A	Personal watercraft – Private (your boat or friend or relatives boat)
	<b>Sailing</b>
700A	Sailing charter/party boat (pay operation)
701A	Sailing rental boat
702A	Sailing private boat (your boat or friend or relatives boat)
	<b>Other Activities NOT MENTIONED ABOVE (parasailing, hang gliding, water-skiing, sunset cruises)</b>
800A	Other activities from a charter/party boat (pay operation)
801A	Other activities from a rental boat
802A	Other activities from a private boat (your boat or friend or relatives boat)

----- OVER -----

**ACTIVITIES LIST**  
**Other Water-Based Activities – NO BOATS**

Number

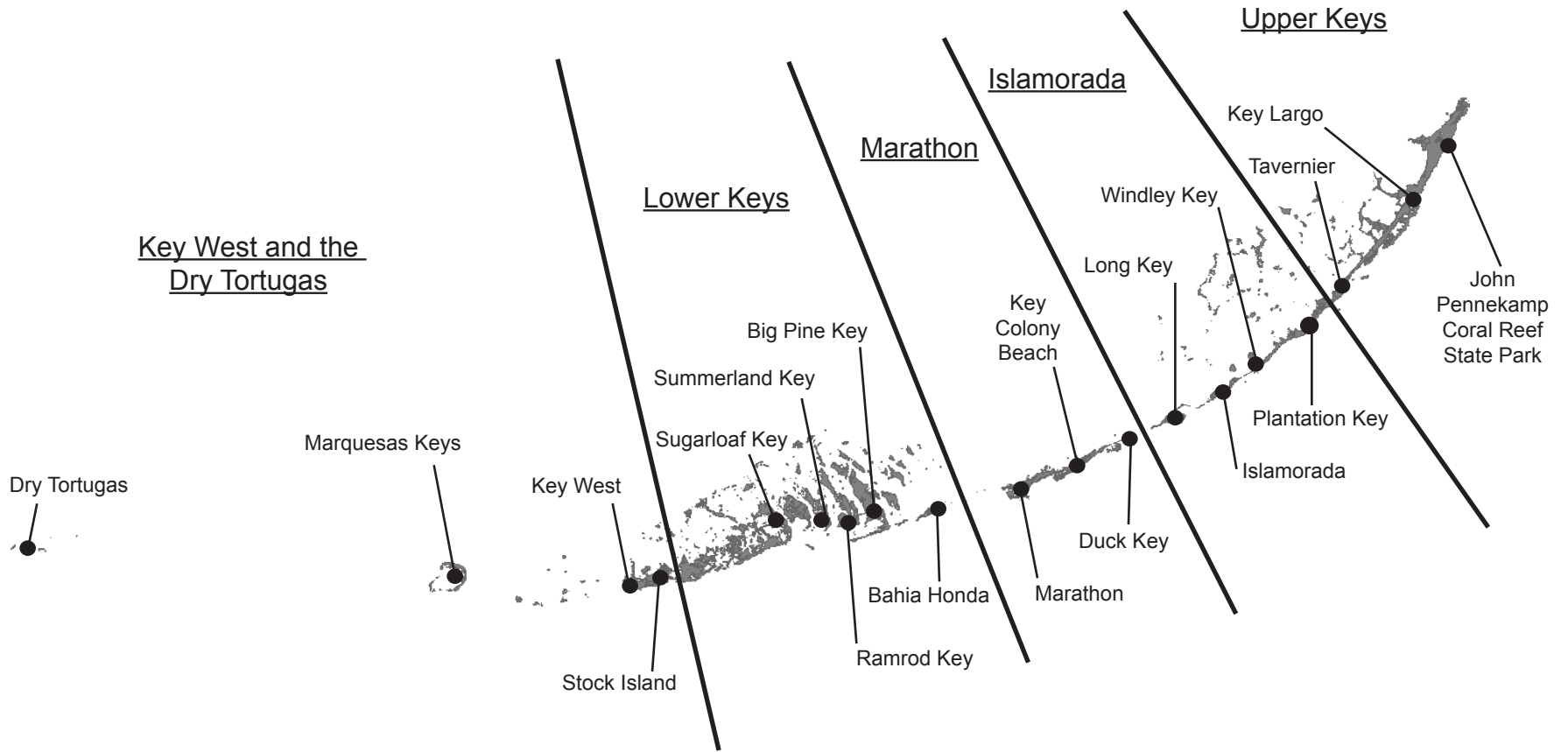
- 
- Snorkeling and Scuba Diving**
- 10A Snorkeling from shore  
11A Scuba diving from shore
- Special Activities while Diving from Shore**
- 12 Diving for lobsters  
13 Underwater photography
- 14A Fishing from shore (beach, bank, pier, bridge, jetty, dock)
- 15A Swimming at Beaches (not in pool)  
16A Swimming in Outdoor Pool  
17 Swimming with Dolphins  
18A Windsurfing, sail boarding or kite surfing

Number

**Land-Based Activities**

- 
- Nature Study – Wildlife Observation – Photography**
- 19A Wildlife observation or wildlife photography  
20A Other nature study and observation  
21 Photography – Natural landscapes/scenery (not including wildlife)
- Camping – Backpacking – Hiking – Picnicking**
- 22 Backpacking  
23 Camping in developed campgrounds  
24 Camping in primitive campgrounds  
25 Day Hiking  
26 Attending ranger guided walk  
27 Self-guided nature or historic trail  
28 Picnicking
- Cultural, Historic and Tourist Attractions**
- 29A Visiting historic areas, sites, buildings or memorials  
30 Attending special events (fairs, festivals, ceremonies, etc.)  
31 Attending outdoor concerts, plays, or other outdoor performances  
32 Attending indoor concerts, plays, performances, or events  
33 Sight-seeing tours and tourist attractions (paid)  
34 Sight-seeing (not paid tours)  
35 Reading roadside exhibits or markers  
36A Visiting a museum, education facility, or information center  
37 Attending outdoor sports events (sailing or boat races; spectator at fishing tournament)
- Outdoor Sports**
- 38 Golf  
39 Tennis  
40 Participation in other outdoor sports and games
- Bicycling – Horseback Riding – Driving for Pleasure**
- 41 Bicycling  
42 Horseback riding  
43 Driving for Pleasure (mopeds, motorcycles)
- Beach Activities – Sunbathing**
- 44A All Beach Activities (other than swimming)  
45 Sunbathing (not at beach)
- Spa, Health & Wellness**
- 46 Spa Treatments (massage, esthetician services, body treatment)  
47 Fitness activities (fitness classes, visited gym/health center, personal trainer)  
48 Healthy cuisine (specialty dining for health or diet)

# The Florida Keys



**Tally Sheet  
Auto Survey  
U.S. 1**

1. Are you a permanent resident of Monroe County?

Yes      Thank you. We are only interviewing nonresidents of Monroe County.  
(Place tic mark in column 4)

No      Are you ending your trip to the Florida Keys today?

Yes       No      Thank you. We are only interviewing people at the  
end of their trip to the Florida Keys.  
(Place tic mark in column 5)

→ Did you do any recreation/tourist  
activities on this visit to  
the Florida Keys?  
(show recreation/tourist  
activity Blue Card)

No      Thank you. We are only interviewing visitors that did  
recreation/tourist activities. (Place tic mark in column 6)

Will you participate in a ←  Yes  
short 5-10 minute  
interview about your visit  
to the Florida Keys?       No

Thank you. (Place tic mark in column 7)

Yes      Please pull over to the parking lot where our  
interviewers are set up. (Place tic mark in column 8)





**Tally Sheet  
Cruise Ship**

Sites

- Mallory Square (MS)       Navy Mole (NM)  
 Truman Annex (TA)

1. Are you a permanent resident of Monroe County  
 Yes      Thank you. We are only interviewing nonresidents of Monroe County. (Place tic mark in column 3)  
 No      →
2. Will you participate in a short 5-10 minute survey about your visit to the Florida Keys?  
 No      Thank you. (Place tic mark in column 4)  
 Yes      (Place tic mark in column 5)  
                     Begin interview

<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>
Site	Date	Permanent Resident	Visitor Refusal or Language Barrier	Visitor Interviewed

Your participation in this  
recreation expenditure survey is

**GREATLY APPRECIATED**

Dear Visitor,

During your recent trip to the Florida Keys 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 answers are voluntary and confidential. Your name will never be released to anyone unless otherwise required by law. After the completion of the project all materials identifying you as an individual will be destroyed.

Before you mail back the questionnaire, please reverse-fold it so that our return address is on the outside. Please staple or tape to seal the questionnaire and mail it back to us. No postage is needed. Your cooperation in this effort is greatly appreciated.

Sincerely,

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



**PART A: YOUR EXPENDITURES FOR THIS TRIP**

We would like to ask you about the expenses related to your recent trip to the Florida Keys. Please complete one of the questions below, indicating for how many people you paid expenses.

1) If you paid your own expenses or if you shared expenses with someone else, please check this box   
 On the following pages, report only those trip expenses you personally paid for.

2) If you were paying all the expenses for yourself and for one or more others, please check this box   
 and record in the box below the number of persons you paid expenses for, including yourself.  
 Report the total amount of expenses you paid for on the following pages.

Number of people you were paying expenses for, including yourself

Please report your expenditures for each of the items listed to the nearest whole dollar. In Column A, put the total amount of money you spent on that item, regardless of where you were when you spent it. In Column B, put the amount you spent just while you were in Southern Florida, in Broward, Dade or Monroe counties. Basically, this area covers the Florida Keys, Everglades National Park, and all the area south of Boca Raton, including the area around Ft. Lauderdale, Hollywood, Hialeah, and Miami. Finally, in Column C, report only the amount you spent while you were in the Florida Keys.

**EXAMPLE:** Joe and Jane Smith drove to Key Largo from Jacksonville. On their way south, they stayed in a hotel in Miami which cost \$80. They spent 3 nights in Key Largo at \$75 per night, or a total of \$225. On their way home, they stayed in West Palm Beach which cost \$60. Their total lodging for the trip (Column A) was \$365. Lodging in South Florida (Column B) was \$305 (\$225 + \$80). The amount for Column C was \$225.

Item	Column A: Total amount spent for this trip	Column B: Of the amount in column A, how much did you spend in South Florida?	Column C: Of the amount in column B, how much did you spend in the Florida Keys?
LODGING, <u>PRIVATELY OWNED</u> (non-government) Hotel/motel/bed & breakfast/cabin, etc.	<u>365</u>	<u>305</u>	<u>225</u>
Camping site (RV/tent/camper)	<u>0</u>	<u>0</u>	<u>0</u>



Item	Column A: Total amount spent for this trip	Column B: Of the amount in column A, how much did you spend in South Florida?	Column C: Of the amount in column B, how much did you spend in the Florida Keys?
<b>BOATING</b> Boat, jet ski, and wave runner rental Boat fuel and oil Boat repairs Boat launch fees Boat slip fees or marina fees (this trip only) Sailing charters or sunset cruises	<hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/>	<hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/>	<hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/>
<b>FISHING</b> Cut bait Live bait Daily or special fishing permits  Fishing lines, fly lines, fish nets, and minnow traps Charter/party boat, guide service	<hr/> <hr/> <hr/> <hr/>  <hr/> <hr/>	<hr/> <hr/> <hr/> <hr/>  <hr/> <hr/>	<hr/> <hr/> <hr/> <hr/>  <hr/> <hr/>
<b>SCUBA DIVING/SNORKELING</b> Rental fee for equipment Charter/party boat, guide service	<hr/> <hr/>	<hr/> <hr/>	<hr/> <hr/>
<b>SIGHTSEEING</b> Sightseeing tours Glass bottom boat rides Back country excursions, kayak tours Park entrance fees Admission to tourist, amusement, festivals and other commercial attractions	<hr/> <hr/> <hr/> <hr/> <hr/> <hr/>	<hr/> <hr/> <hr/> <hr/> <hr/> <hr/>	<hr/> <hr/> <hr/> <hr/> <hr/> <hr/>



**PART B: ANNUAL VACATION AND EQUIPMENT PURCHASES**

This section asks about money people spent on recreational equipment, boat storage, time share and condo fees and related purchases over the past 12 months. For each of the items listed, indicate in Column A the total amount of money you spent on that equipment in the past 12 months. In Column B, report the total amount of purchases you made just in the county where you live. In Column C, report the total amount of purchases you made in the Florida Keys.

First, please answer these questions regarding your boating recreation.

- During the past 12 months, how many times did you take a trip away from home for a boating-related activity (sailing, waterskiing, canoeing, fishing from a boat, motorboating, SCUBA diving, jet skiing, etc.)? \_\_\_\_\_
- Of these trips, how many were to some place in the Florida Keys? \_\_\_\_\_

Example: Joe and Jane Smith purchased a boat for \$17,000 from a dealer at their home in Jacksonville last summer. They also purchased a jet ski for \$12,000 from a dealer in Key Largo. Here is how they would report these expenditures.

Item	Column A: Total Purchases in Past 12 Months	Column B: Purchases in Your Home County	Column C: Purchases in Florida Keys
BOATING EQUIPMENT New motorized boats or jet skis	_____29,000_____	_____17,000_____	_____12,000_____

Item	Column A: Total Purchases in Past 12 Months	Column B: Purchases in Your Home County	Column C: Purchases in Florida Keys
<b>MAJOR RECREATIONAL EQUIPMENT</b> Diving or snorkeling equipment Fishing rods and reels Cameras and other photo gear Binocular and other viewing equipment Miscellaneous (boats, guns, skis, vehicles, any other major equipment), specify _____ _____	_____ _____ _____ _____ _____ _____	_____ _____ _____ _____ _____ _____	_____ _____ _____ _____ _____ _____
<b>BOATING EQUIPMENT</b> New motorized boats or jet skis New nonmotorized boats (sailboats, row boats, canoes, etc.) New boat engines  New boat accessories New sails or rigging New boat trailer Boat storage and marina fees Other boating expenses Describe: _____ _____	_____ _____ _____ _____ _____ _____ _____ _____ _____ _____	_____ _____ _____ _____ _____ _____ _____ _____ _____ _____	_____ _____ _____ _____ _____ _____ _____ _____ _____ _____
<b>ANNUAL LODGING-RELATED FEES</b> Condo and time share fees RV or trailer park fees	_____ _____	_____ _____	_____ _____

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

**That's All!!** If you would like to be entered into a sweepstakes to win a free vacation to the Florida Keys, fill out your name, address and phone number below. All prizes will be awarded in October of 2007.

Name: \_\_\_\_\_

Address: \_\_\_\_\_

City: \_\_\_\_\_

State: \_\_\_\_\_ Zip: \_\_\_\_\_ Phone: \_\_\_\_\_

Prizes to be awarded are:

GRAND PRIZE

- \* Airfare for two from anywhere in the continental United States to the Florida Keys
- \* Rental car with unlimited miles for one week (seven days)
- \* Accommodations for two for one week (six nights)
- \* Two complimentary "activities" for two (i.e., diving trip, fishing charter, sunset sail, etc.)
- \* Complimentary dinner for two at local restaurant

FIRST PRIZE

- \* Accommodations for two for five days (four nights)
- \* Two complimentary "activities" for two (i.e., diving trip, fishing charter, sunset sail, etc.)
- \* Complimentary dinner for two at local restaurant

SECOND PRIZE

- \* Accommodations for two for four days (three nights)
- \* One complimentary "activity" for two (i.e., diving trip, fishing charter, sunset sail, etc.)
- \* Complimentary dinner for two at local restaurant

THIRD PRIZE

- \* Accommodations for two for three days (two nights)
- \* One complimentary "activity" for two (i.e., diving trip, fishing charter, sunset sail, etc.)

This is a cooperative research project of the Monroe County Tourist Development Council and the National Oceanic and Atmospheric Administration. Public reporting burden for this collection of information is estimated to average 15 minutes including time for reviewing instructions, searching existing data sources, gathering and maintaining the data need, 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 this burden, to U.S. Department of Commerce, Clearance Officer, Office of Chief Information Officer, Rm. 6625, 14th and Constitution Avenue NW, Washington, DC 20230.

Your participation in this  
recreation expenditure survey is

**GREATLY APPRECIATED**

Dear Visitor,

During your recent trip to the Florida Keys 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 answers are voluntary and confidential. Your name will never be released to anyone unless otherwise required by law. After the completion of the project all materials identifying you as an individual will be destroyed.

Before you mail back the questionnaire, please reverse-fold it so that our return address is on the outside. Please staple or tape to seal the questionnaire and mail it back to us. No postage is needed. Your cooperation in this effort is greatly appreciated.

Sincerely,

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



**YOUR EXPENDITURES FOR THIS TRIP**

We would like to ask you about the expenses related to your recent trip to the Florida Keys. Please complete one of the questions below, indicating for how many people you paid expenses.

1) If you paid your own expenses or if you shared expenses with someone else, please check this box   
 On the following pages, report only those trip expenses you personally paid for.

2) If you were paying all the expenses for yourself and for one or more others, please check this box   
 and record in the box below the number of persons you paid expenses for, including yourself.  
 Report the total amount of expenses you paid for on the following pages.

Number of people you were paying expenses for, including yourself

Please report your expenditures for each of the items listed to the nearest whole dollar. We are interested in only expenses made while you were on shore in the Florida Keys.

Item	Total amount spent in Florida Keys
<b>FOOD &amp; BEVERAGES</b>	
Food purchased at a store (food store/fruit market, etc.) for carry-out	_____
Drinks consumed at bars and clubs during non-meal times (nighttime recreation)	_____
Beverages purchased at a store for carry-out	_____
Food and drinks consumed at restaurants and bars	_____
<b>TRANSPORTATION</b>	
Rental automobile, motorcycle or moped	_____
Gas & oil - auto/moped	_____
Parking fees & tolls	_____
Taxi fare	_____
Bus fare	_____
<b>BOATING</b>	
Boat, jet ski, and wave runner rental	_____
Sailing charters or sunset cruises	_____

Item	Total amount spent in Florida Keys
<b>FISHING</b> Cut Bait Live Bait Daily or special fishing permits Fishing lines, fly lines, fish nets, minnow traps and seines Charter/party boat, guide service	 <hr/> <hr/> <hr/> <hr/> <hr/>
<b>SCUBA DIVING/SNORKELING</b> Rental fee for equipment Charter/party boat, guide service	 <hr/> <hr/>
<b>SIGHTSEEING</b> Sightseeing tours Glass bottom boat rides Admission to tourist, amusement, festivals, and other attraction	 <hr/> <hr/> <hr/>
<b>OTHER ACTIVITY EXPENDITURES</b> Rental fee for recreation equipment (bicycles, golf carts not listed above) Guide service, tour, or outfitters (not listed above, like parasailing) Park entrance fees Admission to motion pictures, theaters, museums, musical performances, concerts, etc. Admission to musical performances, concerts Spa treatments Fitness activities (gym fees, fitness classes/instruction)	 <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/>
<b>MISCELLANEOUS EXPENDITURES</b> Film Purchases Film Developing Footware Clothing Souvenirs, gifts (not clothing) Other, specify _____	 <hr/> <hr/> <hr/> <hr/> <hr/> <hr/>

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

That's All!! If you would like to be entered into a sweepstakes to win a free Vacation to the Florida Keys, fill out your name, address and phone number below. All prizes will be awarded in October of 2007.

Name: \_\_\_\_\_

Address: \_\_\_\_\_

City: \_\_\_\_\_

State: \_\_\_\_\_ Zip: \_\_\_\_\_ Phone: \_\_\_\_\_

Prizes to be awarded are:

GRAND PRIZE

- \* Airfare for two from anywhere in the continental United States to the Florida Keys
- \* Rental car with unlimited miles for one week (seven days)
- \* Accommodations for two for one week (six nights)
- \* Two complimentary "activities" for two (i.e., diving trip, fishing charter, sunset sail, etc.)
- \* Complimentary dinner for two at local restaurant

FIRST PRIZE

- \* Accommodations for two for five days (four nights)
- \* Two complimentary "activities" for two (i.e., diving trip, fishing charter, sunset sail, etc.)
- \* Complimentary dinner for two at local restaurant

SECOND PRIZE

- \* Accommodations for two for four days (three nights)
- \* One complimentary "activity" for two (i.e., diving trip, fishing charter, sunset sail, etc.)
- \* Complimentary dinner for two at local restaurant

SECOND PRIZE

- \* Accommodations for two for three days (two nights)
- \* One complimentary "activity" for two (i.e., diving trip, fishing charter, sunset sail, etc.)

OMB Approval #: 0648-xxxx

Expiration Date:

This is a cooperative research project of the Monroe County Tourist Development Council and the National Oceanic and Atmospheric Administration. Public reporting burden for this collection of information is estimated to average 20 minutes including time for reviewing instructions, searching existing data sources, gathering and maintaining the data need, 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 this burden, to U.S. Department of Commerce, Clearance Officer, Office of Chief Information Officer, Rm. 6625, 14<sup>th</sup> and Constitution Avenue NW, Washington, DC 20230. Notwithstanding any other provisions of the law, no person is required to respond to, nor shall any person be subject to penalty for failure to comply with, a collection of information subject to requirements of the Paperwork Reduction Act, unless that collection of information displays a currently valid OMB Control Number.

## THANK YOU!

for  
participating in this  
Recreation Survey

Dear Visitor,

During your recent trip to the Florida Keys 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 answers are voluntary and confidential. Your name will never be released to anyone unless otherwise required by law. After the completion of the project all materials identifying you as an individual will be destroyed.

When you complete the questionnaire, please reverse-fold it so that our return address on the GREEN PAGE in the inside is folded to the outside. Please staple or tape to seal the questionnaire and mail it back to us. No postage is needed. Your cooperation in this effort is greatly appreciated.

Sincerely,

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

In this section we are interested in identifying the recreation site information which is important to you, the visitor.

IMPORTANCE  
(in the ideal recreational setting for activities)

1a Please read each statement and rate the importance of each item as it contributes to an ideal recreation/tourism setting for the activities you did in the Florida Keys. If an item does not apply, indicate by circling n/a (not applicable). Likewise, if you don't know, circle (dk).

			Not Applicable	Don't Know	Not Important	Somewhat Important	Important	Very Important	Extremely Important
1)	Clear water (high visibility)	n/a	dk	1	2	3	4	5	
2)	Amount of living coral on reefs	n/a	dk	1	2	3	4	5	
3)	Public transportation	n/a	dk	1	2	3	4	5	
4)	Parking	n/a	dk	1	2	3	4	5	
5)	Many different kind of fish and sea life to view	n/a	dk	1	2	3	4	5	
6)	Many different kind of fish and sea life to catch	n/a	dk	1	2	3	4	5	
7)	Large numbers of fish	n/a	dk	1	2	3	4	5	
8)	Opportunity to view large wildlife: (manatees, whales, dolphins, sea turtles)	n/a	dk	1	2	3	4	5	
9)	Uncrowded conditions	n/a	dk	1	2	3	4	5	
10)	Maps, brochures, and other tourist information	n/a	dk	1	2	3	4	5	
11)	Boat ramps/launching facilities	n/a	dk	1	2	3	4	5	
12)	Marina facilities	n/a	dk	1	2	3	4	5	
13)	Directional signs, street signs, mile markers	n/a	dk	1	2	3	4	5	
14)	Condition of roads and streets	n/a	dk	1	2	3	4	5	
15)	Cleanliness of streets and sidewalks	n/a	dk	1	2	3	4	5	
16)	Condition of bike paths and sidewalks/walking paths	n/a	dk	1	2	3	4	5	
17)	Shoreline access	n/a	dk	1	2	3	4	5	
18)	Designated swimming/beach areas	n/a	dk	1	2	3	4	5	
19)	Quality of beaches	n/a	dk	1	2	3	4	5	
20)	Customer service and friendliness of people	n/a	dk	1	2	3	4	5	
21)	Historic preservation (historic landmarks, houses, etc.)	n/a	dk	1	2	3	4	5	
22)	Availability of public restrooms	n/a	dk	1	2	3	4	5	
23)	Value for the price	n/a	dk	1	2	3	4	5	
24)	Parks and specially protected areas	n/a	dk	1	2	3	4	5	
25)	Mooring buoys near coral reefs	n/a	dk	1	2	3	4	5	

lb. On the previous page you indicated the importance of a list of items to your recreational/tourist experiences. Now please read each of the items on this list and rate how satisfied you were with each at the places you did your activities in the Florida Keys. If an item does not apply, indicate by circling n/a (not applicable). Likewise, if you don't know, circle (dk).

SATISFACTION  
(with each of these items where  
you did activities in the Florida Keys)

			Not Applicable	Don't Know	Terrible	Unhappy/Dissatisfied	Mixed	Happy/Satisfied	Delighted
1)	Clear water (high visibility)	n/a	dk	1	2	3	4	5	
2)	Amount of living coral on reefs	n/a	dk	1	2	3	4	5	
3)	Public transportation	n/a	dk	1	2	3	4	5	
4)	Parking	n/a	dk	1	2	3	4	5	
5)	Many different kind of fish and sea life to view	n/a	dk	1	2	3	4	5	
6)	Many different kind of fish and sea life to catch	n/a	dk	1	2	3	4	5	
7)	Large numbers of fish	n/a	dk	1	2	3	4	5	
8)	Opportunity to view large wildlife: (manatees, whales, dolphins, sea turtles)	n/a	dk	1	2	3	4	5	
9)	Uncrowded conditions	n/a	dk	1	2	3	4	5	
10)	Maps, brochures, and other tourist information	n/a	dk	1	2	3	4	5	
11)	Boat ramps/launching facilities	n/a	dk	1	2	3	4	5	
12)	Marina facilities	n/a	dk	1	2	3	4	5	
13)	Directional signs, street signs, mile markers	n/a	dk	1	2	3	4	5	
14)	Condition of roads and streets	n/a	dk	1	2	3	4	5	
15)	Cleanliness of streets and sidewalks	n/a	dk	1	2	3	4	5	
16)	Condition of bike paths and sidewalks/walking paths	n/a	dk	1	2	3	4	5	
17)	Shoreline access	n/a	dk	1	2	3	4	5	
18)	Designated swimming/beach areas	n/a	dk	1	2	3	4	5	
19)	Quality of beaches	n/a	dk	1	2	3	4	5	
20)	Customer service and friendliness of people	n/a	dk	1	2	3	4	5	
21)	Historic preservation (historic landmarks, houses, etc.)	n/a	dk	1	2	3	4	5	
22)	Availability of public restrooms	n/a	dk	1	2	3	4	5	
23)	Value for the price	n/a	dk	1	2	3	4	5	
24)	Parks and specially protected areas	n/a	dk	1	2	3	4	5	
25)	Mooring buoys near coral reefs	n/a	dk	1	2	3	4	5	

1c. Had you visited the Florida Keys more than five years ago?

- If "yes" answer question 1d.
- If "no" skip to question II on page 4.

SATISFACTION  
(with each of these items five  
years ago in the Florida Keys)

1d. Now please read each of the items on this list and rate how satisfied you were with each five years ago or more in the Florida Keys. If an item does not apply, indicate by circling n/a (not applicable). Likewise, if you don't know, circle (dk).

		Not Applicable Don't Know Terrible Unhappy/Dissatisfied Mixed Happy/Satisfied Delighted							
1)	Clear water (high visibility) . . . . .	n/a	dk	1	2	3	4	5	
2)	Amount of living coral on reefs . . . . .	n/a	dk	1	2	3	4	5	
3)	Opportunity to view large wildlife . . . . .	n/a	dk	1	2	3	4	5	
4)	Uncrowded conditions . . . . .	n/a	dk	1	2	3	4	5	
5)	Condition of roads and streets . . . . .	n/a	dk	1	2	3	4	5	
6)	Cleanliness of streets and sidewalks. . . . .	n/a	dk	1	2	3	4	5	
7)	Shoreline access . . . . .	n/a	dk	1	2	3	4	5	
8)	Quality of beaches . . . . .	n/a	dk	1	2	3	4	5	
9)	Customer service and friendliness of people . . . . .	n/a	dk	1	2	3	4	5	
10)	Historic preservation (historic landmarks, houses, etc.) . . . . .	n/a	dk	1	2	3	4	5	
11)	Parks and specially protected areas . . . . .	n/a	dk	1	2	3	4	5	
12)	Value for the price . . . . .	n/a	dk	1	2	3	4	5	



In this section we have a few special issues questions we would like to ask you.

IIa. Did you use your own boat or personal watercraft while on your recent visit to the Florida Keys?

- Yes (Continue)       No ( Go to Question III)

IIb. Is your boat or personal watercraft in the Florida Keys or did you trailer it?

- I store my boat/personal watercraft in the Florida Keys  
 I trailer my boat/personal watercraft to the Florida Keys

IIIa. How likely is it that you will recommend the Florida Keys/Key West to a friend or family member for their next vacation?

- |    |            |                    |                 |        |             |                |
|----|------------|--------------------|-----------------|--------|-------------|----------------|
|    | Don't Know | Will Not Recommend | Somewhat Likely | Likely | Very Likely | Will Recommend |
| dk | 1          | 2                  | 3               | 4      | 5           |                |

IIIb. How likely is it that you will return to the Florida Keys/Key West for a visit? Circle the appropriate answer.

- |    |            |                 |                 |        |             |             |
|----|------------|-----------------|-----------------|--------|-------------|-------------|
|    | Don't Know | Will Not Return | Somewhat Likely | Likely | Very Likely | Will Return |
| dk | 1          | 2               | 3               | 4      | 5           |             |

<If you circle "Don't Know" or "Will Not Return" above, go to Question IV>

IIIc. How soon might you return to the Florida Keys?

- Don't Know  
 In less than 3 months  
 3 to 6 months  
 6 to 12 months  
 Greater than one year

IVa. On your first visit ever to the Florida Keys/Key West, was your visit on a cruise ship stopover in Key West?

- Yes       No (Skip to Section V)

IVb. Did your experience in Key West result in you choosing the Florida Keys/Key West as a destination for a non cruise ship visit?

- Yes       No

IVc. If this cruise ship visit was your first visit, did your experience lead you to think about planning a future non cruise ship visit to the Florida Keys/Key West?

- Yes       No

Va. Did you go into any of the Chamber of Commerce Visitor Centers on your most recent visit (the one we interviewed you on) to the Florida Keys?

- Yes (Continue)       No ( Skip to Section VI)

Vb. Which Visitor Centers did you go into? (Please check all that apply)

- Key Largo Visitor Center  
 Islamorada Visitor Center  
 Marathon Visitor Center  
 Lower Keys Visitor Center  
 Key West Visitor Center

[This page intentionally left blank. Proceed to next page.]

Vc. Did going into any of the Visitor Centers result in you obtaining information that extended your length of stay in the Florida Keys? (Please answer this for the most recent trip for which we interviewed you)

- Yes (Continue)       No ( Skip to Section VI)

Vd. How many days longer did you extend your stay?

\_\_\_\_\_ ( # of days)

VI. In this section, we are interested in learning about your feelings regarding various environmental issues. Below is a list of statements. For each statement please circle the response that best reflects your opinion about the statement.

		<i>Strongly Agree</i>	<i>Agree</i>	<i>Neutral</i>	<i>Disagree</i>	<i>Strongly Disagree</i>
1)	The federal government will have to introduce harsh measures to halt pollution since few people will regulate themselves . . . . .	SA	A	N	D	SD
2)	We should not worry about killing too many game animals because in the long run things will balance out . . . . .	SA	A	N	D	SD
3)	I'd be willing to make personal sacrifices for the sake of slowing down pollution even though the immediate results may not seem significant . . . . .	SA	A	N	D	SD
4)	Pollution is not personally affecting my life . . . . .	SA	A	N	D	SD
5)	The benefits of modern consumer products are more important than the pollution that results from their production and use . . . . .	SA	A	N	D	SD
6)	We must prevent any type of animal from becoming extinct, even if it means sacrificing some things for ourselves . . . . .	SA	A	N	D	SD
7)	Courses focusing on the conservation of natural resources should be taught in the public schools . . . . .	SA	A	N	D	SD
8)	Although there is continual contamination of our lakes, streams, and air, nature's purifying processes soon return them to normal . . . . .	SA	A	N	D	SD

VI. (continued)

		Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
9)	Because the government has such good inspection and control agencies, it's very unlikely that pollution due to energy production will become excessive . . . . .	SA	A	N	D	SD
10)	The government should provide each citizen with a list of agencies and organizations to which the citizen could report grievances concerning pollution . . . . .	SA	A	N	D	SD
11)	Predators such as hawks, crows, skunks, and coyotes which prey on farmers' grain crops and poultry should be eliminated . . . . .	SA	A	N	D	SD
12)	The currently active anti-pollution organizations are really more interested in disrupting society than they are in fighting pollution . . . . .	SA	A	N	D	SD
13)	Even if public transportation was more efficient than it is, I would prefer to drive my car to work . . . . .	SA	A	N	D	SD
14)	Industry is trying its best to develop effective anit-pollution technology . . . . .	SA	A	N	D	SD
15)	If asked, I would contribute time, money, or both to an organization like the Sierra Club that works to improve the quality of the environment . . . . .	SA	A	N	D	SD
16)	I would be willing to accept an increase in my family's expenses of \$100 a year to promote the wise use of natural resources . . . . .	SA	A	N	D	SD

That's All!! If you would like to be entered into a sweepstakes to win a free Vacation to the Florida Keys, fill out your name, address and phone number below. All prizes will be awarded in October of 2007.

Name: \_\_\_\_\_

Address: \_\_\_\_\_

City: \_\_\_\_\_

State: \_\_\_\_\_ Zip: \_\_\_\_\_ Phone: \_\_\_\_\_

Prizes to be awarded are:

GRAND PRIZE

- \* Airfare for two from anywhere in the continental United States to the Florida Keys
- \* Rental car with unlimited miles for one week (seven days)
- \* Accommodations for two for one week (six nights)
- \* Two complimentary "activities" for two (i.e., diving trip, fishing charter, sunset sail, etc.)
- \* Complimentary dinner for two at local restaurant

FIRST PRIZE

- \* Accommodations for two for five days (four nights)
- \* Two complimentary "activities" for two (i.e., diving trip, fishing charter, sunset sail, etc.)
- \* Complimentary dinner for two at local restaurant

SECOND PRIZE

- \* Accommodations for two for four days (three nights)
- \* One complimentary "activity" for two (i.e., diving trip, fishing charter, sunset sail, etc.)
- \* Complimentary dinner for two at local restaurant

SECOND PRIZE

- \* Accommodations for two for three days (two nights)
- \* One complimentary "activity" for two (i.e., diving trip, fishing charter, sunset sail, etc.)

This is a cooperative research project of the Monroe County Tourist Development Council and the National Oceanic and Atmospheric Administration. Public reporting burden for this collection of information is estimated to average 15 minutes including time for reviewing instructions, searching existing data sources, gathering and maintaining the data need, 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 this burden, to U.S. Department of Commerce, Clearance Officer, Office of Chief Information Officer, Rm. 6625, 14th and Constitution Avenue NW, Washington, DC 20230. Notwithstanding any other provisions of the law, no person is required to respond to, nor shall any person be subject to penalty for failure to comply with, a collection of information subject to requirements of the Paperwork Reduction Act, unless that collection of information displays a currently valid OMB Control Number.

## VISITOR: CUSTOMER SURVEY

- **On-site Survey**
  - Questionnaire
  - Respondent Card (Yellow Card)
  - Activities List (White Card)
  - Activities List – Reefs (Blue Card)
  - Specialization Question Responses - Main or Primary Activity (Orange Card)
  
- **Knowledge, Attitudes & Perceptions of Sanctuary Management Strategies and Regulations/Reef Valuation Mailback**
  - Questionnaire
  
- **Global Climate Change/Coral Bleaching Mailback**
  - Questionnaire
  - Version 1
  - Version 2
  - Version 3
  - Version 4

The Global Climate Change/Coral Bleaching Mailback has four versions. The difference in the versions is the choice questions. Each version has six (6) choice questions. Across the four versions there are 24 different choice questions. All four versions include the Satisfaction Module, choice questions and contingent behavior questions.

- **Substitution/Management Alternatives Mailback**
  - Questionnaire
  - Version 1
  - Version 2
  - Version 3
  - Version 4
  - Version 5
  - Version 6

The Substitution/Management Alternatives Mailback has six versions. The difference in versions is the Management Alternatives choice questions. Each version includes eight (8) choice questions for each of two activities (fishing and diving). Across the six versions, there are 48 different choice questions.

# **CUSTOMER SURVEY**

*Florida Keys*

**SURVEY # \_\_\_\_\_**

OMB Approval #: 0648-xxxx  
Expiration Date:

To be read to interviewee:

This is a cooperative research project of the Monroe County Tourist Development Council and the National Oceanic and Atmospheric Administration. Public reporting burden for this collection of information is estimated to average 15 minutes including time for reviewing instructions, searching existing data sources, gathering and maintaining the data need, 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 this burden, to U.S. Department of Commerce, Clearance Officer, Office of Chief Information Officer, Rm. 6625, 14<sup>th</sup> and Constitution Avenue NW, Washington, DC 20230. Notwithstanding any other provisions of the law, no person is required to respond to, nor shall any person be subject to penalty for failure to comply with, a collection of information subject to requirements of the Paperwork Reduction Act, unless that collection of information displays a currently valid OMB Control Number.



## CUSTOMER SURVEY

Interviewer Name: \_\_\_\_\_

LOCATION CODE	INTERVIEW SITE	AGENCY	DATE								
_____	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 80%;">                     1 Resort                      2 Campground                      3 Marina                      4 Museum                      5 Historic Area                      6 Natural Area                      7 Dive Shop                      8 Beach                      9 Park                      10 Other (specify)                      _____                 </td> <td style="width: 20%; text-align: center;">                     SPECIFIC                      _____                 </td> </tr> </table>	1 Resort 2 Campground 3 Marina 4 Museum 5 Historic Area 6 Natural Area 7 Dive Shop 8 Beach 9 Park 10 Other (specify) _____	SPECIFIC _____	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 80%;">                     1 FS                      2 BLM                      3 COE                      4 TVA                      5 NOAA                      6 Other                 </td> <td style="width: 20%; text-align: center;">                     STATE                      _____                 </td> </tr> </table>	1 FS 2 BLM 3 COE 4 TVA 5 NOAA 6 Other	STATE _____	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 10%;">                     1 Jan                      2 Feb                      3 Mar                      4 Apr                      5 May                      6 Jun                      7 Jul                      8 Aug                      9 Sep                      10 Oct                      11 Nov                      12 Dec                 </td> <td style="width: 10%; text-align: center;">                     Day                      _____                 </td> <td style="width: 10%; text-align: center;">                     Year                      200__                 </td> </tr> </table>	1 Jan 2 Feb 3 Mar 4 Apr 5 May 6 Jun 7 Jul 8 Aug 9 Sep 10 Oct 11 Nov 12 Dec	Day _____	Year 200__	Number of intervening vehicles or groups since last interview <b>VEHICLES</b> _____
1 Resort 2 Campground 3 Marina 4 Museum 5 Historic Area 6 Natural Area 7 Dive Shop 8 Beach 9 Park 10 Other (specify) _____	SPECIFIC _____										
1 FS 2 BLM 3 COE 4 TVA 5 NOAA 6 Other	STATE _____										
1 Jan 2 Feb 3 Mar 4 Apr 5 May 6 Jun 7 Jul 8 Aug 9 Sep 10 Oct 11 Nov 12 Dec	Day _____	Year 200__									
				<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="text-align: center;"><b>TYPE OF DAY</b></td> </tr> <tr> <td>1 Weekday</td> </tr> <tr> <td>2 Weekend</td> </tr> <tr> <td>3 Holiday</td> </tr> </table>	<b>TYPE OF DAY</b>	1 Weekday	2 Weekend	3 Holiday			
<b>TYPE OF DAY</b>											
1 Weekday											
2 Weekend											
3 Holiday											

### INTRODUCTION AND QUALIFYING QUESTIONS

Interviewer: Refer to Introduction and Qualifying Questions on your clipboard

### TRIP PROFILE

We would first like to ask you some questions about the trip you are on and your visit to <Location> . To answer these questions, please consider your "visit" to have started when you entered <Location> and your "trip" to have begun when you left your primary residence, or where you live most of the time throughout the year.

**1. Where is your primary residence?**

City or nearest city	Country	State
Zip code: _____		

Country	1 USA 2 Canada 3 Mexico 4 Central Am./South Am.	5 Australia/Oceania 6 Japan 7 Other Far East 8 United Kingdom	9 Other Europe 10 Middle East 11 Africa 12 Other
---------	--	--	---

**2. Please look at Section 1 on the yellow card and tell me which reason listed there best describes the primary purpose for the trip you are on?**

- |   |   |
|---|---|
| <b>A Recreation or Vacation</b><br><b>B Visit Family or Friends</b><br><b>C Business Trip</b> | <b>D Business/Pleasure Combined</b><br><b>E Other (specify):</b><br>_____ |
|---|---|

**3. When did you first arrive at <Location> ?**

1 Jan 2 Feb 3 Mar 4 Apr	5 May 6 Jun 7 Jul 8 Aug	9 Sep 10 Oct 11 Nov 12 Dec	[?] DATE _____ [?] TIME (military) _____
----------------------------------	----------------------------------	-------------------------------------	---

4. When will you be leaving at the end of your visit to <Location> ?  1 Jan  5 May  9 Sep  DATE \_\_\_\_\_  
 2 Feb  6 Jun  10 Oct \_\_\_\_\_  
 3 Mar  7 Jul  11 Nov \_\_\_\_\_  
 4 Apr  8 Aug  12 Dec  TIME (military) \_\_\_\_\_

**Must be before noon next day from time of interview**

5. How many miles and hours did you travel, from your primary residence to <Location> , including travel to other places you have visited?  Miles: \_\_\_\_\_  Hours: \_\_\_\_\_

6. How much time did you spend or do you plan to spend visiting areas other than the <Location> , during this trip, not including travel time?  Hours: \_\_\_\_\_  Days: \_\_\_\_\_ —————> if answer is zero, leave blank and go to Q. 12

7. Is <Location> , your primary destination?  Yes —————> GO TO Q. 9  
 No

8. How far away from <Location> is your primary destination in miles and hours?  Miles: \_\_\_\_\_  Hours: \_\_\_\_\_

9. Did you travel to <Location> from a temporary residence (such as a hotel, campground or friends house) located outside <Location> ?  Yes —————> GO TO Q. 10  
 No —————> GO TO Q. 12  
 ? —————> GO TO Q. 12

10. After your visit to <Location> , will you be returning to the temporary residence  Yes  No  ?

11. How far away in miles and hours is this temporary residence from <Location> ?  Miles: \_\_\_\_\_  Hours: \_\_\_\_\_

Next we would like to ask you some questions about your visit, the people you are travelling with, and your recreational activities.

12. Have you ever been to <Location> before?  Yes —————> GO TO Q. 13  
 No —————> GO TO Q. 15  
 ? —————> GO TO Q. 15

13. What year did you first come here?  Year: \_\_\_\_\_

14. Including this visit, how many times have you been to <Location> where you participated in at least one recreation activity in the last twelve (12) months, that is, since (date last year)?  Times: \_\_\_\_\_

15. Including this trip, how many days have you spent in <Location> during the past 12 months, that is, since (date last year)?  Days: \_\_\_\_\_



**This next set of questions focuses on use of both the artificial reefs and natural reefs in the Florida Keys.**

Interviewer: Hand respondent map of Florida Keys and blue card with activities list for reefs

**Again, I want you to focus on the use of the reefs on this trip.**

**20. In which of the regions of the Florida Keys did you or someone in your group do any activities on artificial or natural reefs?**

Interviewer: Mark boxes on each page for each region in which they did activities

Interviewer: Start with first region in which they did activities

Interviewer: If no reef activities, GO TO Q. 29

**21. Please look at the blue card with the activities list for reefs and tell me in which activities you or someone in your group participated in <Region> on either artificial or natural reefs. Please read me the number for each activity.**

**22. As I read each activity, please tell me how many others in your group, who are not permanent residents of Monroe County, participated in the activity in <Region> ?**

**23. As I read each activity, please tell me how many days you participated in the activity in <Region> ?**

**24. How many of the days of <Activity> were on artificial reefs in <Region> ?**

**25. How many of the days of <Activity> were on natural reefs in <Region> ?**

Interviewer: If no Scuba Diving or Snorkelling in any region, GO TO Q. 29

**26. How many dives did you make <Activity> (a dive is a water entry and exit) in <Region> ?**

**27. How many dives did you make <Activity> on artificial reefs in <Region> ?**

**28. How many dives did you make <Activity> on natural reefs in <Region> ?**

**Upper Keys - Reef Use**

Activity	Resp.	# Others	Respondent # of days	# days artificial	# days natural	Respondent # dives	# dives artificial	# dives natural
_____	○	_____	_____	_____	_____	_____	_____	_____
_____	○	_____	_____	_____	_____	_____	_____	_____
_____	○	_____	_____	_____	_____	_____	_____	_____
_____	○	_____	_____	_____	_____	_____	_____	_____
_____	○	_____	_____	_____	_____	_____	_____	_____
_____	○	_____	_____	_____	_____	_____	_____	_____
_____	○	_____	_____	_____	_____	_____	_____	_____
_____	○	_____	_____	_____	_____	_____	_____	_____
_____	○	_____	_____	_____	_____	_____	_____	_____
_____	○	_____	_____	_____	_____	_____	_____	_____

Interviewer: Repeat Q. 22 - 28 for each region.

22. As I read each activity, please tell me how many others in your group, who are not permanent residents of Monroe County, participated in the activity in <Region> ?

23. As I read each activity, please tell me how many days you participated in the activity in <Region> ?

24. How many of the days of <Activity> were on artificial reefs in <Region> ?

25. How many of the days of <Activity> were on natural reefs in <Region> ?

Interviewer: If no Scuba Diving or Snorkelling in any region, GO TO Q. 29

26. How many dives did you make <Activity> (a dive is a water entry and exit) in <Region> ?

27. How many dives did you make <Activity> on artificial reefs in <Region> ?

28. How many dives did you make <Activity> on natural reefs in <Region> ?

Islamorada - Reef Use

Activity	Resp.	# Others	Respondent # of days	# days artificial	# days natural	Respondent # dives	# dives artificial	# dives natural
_____	○	_____	_____	_____	_____	_____	_____	_____
_____	○	_____	_____	_____	_____	_____	_____	_____
_____	○	_____	_____	_____	_____	_____	_____	_____
_____	○	_____	_____	_____	_____	_____	_____	_____
_____	○	_____	_____	_____	_____	_____	_____	_____
_____	○	_____	_____	_____	_____	_____	_____	_____
_____	○	_____	_____	_____	_____	_____	_____	_____
_____	○	_____	_____	_____	_____	_____	_____	_____
_____	○	_____	_____	_____	_____	_____	_____	_____
_____	○	_____	_____	_____	_____	_____	_____	_____

Marathon - Reef Use

Activity	Resp.	# Others	Respondent # of days	# days artificial	# days natural	Respondent # dives	# dives artificial	# dives natural
_____	○	_____	_____	_____	_____	_____	_____	_____
_____	○	_____	_____	_____	_____	_____	_____	_____
_____	○	_____	_____	_____	_____	_____	_____	_____
_____	○	_____	_____	_____	_____	_____	_____	_____
_____	○	_____	_____	_____	_____	_____	_____	_____
_____	○	_____	_____	_____	_____	_____	_____	_____
_____	○	_____	_____	_____	_____	_____	_____	_____
_____	○	_____	_____	_____	_____	_____	_____	_____
_____	○	_____	_____	_____	_____	_____	_____	_____
_____	○	_____	_____	_____	_____	_____	_____	_____

Interviewer: Repeat Q. 22 - 28 for each region.

22. As I read each activity, please tell me how many others in your group, who are not permanent residents of Monroe County, participated in the activity in <Region> ?

---

23. As I read each activity, please tell me how many days you participated in the activity in <Region> ?

---

24. How many of the days of <Activity> were on artificial reefs in <Region> ?

---

25. How many of the days of <Activity> were on natural reefs in <Region> ?

---

Interviewer: If no Scuba Diving or Snorkelling in any region, GO TO Q. 29

26. How many dives did you make <Activity> (a dive is a water entry and exit) in <Region> ?

---

27. How many dives did you make <Activity> on artificial reefs in <Region> ?

---

28. How many dives did you make <Activity> on natural reefs in <Region> ?

---

Lower Keys - Reef Use

Activity	Resp.	# Others	Respondent # of days	# days artificial	# days natural	Respondent # dives	# dives artificial	# dives natural
_____	○	_____	_____	_____	_____	_____	_____	_____
_____	○	_____	_____	_____	_____	_____	_____	_____
_____	○	_____	_____	_____	_____	_____	_____	_____
_____	○	_____	_____	_____	_____	_____	_____	_____
_____	○	_____	_____	_____	_____	_____	_____	_____
_____	○	_____	_____	_____	_____	_____	_____	_____
_____	○	_____	_____	_____	_____	_____	_____	_____
_____	○	_____	_____	_____	_____	_____	_____	_____
_____	○	_____	_____	_____	_____	_____	_____	_____
_____	○	_____	_____	_____	_____	_____	_____	_____

Key West - Reef Use

Activity	Resp.	# Others	Respondent # of days	# days artificial	# days natural	Respondent # dives	# dives artificial	# dives natural
_____	○	_____	_____	_____	_____	_____	_____	_____
_____	○	_____	_____	_____	_____	_____	_____	_____
_____	○	_____	_____	_____	_____	_____	_____	_____
_____	○	_____	_____	_____	_____	_____	_____	_____
_____	○	_____	_____	_____	_____	_____	_____	_____
_____	○	_____	_____	_____	_____	_____	_____	_____
_____	○	_____	_____	_____	_____	_____	_____	_____
_____	○	_____	_____	_____	_____	_____	_____	_____
_____	○	_____	_____	_____	_____	_____	_____	_____
_____	○	_____	_____	_____	_____	_____	_____	_____

29. Please look at the activity list on the white card and tell me which (if any) activity was the main reason for your visit to <Location> .

Main Activity: \_\_\_\_\_  
 No main activity

30. Consider for a moment, the total number of visits you have made to <Location> in which you did at least one of the activities on the list during the past twelve (12) months. Including this visit, how many of these visits were particularly for (main activity)?

Visits: \_\_\_\_\_

31. How many visits over the past twelve (12) months have you made to any site for (main activity)?

Visits: \_\_\_\_\_

Interviewer: If answer to Question 29 (main activity) is "no main activity" or Main activity is not fishing or diving (activities 100 to 410) then skip to Question 39.

In this section, we are interested in learning more about your main or primary activity. You told me your main or primary activity was <main activity>. (from Q29) Hand respondent the orange card.

For the next four questions, please read the four choices and give me the number of the one answer that best fits you for that question.

32. When I participate in my primary activity, I feel like:

1      2      3      4

33. During my activity, I can best be described as:

1      2      3      4

34. My relationships with others who do the activity are:

1      2      3      4

35. My commitment to the activity is:

1      2      3      4

36. If you had to replace all of the equipment that you currently own for your main or primary activity with similar equipment, how much would it cost to replace?

\$\_\_\_\_\_AMOUNT TO REPLACE PRIMARY ACTIVITY EQUIPMENT

For the next two questions, I will first read the question. For each lettered item, please respond with the letter and the number for the one answer that best fits you for that question.

**37. To what extent do you make use of the following for current information about your primary activity?**

	<b>No Use</b>	<b>Almost no use</b>	<b>A little use</b>	<b>Some use</b>	<b>A lot of use</b>
a. Talking with others who participate in the activity.....	1	2	3	4	5
b. Magazines.....	1	2	3	4	5
c. Government agency publications.....	1	2	3	4	5
d. Conservation organization publications.....	1	2	3	4	5
e. Newspapers.....	1	2	3	4	5
f. Diving shops/companies.....	1	2	3	4	5
g. Club meetings.....	1	2	3	4	5
h. Television.....	1	2	3	4	5
i. Radio.....	1	2	3	4	5
j. Internet.....	1	2	3	4	5

**38. Below is a list of reasons why people engage in recreation activities.**

	<b>Not at all important</b>	<b>Slightly important</b>	<b>Moderately important</b>	<b>Very important</b>	<b>Extremely important</b>
a. To be outdoors.....	1	2	3	4	5
b. For family recreation.....	1	2	3	4	5
c. To experience new and different things.....	1	2	3	4	5
d. For relaxation.....	1	2	3	4	5
e. To be close to the water.....	1	2	3	4	5
f. To get away from the demands of other people.....	1	2	3	4	5
g. To be with friends.....	1	2	3	4	5
h. To develop my skills.....	1	2	3	4	5
i. To get away from the regular routine.....	1	2	3	4	5
j. To experience adventure and excitement.....	1	2	3	4	5
k. To experience natural surroundings.....	1	2	3	4	5



39. On this trip, are you paying your own expenses, sharing expenses, or is someone else paying your expenses?

- Own expenses \_\_\_\_\_
  - Shared expenses \_\_\_\_\_
  - Someone else paying expenses \_\_\_\_\_
- > Beside your own expenses, how many other people are you paying for on this trip? \_\_\_\_\_
- > With how many people are you sharing expenses? \_\_\_\_\_

40. During this trip to the Florida Keys, were you giving up any income earning activities?

- Yes       No

How much income, before taxes, do you estimate you lost during this trip to the Florida Keys?

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

41. Looking at Section 5 of the yellow card, how did you get to the Florida Keys?  
Please give the letters of all that apply. (Circle all that apply)

- |                                  |                                       |
|----------------------------------|---------------------------------------|
| A Automobile - Private           | I Air - Orlando                       |
| B Automobile - Rental            | J Air - Other Florida (specify) _____ |
| C Air - Key West                 | K Cruise Ship                         |
| D Air - Marathon                 | L Own Boat                            |
| E Air - Miami                    | M Ferry                               |
| F Air - Ft. Lauderdale/Hollywood | N Bus / Shuttle                       |
| G Air - West Palm Beach          | O Train - Miami                       |
| H Air - Tampa                    | P Other (specify) _____               |

**GROUP DEMOGRAPHIC INFORMATION**

The next group of questions refers to the people who are recreating with you on this visit.

42. How many people are recreating with you on this visit, including yourself?  People: \_\_\_\_\_

43. Looking at Section 2 of the yellow card, which best describes the group recreating with you, on this visit?

A	Group of family members	E	Tour group
B	Group of 2 or more families	F	Unrelated friends (2 or more)
C	Group of family and friends	G	One person travelling alone
D	Organized group or club	H	Other (specify) _____

44. How would you best describe your household? Looking at Section 3 of the yellow card, please give the letter on the yellow card that is closest to the description of your household.

A	Single adult with no children 18 or under
B	Single adult with children 18 or under
C	Two adults with no children 18 or under
D	Two adults with children 18 or under
E	More than two adults with no children 18 or under
F	More than two adults with children 18 or under

45. Please refer to the yellow card again and tell me which of the income categories in Section 4 best describes your annual household income last year before taxes. Please give me the letter on the card that is closest.

A B C D E F G H I J K L M N O

Refuse to answer  
 Don't know

We would now like to ask you some questions about yourself and the group who are recreating with you on this visit.		RESPONDENT							
<b>AGE</b>	Years								
<b>SEX</b>	Male	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	Female	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>ETHNICITY</b>	Spanish/Hispanic/Latino - Check if "Yes"	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>RACE (all that apply)</b>	White	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	Black or African American	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	American Indian or Alaska Native	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	Asian	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	Native Hawaiian or Other Pacific Islander	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>EDUCATION COMPLETED</b>	8th grade or less	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	9th - 11th grade	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	12th grade	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	13 - 15 years	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	16 years (college grad)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	17 or more years (grad. school)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>DISABILITY</b>	Hearing impaired	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	Visually impaired	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	Mobility impaired	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	Mentally or learning impaired	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	None of the above	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>EMPLOYMENT</b>	Unemployed	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	Employed full-time	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	Employed part-time	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	Retired	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	Student	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	Homemaker	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	None of the above	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Interviewer: Mailback Information

We would like to collect some additional information on your opinions about the management of the natural resources in the Florida Keys. Please take these two questionnaires and return them to us in the mail. The questionnaires will have a business reply page, and postage is pre-paid. It will cost you nothing to return them to us. The information gained from these questions is very important to all those responsible for making your trip to the Florida Keys an enjoyable experience. As an incentive to return your questionnaires, a sweepstakes has been organized by the local business community. Hand brochure describing sweepstakes. By returning both questionnaires with your name and address, we will enter you with two chances in the sweepstakes.

Reminder: Your answers are voluntary. After the survey is completed and the sweepstakes prizes awarded, all name and address information will be destroyed. No one will be allowed to use this information for contacting you about any promotions.

46. Will you complete the questionnaire?

Yes

No → This concludes our interview. Thank you for your time. In appreciation for your participation, we would like to offer you this gift.

47. Please give us your name and address, so that we may send you the questionnaire.

Name and address

Name: \_\_\_\_\_

Address: \_\_\_\_\_

City: \_\_\_\_\_ State: \_\_\_\_\_ Zip: \_\_\_\_\_

---

**COMMENTS:**

**THIS CONCLUDES OUR INTERVIEW. THANK YOU FOR YOUR TIME.**

**RESPONDENT CARD**

Your participation in this interview is voluntary. There are no penalties for not answering some or all of the questions, but since each interviewed person will represent many others not interviewed, your cooperation is extremely important. This study is being conducted by the University of Massachusetts-Amherst for the Monroe County Tourist Development Council and the National Oceanic and Atmospheric Administration. Uses of the information include the evaluation of present recreation uses and planning for future visitation. At the end of the study any materials identifying you as an individual will be destroyed.

**SECTION 1: Primary Purpose of Trip to Florida Keys**

- |          |                                |          |                              |          |                        |
|----------|--------------------------------|----------|------------------------------|----------|------------------------|
| <b>A</b> | <b>Recreation or vacation</b>  | <b>C</b> | <b>Business trip</b>         | <b>E</b> | <b>Other (specify)</b> |
| <b>B</b> | <b>Visit family or friends</b> | <b>D</b> | <b>Business and Pleasure</b> |          |                        |

**SECTION 2: Group Description**

- |          |                                      |          |                                      |
|----------|--------------------------------------|----------|--------------------------------------|
| <b>A</b> | <b>A group of family members</b>     | <b>E</b> | <b>Tour Group</b>                    |
| <b>B</b> | <b>A group of 2 or more families</b> | <b>F</b> | <b>Unrelated friends (2 or more)</b> |
| <b>C</b> | <b>A group of family and friends</b> | <b>G</b> | <b>One person traveling alone</b>    |
| <b>D</b> | <b>An organized group or club</b>    | <b>H</b> | <b>Other</b>                         |

**SECTION 3: HOUSEHOLD**

- A** Single adult with no children 18 or under
- B** Single adult with children 18 or under
- C** Two adults with no children 18 or under
- D** Two adults with children 18 or under
- E** More than two adults with no children 18 or under
- F** More than two adults with children 18 or under

**SECTION 4: HOUSEHOLD INCOME CATEGORIES (Annual Income before taxes)**

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

**SECTION 5: TRANSPORTATION (Please give letter of ALL that apply)**

- |          |                                       |          |   |
|----------|---------------------------------------|----------|---|
| <b>A</b> | <b>Automobile – Private</b>           | <b>I</b> | <b>Air – Orlando</b>                                  |
| <b>B</b> | <b>Automobile – Rental</b>            | <b>J</b> | <b>Air – Other Florida (Specify)</b>                  |
| <b>C</b> | <b>Air – Key West</b>                 | <b>K</b> | <b>Cruise Ship</b>                                    |
| <b>D</b> | <b>Air – Marathon</b>                 | <b>L</b> | <b>Own boat</b>                                       |
| <b>E</b> | <b>Air – Miami</b>                    | <b>M</b> | <b>Ferry – Fort Myers (may have Miami ferry soon)</b> |
| <b>F</b> | <b>Air – Ft. Lauderdale/Hollywood</b> | <b>N</b> | <b>Bus/Shuttle</b>                                    |
| <b>G</b> | <b>Air – West Palm Beach</b>          | <b>O</b> | <b>Train - Miami</b>                                  |
| <b>H</b> | <b>Air – Tampa</b>                    | <b>P</b> | <b>Other (Specify)</b>                                |

## ACTIVITIES LIST

Number	<b>Activities Using Boats and Personal Watercraft</b>
	<b>Snorkeling</b>
100A	Snorkeling from charter/party boat (pay operation)
101A	Snorkeling from a rental boat
102A	Snorkeling from private boat (your boat or friend or relatives boat)
	<b>Scuba Diving</b>
200A	Scuba diving from charter/party boat (pay operation)
201A	Scuba diving from a rental boat
202A	Scuba diving from a private boat (your boat or friend or relatives boat)
	<b>Special Activities while Snorkeling or Scuba Diving</b>
300	Diving for lobsters
301	Underwater photography
302	Wreck diving
303	Spear fishing
	<b>Fishing – Offshore</b>
400A	Fishing from charter boat (pay operation, usually six persons or less) - offshore
401A	Fishing from party or head boat (pay operation, charge per person) - offshore
402A	Fishing from a rental boat – off shore
403A	Fishing from a private boat (your boat or friend or relatives boat) – offshore
	<b>Fishing – Flats or Back Country</b>
404A	Fishing from charter/party boat or guide (pay operation) – flats or back country
405A	Fishing from rental boat – flats or back country
406A	Fishing from a private boat (your boat or friend or relatives boat) – flats or back country
	<b>Other Fishing</b>
407A	Other fishing from charter boat (pay operation, usually six persons or less)
408A	Other fishing from party or head boat (pay operation, charge per person)
409A	Other fishing from a rental boat
410A	Other fishing from a private boat (your boat or friends or relatives boat)
	<b>Viewing Nature and Wildlife</b>
500A	Glass bottom boat rides (pay operation)
501A	Back country boat excursions (pay operation/guided service/NOT FISHING)
502A	Viewing nature and wildlife from private or rental boat
	<b>Personal Watercraft (jet skis, wave runners, etc.)</b>
600A	Personal watercraft – rental
601A	Personal watercraft – Private (your boat or friend or relatives boat)
	<b>Sailing</b>
700A	Sailing charter/party boat (pay operation)
701A	Sailing rental boat
702A	Sailing private boat (your boat or friend or relatives boat)
	<b>Other Activities NOT MENTIONED ABOVE (parasailing, hang gliding, water-skiing, sunset cruises)</b>
800A	Other activities from a charter/party boat (pay operation)
801A	Other activities from a rental boat
802A	Other activities from a private boat (your boat or friend or relatives boat)

----- OVER -----

**ACTIVITIES LIST****Other Water-Based Activities – NO BOATS**

Number

- 
- Snorkeling and Scuba Diving**
- 10A Snorkeling from shore  
11A Scuba diving from shore
- Special Activities while Diving from Shore**
- 12 Diving for lobsters  
13 Underwater photography
- 14A Fishing from shore (beach, bank, pier, bridge, jetty, dock)
- 15A Swimming at Beaches (not in pool)  
16A Swimming in Outdoor Pool  
17 Swimming with Dolphins  
18A Windsurfing, sail boarding or kite surfing

Number

**Land-Based Activities**

- 
- Nature Study – Wildlife Observation – Photography**
- 19A Wildlife observation or wildlife photography  
20A Other nature study and observation  
21 Photography – Natural landscapes/scenery (not including wildlife)
- Camping – Backpacking – Hiking – Picnicking**
- 22 Backpacking  
23 Camping in developed campgrounds  
24 Camping in primitive campgrounds  
25 Day Hiking  
26 Attending ranger guided walk  
27 Self-guided nature or historic trail  
28 Picnicking
- Cultural, Historic and Tourist Attractions**
- 29A Visiting historic areas, sites, buildings or memorials  
30 Attending special events (fairs, festivals, ceremonies, etc.)  
31 Attending outdoor concerts, plays, or other outdoor performances  
32 Attending indoor concerts, plays, performances, or events  
33 Sight-seeing tours and tourist attractions (paid)  
34 Sight-seeing (not paid tours)  
35 Reading roadside exhibits or markers  
36A Visiting a museum, education facility, or information center  
37 Attending outdoor sports events (sailing or boat races; spectator at fishing tournament)
- Outdoor Sports**
- 38 Golf  
39 Tennis  
40 Participation in other outdoor sports and games
- Bicycling – Horseback Riding – Driving for Pleasure**
- 41 Bicycling  
42 Horseback riding  
43 Driving for Pleasure (mopeds, motorcycles)
- Beach Activities – Sunbathing**
- 44A All Beach Activities (other than swimming)  
45 Sunbathing (not at beach)
- Spa, Health & Wellness**
- 46 Spa Treatments (massage, esthetician services, body treatment)  
47 Fitness activities (fitness classes, visited gym/health center, personal trainer)  
48 Healthy cuisine (specialty dining for health or diet)

**ACTIVITIES LIST (REEFS)****Number                      Activities Using Boats on Artificial and Natural Reefs****Snorkeling**

- 100A Snorkeling from charter/party boat (pay operation)  
 101A Snorkeling from a rental boat  
 102A Snorkeling from private boat (your boat or friend or relatives boat)

**Scuba Diving**

- 200A Scuba diving from charter/party boat (pay operation)  
 201A Scuba diving from a rental boat  
 202A Scuba diving from a private boat (your boat or friend or relatives boat)

**Special Activities while Snorkeling or Scuba Diving**

- 300 Diving for lobsters  
 301 Underwater photography  
 302 Wreck diving  
 303 Spear fishing

**Fishing on Artificial or Natural Reefs**

- 407A Other fishing from charter boat (pay operation, usually six persons or less)  
 408A Other fishing from party or head boat (pay operation, charge per person)  
 409A Other fishing from a rental boat  
 410A Other fishing from a private boat (your boat or friends or relatives boat)

**Viewing Nature and Wildlife**

- 500A Glass bottom boat rides (pay operation)  
 502A Viewing nature and wildlife from private or rental boat

**Number                      Other Water-Based Activities – NO BOATS – On Artificial or Natural Reefs****Snorkeling and Scuba Diving**

- 10A Snorkeling from shore  
 11A Scuba diving from shore

**Special Activities while Diving from Shore**

- 12 Diving for lobsters  
 13 Underwater photography

In this section, we are interested in learning more about your main or primary activity.

For the next four questions below, the Interviewer will read the questions to you.  
Please respond with the number of the one answer that best fits you for that question.

**32. When I participate in my primary activity, I feel like:**

- 1 a beginner. I don't really feel like I am part of the activity scene.
- 2 an occasional or irregular participant. Sometimes it is fun, entertaining or rewarding to do my activity.
- 3 a habitual and regular participant in the activity.
- 4 an insider to the sport. The activity is an important part of who I am.

**33. During my activity, I can best be described as:**

- 1 having very little understanding of the activity. I am often unsure about how to do certain things when I go.
- 2 having some understanding of the activity, but still in the process of learning more about the sport. I am becoming more familiar and comfortable with the activity.
- 3 being comfortable with the sport. I have a good understanding of what I can do, and how to do it.
- 4 a knowledgeable expert in the sport. I encourage, teach and enhance opportunities for others who are interested in the activity.

**34. My relationships with others who do the activity are:**

- 1 not established. I really don't know any other people who do the activity.
- 2 very limited. I know some others in the activity by sight and sometimes talk with them, but I don't know their names.
- 3 one of familiarity. I know the names of others who do the activity, and often speak with them.
- 4 close. I have personal and close relationships with others in the activity. These friendships often revolve around the activity.

**35. My commitment to the activity is:**

- 1 very slight. I have very little connection to the activity. I may or may not continue to participate in the sport in the future.
- 2 moderate. I will continue to do it as it is entertaining and provides the benefits I want.
- 3 fairly strong. I have a sense of being a member of the activity, and it is likely that I will continue to do it for a long time.
- 4 very strong. I am totally committed to the activity. I encourage others to participate in the sport and seek to ensure the activity continues into the future.

**36. If you had to replace all of the equipment that you currently own for your primary activity with similar equipment, how much would it cost to replace?**

\$ \_\_\_\_\_ AMOUNT TO REPLACE PRIMARY ACTIVITY EQUIPMENT



For the next two questions below, the Interviewer will read the questions to you. For each lettered item, please respond with the letter and the number for the one answer that best fits you for that question.

37. To what extent do you make use of the following for current information about your primary activity?

	No Use	Almost no use	A little use	Some use	A lot of use
a. Talking with others who participate in the activity.....	1	2	3	4	5
b. Magazines.....	1	2	3	4	5
c. Government agency publications.....	1	2	3	4	5
d. Conservation organization publications.....	1	2	3	4	5
e. Newspapers.....	1	2	3	4	5
f. Diving shops/companies.....	1	2	3	4	5
g. Club meetings.....	1	2	3	4	5
h. Television.....	1	2	3	4	5
i. Radio.....	1	2	3	4	5
j. Internet.....	1	2	3	4	5

38. Below is a list of reasons why people engage in recreation activities.

	Not at all important	Slightly important	Moderately important	Very important	Extremely important
a. To be outdoors.....	1	2	3	4	5
b. For family recreation.....	1	2	3	4	5
c. To experience new and different things.....	1	2	3	4	5
d. For relaxation.....	1	2	3	4	5
e. To be close to the water.....	1	2	3	4	5
f. To get away from the demands of other people.....	1	2	3	4	5
g. To be with friends.....	1	2	3	4	5
h. To develop my skills.....	1	2	3	4	5
i. To get away from the regular routine.....	1	2	3	4	5
j. To experience adventure and excitement.....	1	2	3	4	5
k. To experience natural surroundings.....	1	2	3	4	5

## THANK YOU!

for  
participating in this  
Recreation Survey

Dear Visitor,

During your recent trip to the Florida Keys 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.

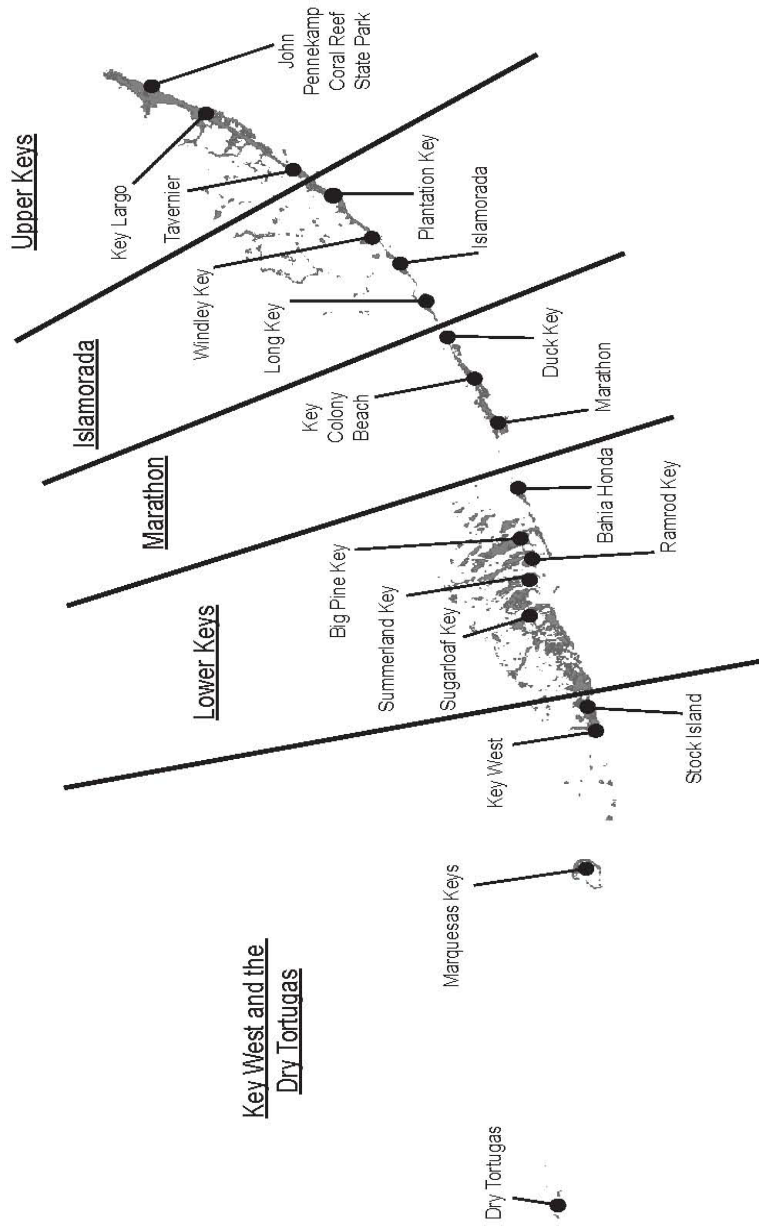
Your answers are voluntary and confidential. Your name will never be released to anyone unless otherwise required by law. After the completion of the project all materials identifying you as an individual will be destroyed.

When you complete the questionnaire, please reverse-fold it so that our return address on the GREEN PAGE in the inside is folded to the outside. Please staple or tape to seal the questionnaire and mail it back to us. No postage is needed. Your cooperation in this effort is greatly appreciated.

Sincerely,

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

# The Florida Keys



In 1990, Congress and the President established the Florida Keys National Marine Sanctuary (FKNMS). The FKNMS is just one of 13 National Marine Sanctuaries in the U.S, which are managed by the National Oceanic and Atmospheric Administration (NOAA). After a long public process and approval by the Governor and Cabinet of Florida, regulations were established and implemented in July 1997. The FKNMS is cooperatively managed with the State of Florida. This survey asks about your knowledge, attitudes and perceptions of FKNMS management strategies and regulations and conditions of the resources in the FKNMS. There are no right or wrong answers; we simply want your honest opinions. Again, your privacy will be protected. No one will be given information that will allow them to identify you from survey data.

**INFORMATION AND PERCEPTIONS**

In this section of the survey, we want to know about how you get information about the FKNMS, which covers all the waters surrounding the Florida Keys/Key West. A map is included on page 1 showing the boundaries of the FKNMS. We also ask questions about the public process in creating the management strategies and regulations and ask about your opinions about the existence of the FKNMS and an appraisal of how well the area is being managed.

1. Please list the sources of information that you have received in the past on the FKNMS and rank the sources in terms of their usefulness. Place an "x" for each source used. Please rank each source 1=highest (most important) to 9=lowest (least important).

	SOURCE	Sources Used	RANK Sources
a.	FKNMS website	_____	_____
b.	FKNMS Staff	_____	_____
c.	Sanctuary Advisory Council	_____	_____
d.	FKNMS brochures/literature	_____	_____
e.	FKNMS signage	_____	_____
	Was signage easy to see?		
	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A		
f.	Information in newspapers	_____	_____
g.	Radio	_____	_____
h.	TV	_____	_____
i.	Word of mouth	_____	_____

2. Did you do any activities through a Dive Shop on any of your visits to the Florida Keys/KeyWest?

\_\_\_ YES (Go to Question 3) \_\_\_ NO (Go to Question 6)

3. Did the Dive Shop staff, either in the Dive Shop or onboard the boat, give you a briefing and/or education materials on how you should behave on the reefs to avoid damaging the reefs?

\_\_\_ YES (Go to Question 4) \_\_\_ NO (Go to Question 6)

4. Did you find the information useful?

\_\_\_ YES (Go to Question 6) \_\_\_ NO (Go to Question 5)

5. Please tell us why you didn't find the information useful and what kinds of information you would have liked to receive.

---



---



---



---



---



---



---

6. Did you rent a boat or personal watercraft (Jet Ski, wave runner, etc.) on any of your visits to the Florida Keys/Key West?

\_\_\_ YES (Go to Question 7) \_\_\_ NO (Go to Question 10)

7. Did the boat rental operation provide you with a briefing and/or education materials on how to navigate to how to behave while on the reefs or information on special zones where you are not allowed to motor the boat?

\_\_\_ YES (Go to Question 8) \_\_\_ NO (Go to Question 10)

8. Did you find the information useful?

\_\_\_ YES (Go to Question 10) \_\_\_ NO (Go to Question 9)

9. Please tell us why you didn't find the information useful and what kinds of information you would have liked to receive.

---



---



---



---



---



---



---



---

For the next set of questions, please provide an answer on a 1 to 5 scale, where 1 means Strongly Agree, 2 means Moderately Agree, 3 means Neutral or Neither Agree or Disagree, 4 means Moderately Disagree, and 5 means Strongly Disagree. Please circle the appropriate number or I don't know, if you simply have no knowledge on the issue.

10. The process that NOAA has used to develop rules and regulations for the FKNMS was open and fair to all groups.

1 2 3 4 5 I don't know

11. The process used by NOAA to develop boundaries and regulations for the FKNMS zones was open and fair to all groups.

1 2 3 4 5 I don't know

12. It has not mattered whether the average person participated in the workshops and meetings on the FKNMS because the average person could not influence the final decisions.

1 2 3 4 5 I don't know

13. NOAA has not addressed the concerns of local and state governments in developing rules and regulations for the FKNMS.

1 2 3 4 5 I don't know

14. NOAA has not addressed the concerns of individual citizens in developing rules and regulations for the FKNMS.

1 2 3 4 5 I don't know

15. Once that the regulations have been in effect, there has been no way that the average person could voice his/her opinion on the usefulness of the regulations.

1 2 3 4 5 I don't know

16. The procedures that NOAA has established to deal with violations of FKNMS regulations have been fair and just.

1 2 3 4 5 I don't know

17. NOAA has made a positive contribution to the marine environment via the National Marine Sanctuary Program.

1 2 3 4 5 I don't know

18. The Florida Keys have benefited environmentally from the FKNMS.

1 2 3 4 5 I don't know

19. There has been a net economic benefit to the Florida Keys from the establishment of the FKNMS.

1 2 3 4 5 I don't know

20. I generally support the establishment of the FKNMS.

1 2 3 4 5 I don't know

For the next set of questions, we want to find out how important the FKNMS is in your decision to choose the Florida Keys/Key West as a destination when you are planning your trips.

21. Did you know before your recent visit to the Florida Keys/Key West that all the waters surrounding the Florida Keys/Key West are in a National Marine Sanctuary?

\_\_\_ Yes \_\_\_ No

22. Do you think having all the waters surrounding the Florida Keys/Key West in a National Marine Sanctuary makes the area a more attractive destination?

\_\_\_ Yes \_\_\_ No

On a scale of 1 to 5, with 1=Not Important, 2=Somewhat Important, 3=Important, 4=Very Important and 5=Extremely Important.

23. In your decision to visit the Florida Keys/Key West, how important was the fact that all the waters surrounding the Florida Keys/Key West was in a National Marine Sanctuary?

Please circle the appropriate number or "dk" for don't know.

1 2 3 4 5 dk

24. When you were planning your recent trip to the Florida Keys/Key West, did you know that there were special zones where certain activities are restricted or not allowed?

\_\_\_ Yes \_\_\_ No

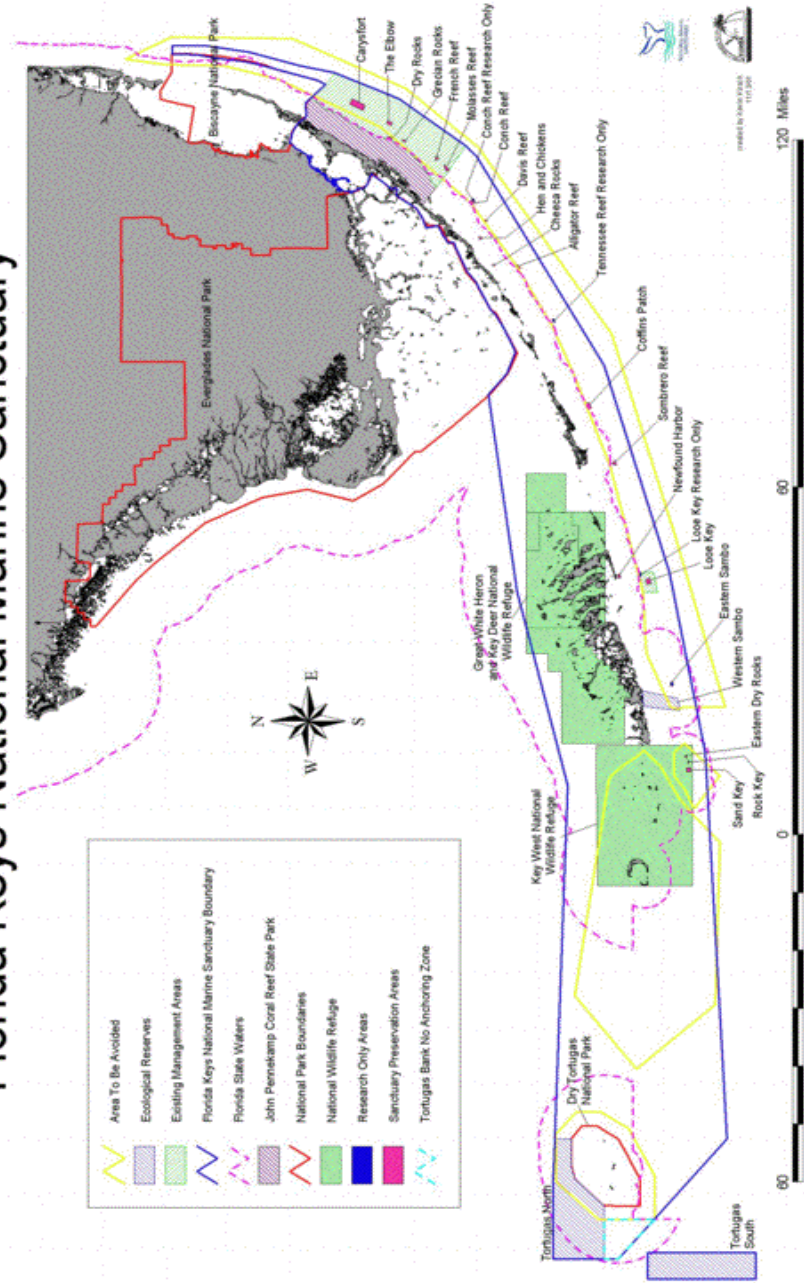
There are five kinds of zones established within the FKNMS, and three of these zone types analyzed for this study are collectively referred to as 'FKNMS zones' in the survey. Zones allow different uses and are generally established for different purposes. Below, a short, general description for each of the three zone types is provided.

**Sanctuary Preservation Areas**, or SPAs, encompass discrete, biologically important areas and are designed to reduce user conflicts and sustain critical marine species and habitats. Regulations for SPAs are designed to limit consumptive activities while continuing to allow activities that do not threaten resource protection. There are 18 SPAs in the FKNMS, which limit consumptive activities (activities where you take something) and 4 that are set aside for research only.

**Ecological Reserves**, or ERs, encompass large, contiguous, diverse habitats, in order to protect and enhance natural spawning, nursery, and permanent-residence areas for the replenishment and genetic protection of fish and other marine life. Regulations for Ecological Reserves are designed to meet the objectives of these zones by limiting consumptive activities while continuing to allow activities that do not threaten resource protection. Ecological Reserves therefore restrict all consumptive activities and allow non-consumptive activities only where such activities are compatible with resource protection. There are currently two Ecological Reserves in the Sanctuary, the Western Sambos Ecological Reserve and the Tortugas Ecological Reserve.

**Wildlife Management Areas**, or WMAs, include bird nesting, resting, or feeding areas, turtle-nesting beaches, and other sensitive habitats. Regulations are designed to protect these species or the habitat while providing for public use. Access restrictions will include no-access buffers, no-motor zones, idle-speed only/no-wake zones, and closed zones. Some restrictions will apply to time periods, others to areas. There are currently 27 WMAs, of which 7 are managed exclusively by the FKNMS (the FKNMS co-manages the others with the US Fish and Wildlife Service).

## Florida Keys National Marine Sanctuary



The next set of questions asks about your opinions on the three types of zones. Please answer each question for each type of zone. Answer by placing an “x” in the box under each type of zone. Leaving a box blank means you don’t think the statement applies to that type of zone.

	ER	SPA	WMA
25. Which of the following represents the main purpose of the FKNMS zones?			
a. Increasing overall fish stocks and biomass within the zones	___	___	___
b. Increasing overall fish stocks and biomass outside the zones	___	___	___
c. Conserving and protecting corals, fish, and other marine life inside the zones	___	___	___
d. Resolving user conflicts	___	___	___
e. Supporting scientific research	___	___	___
26. Which groups have most benefited from FKNMS zones?			
a. Commercial fishers	___	___	___
b. Recreational/sport fishers	___	___	___
c. Commercial dive operators	___	___	___
d. Recreational (local and tourist) divers	___	___	___
27. FKNMS zones have reduced conflicts between different user groups	___	___	___
28. FKNMS zones have been effective in restoring coral reefs in the Florida Keys to what they used to be.	___	___	___
29. I support the establishment of FKNMS zones as they are currently established.	___	___	___

For questions 30 through 33, please refer to the map on page 5 of the FKNMS.

	ER	SPA	WMA
30. I support the establishment of FKNMS zones in the Upper Keys.	___	___	___
31. I support the establishment of FKNMS zones in the Middle Keys.	___	___	___
32. I support the establishment of FKNMS zones in the Lower Keys.	___	___	___
33. I support the establishment of FKNMS zones in the Dry Tortugas.	___	___	___
34. There should be more FKNMS zones in the Florida Keys.	___	___	___

35. Do you use any of the FKNMS zones?

\_\_ YES (Go to Question 36) \_ NO (Go Question 39)

36. Which ones do you use?

---



---



---



---



---



37. Since the FKNMS zones were established has your use:

INCREASED \_\_\_%    SAME            DECREASED \_\_\_%

Please circle answer and fill in estimate of percentage of how your use increased or decreased.

38. For the each of the different types of FKNMS zones that you use, could you rate how the zones have changed for each of the following items: Please rate them on a scale of 1 to 5 with 1 being Better to 5 being Worse. Leaving a space blank means you didn't use that type of zone.

Better-----Worse  
1   2   3   4   5

	<b>ER</b>	<b>SPA</b>	<b>WMA</b>
a. Water quality	___	___	___
b. Number of fish	___	___	___
c. Types of fish	___	___	___
d. Amount of living coral	___	___	___
e. Other marine life	___	___	___
f. Crowding	___	___	___

The final set of questions ask about how effective you think the FKNMS has been in managing the natural resources in the surrounding waters of the Florida Keys/Key West.

39. Please rate the status/condition of the following resources by their status/condition since implementation of the FKNMS, where 1 equals Much Better and 5 is Much Worse and "dk" is don't know.

Please circle your answer.

Better-----Worse

a. Water quality	1	2	3	4	5	dk
b. Land-based pollution/sewage	1	2	3	4	5	dk
c. Sea-based pollution/marine debris	1	2	3	4	5	dk
d. Coral reefs	1	2	3	4	5	dk
e. Sea grasses	1	2	3	4	5	dk
f. Fisheries	1	2	3	4	5	dk
g. Mooring buoys	1	2	3	4	5	dk

For the following statement (Question 40), please circle your answer according to the following scale:

1=Strongly Agree, 2=Moderately Agree, 3=Neutral (neither agree or disagree), 4=Moderately Disagree, 5=Strongly Disagree

40. The FKNMS is mostly responsible for the status/condition of the resources that you rated in the previous question.

1      2      3      4      5      dk

41. In which area(s) has the FKNMS been a success?

---

---

---

---

---

---

---

---

42. In which area(s) has the FKNMS been least successful?

---

---

---

---

---

---

---

---

43. Are there any management strategies or regulations which you would like to see changed in the FKNMS?

Please briefly describe the top three management strategies or regulations you would like to see changed and how you would like to see them changed.

Management Strategy or Regulation	How I would like to see it changed.
a. _____	_____
_____	_____
b. _____	_____
_____	_____
c. _____	_____
_____	_____
_____	_____
_____	_____

That's All!! If you would like to be entered into a sweepstakes to win a free Vacation to the Florida Keys, fill out your name, address and phone number below. All prizes will be awarded in October of 2007.

Name: \_\_\_\_\_

Address: \_\_\_\_\_

City: \_\_\_\_\_

State: \_\_\_\_\_ Zip: \_\_\_\_\_ Phone: \_\_\_\_\_

Prizes to be awarded are:

GRAND PRIZE

- \* Airfare for two from anywhere in the continental United States to the Florida Keys
- \* Rental car with unlimited miles for one week (seven days)
- \* Accommodations for two for one week (six nights)
- \* Two complimentary "activities" for two (i.e., diving trip, fishing charter, sunset sail, etc.)
- \* Complimentary dinner for two at local restaurant

FIRST PRIZE

- \* Accommodations for two for five days (four nights)
- \* Two complimentary "activities" for two (i.e., diving trip, fishing charter, sunset sail, etc.)
- \* Complimentary dinner for two at local restaurant

SECOND PRIZE

- \* Accommodations for two for four days (three nights)
- \* One complimentary "activity" for two (i.e., diving trip, fishing charter, sunset sail, etc.)
- \* Complimentary dinner for two at local restaurant

SECOND PRIZE

- \* Accommodations for two for three days (two nights)
- \* One complimentary "activity" for two (i.e., diving trip, fishing charter, sunset sail, etc.)

This is a cooperative research project of the Monroe County Tourist Development Council and the National Oceanic and Atmospheric Administration. Public reporting burden for this collection of information is estimated to average 20 minutes including time for reviewing instructions, searching existing data sources, gathering and maintaining the data need, 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 this burden, to U.S. Department of Commerce, Clearance Officer, Office of Chief Information Officer, Rm. 6625, 14th and Constitution Avenue NW, Washington, DC 20230. Notwithstanding any other provisions of the law, no person is required to respond to, nor shall any person be subject to penalty for failure to comply with, a collection of information subject to requirements of the Paperwork Reduction Act, unless that collection of information displays a currently valid OMB Control Number.

## THANK YOU!

for  
participating in this  
Recreation Survey

Dear Visitor,

During your recent trip to the Florida Keys 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 answers are voluntary and confidential. Your name will never be released to anyone unless otherwise required by law. After the completion of the project all materials identifying you as an individual will be destroyed.

When you complete the questionnaire, please reverse-fold it so that our return address on the GREEN PAGE in the inside is folded to the outside. Please staple or tape to seal the questionnaire and mail it back to us. No postage is needed. Your cooperation in this effort is greatly appreciated.

Sincerely,

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

There are many places to engage in snorkeling/SCUBA diving activities. In the next several questions, we are attempting to understand the reason you may choose to snorkel/SCUBA dive on one reef versus another, or if necessary, choose to engage in activities other than snorkeling/SCUBA diving in the Florida Keys.

**When answering the following questions, please think about a favorite or most common reef that you dive on in the Florida Keys. If you do not have a favorite or most common reef that you dive on in the Keys, please think about the last reef that you dove on in the Florida Keys.**

**Read the choices and circle the letter that indicates your answer for that question.**

**1. Please circle which reef you are thinking of when responding to the following questions. (Please circle only one answer)**

- A Favorite reef to snorkel/dive on
- B Most common reef I snorkel/dive on
- C Most recent reef I snorkeled/dove on

**2. Is this reef a:**

- A Natural coral reef
- B Artificial reef

**3. Are you able to recall the name of this reef? If so, please list in below.**

\_\_\_\_\_ reef

**4. Imagine that you discovered that you could not snorkel/ SCUBA dive at this reef (from question #1 above) during your next planned snorkel/SCUBA dive trip. What would you do? (Please circle only one answer)**

- A I would still snorkel/ SCUBA dive, but elsewhere in the Florida Keys
- B I would still snorkel/ SCUBA dive, but at a location outside of the Florida Keys
- C I would temporarily participate in a different activity in the Florida Keys
- D I would temporarily participate in a different activity, but outside the Florida Keys

**5. Imagine that you discovered that you could not snorkel/ SCUBA dive at this reef (from question #1 above) for the next five years. What would you do?**

- A I would still snorkel/ SCUBA dive, but elsewhere in the Florida Keys
- B I would still snorkel/ SCUBA dive, but at a location outside of the Florida Keys
- C I would permanently participate in a different activity in the Florida Keys
- D I would permanently participate in a different activity, but outside the Florida Keys

**6. Imagine that you discovered during your next snorkel/ SCUBA dive trip that this reef (from question #1 above) was more crowded than you normally find acceptable. What would you do?**

- A I would make an exception and still snorkel/ SCUBA dive on this reef
- B I would still snorkel/ SCUBA dive, but elsewhere in the Florida Keys
- C I would temporarily participate in a different activity in the Florida Keys
- D I would temporarily participate in a different activity, but outside the Florida Keys

**7. Imagine that you discovered during your next snorkel/ SCUBA dive trip that this reef (from question #1 above) was more ecologically damaged (e.g., there wasn't enough healthy coral or fish) than normally find acceptable. What would you do?**

- A I would make an exception and still snorkel/ SCUBA dive on this reef
- B I would still snorkel/ SCUBA dive, but elsewhere in the Florida Keys
- C I would temporarily participate in a different activity in the Florida Keys
- D I would temporarily participate in a different activity, but outside the Florida Keys

**8. Imagine that you discovered during your next snorkel/ SCUBA dive trip that user groups with whom you experience conflict are using this reef (from question #1 above). What would you do?**

- A I would make an exception and still snorkel/ SCUBA dive on this reef
- B I would still snorkel/ SCUBA dive, but elsewhere in the Florida Keys
- C I would temporarily participate in a different activity in the Florida Keys
- D I would temporarily participate in a different activity, but outside the Florida Keys

**9. If you could not snorkel/SCUBA dive at this reef (from question #1 above), how many other Florida Keys reefs do you think can offer you just as good an experience as your favorite reefs?**

\_\_\_\_\_ number of other Florida Keys reefs

Don't Know

**10. If you could not snorkel/SCUBA dive at this reef (from question #1 above), how many other Florida Keys reefs do you think can offer you a similar, but not quite as good, experience?**

\_\_\_\_\_ number of other Florida Keys reefs

Don't Know

**11. Please rate how similar you think the snorkeling/SCUBA diving experience is at your best similar reef compared to this reef (from question #1 above).**

Not as good				Equivalent				Better
1	2	3	4	5	6	7		

12. There are many things that you might think about or consider when deciding to substitute one reef for another when snorkeling or SCUBA diving. Please indicate how important each of the following factors is in terms of deciding whether or not you would choose to snorkel/SCUBA dive at a substitute reef.

	Not at all important	Somewhat important	Moderately important	Very important	Extremely important
a) The quality of other reefs.....	1	2	3	4	5
b) The difficulty of the diving conditions on other reefs.....	1	2	3	4	5
c) The distance to other reefs.....	1	2	3	4	5
d) My familiarity with various dive shops.....	1	2	3	4	5
e) The adequacy of my boat to get to other reefs.....	1	2	3	4	5
f) The number of fish at other reefs.....	1	2	3	4	5
g) The cost of fuel to get to other reefs.....	1	2	3	4	5
h) The level of crowding at other reefs.....	1	2	3	4	5
i) The amount of live coral at other reefs.....	1	2	3	4	5
j) Area closures at desirable reef locations.....	1	2	3	4	5
k) The presence of other groups that I don't like.....	1	2	3	4	5
l) Other.....	1	2	3	4	5

13. If you could not go snorkeling/SCUBA diving, either in the Florida Keys or elsewhere, are there any other recreation activities in the Florida Keys that would provide you with the same satisfaction and enjoyment that you receive from going snorkeling/SCUBA diving?

Yes --- If yes, please go to question # 14 below

No --- If no, please go to question # 15 below

14. If you answered “yes” to question 13, please list up to three specific activities that you consider to be substitutes for snorkeling/SCUBA diving.

\_\_\_\_\_ activity

\_\_\_\_\_ activity

\_\_\_\_\_ activity

15. There are reasons why people cannot participate as often as they would like in an activity they enjoy doing. Please indicate the extent to which you agree or disagree with each of the following statements as they relate to your ability to snorkel/SCUBA dive in the Florida Keys as often as you would like.

	Completely disagree	Disagree	Neutral	Agree	Completely agree
a) I don't have enough leisure time.....	1	2	3	4	5
b) The equipment is too expensive.....	1	2	3	4	5
c) The cost of travel is too high.....	1	2	3	4	5
d) It is difficult to find snorkel/SCUBA diving partners.....	1	2	3	4	5
e) Fuel prices for my boat are too high.....	1	2	3	4	5
f) Snorkel/SCUBA diving areas are too crowded.....	1	2	3	4	5
g) Too many snorkel/SCUBA diving areas are off-limits.....	1	2	3	4	5
h) Dive boats are too expensive .....	1	2	3	4	5
i) Other.....	1	2	3	4	5



16. Below is a list of reasons why people snorkel/SCUBA dive in the Florida Keys. Please circle the number that indicates how important each item is to you as a reason for snorkel/SCUBA diving in the Florida Keys.

	Not at all important	Somewhat important	Moderately important	Very important	Extremely important
a) To develop my skills.....	1	2	3	4	5
b) To experience excitement.....	1	2	3	4	5
c) For family recreation.....	1	2	3	4	5
d) To be with friends.....	1	2	3	4	5
e) To be outdoors.....	1	2	3	4	5
f) To experience new and different things.....	1	2	3	4	5
g) For the experience of the dive.....	1	2	3	4	5
h) To get away from the demands of other people.....	1	2	3	4	5
i) To get away from the regular routine.....	1	2	3	4	5
j) To see diverse underwater life.....	1	2	3	4	5
k) To teach underwater skills to other people.....	1	2	3	4	5
l) To obtain additional dive ratings.....	1	2	3	4	5
m) To experience natural surroundings.....	1	2	3	4	5
n) For solitude.....	1	2	3	4	5
o) For relaxation.....	1	2	3	4	5
p) For the challenge of the dive.....	1	2	3	4	5

There are many places to engage in fishing. In the next several questions, we are attempting to understand the reason you may choose to fish in one location versus another, or if necessary, engage in an activity other than fishing in the Florida Keys.

**When answering the following questions, please think about a favorite or most common area that you fish in off the Florida Keys. If you do not have a favorite or most common area that you fish in off the Keys, please think about the last area that you fished in off the Florida Keys.**

**17. Please indicate which reef you are thinking of when responding to the following questions. (Please circle only one answer)**

- A My favorite reef to fish at
- B The most common area I fish at
- C The most recent area I fished in

**18. Is this area:**

- A A flat
- B A natural coral reef
- C Hawk Channel
- D An artificial reef
- E Other (please list) \_\_\_\_\_

**19. Are you able to recall the name of this area? If so, please list it below.**

\_\_\_\_\_ area

**20. Imagine that you discovered that you could not fish in this area (from question #17 above) during your next planned fishing trip. What would you do? (Please circle only one answer)**

- A I would still fish, but elsewhere in the Florida Keys
- B I would still fish, but at a location outside of the Florida Keys
- C I would temporarily participate in a different activity in the Florida Keys
- D I would temporarily participate in a different activity, but outside the Florida Keys

**21. Imagine that you discovered that you could not fish in this area (from question #17 above) for the next five years. What would you do?**

- A I would still fish, but elsewhere in the Florida Keys
- B I would still fish, but at a location outside of the Florida Keys
- C I would permanently participate in a different activity in the Florida Keys
- D I would permanently participate in a different activity, but outside the Florida Keys

**22. Imagine that you discovered during your next fishing trip that this area (from question #17 above) was more crowded than you normally find acceptable. What would you do?**

- A I would make an exception and still fish in this area
- B I would still fish, but elsewhere in the Florida Keys
- C I would temporarily participate in a different activity in the Florida Keys
- D I would temporarily participate in a different activity, but outside the Florida Keys

**23. Imagine that you discovered during your next fishing trip that this area (from question #17 above) was more ecologically damaged (e.g., there was no longer enough good fish habitat) than you normally find acceptable. What would you do?**

- A I would still fish in this area
- B I would still fish, but elsewhere in the Florida Keys
- C I would temporarily participate in a different activity in the Florida Keys
- D I would temporarily participate in a different activity, but outside the Florida Keys

**24. Imagine that you discovered during your next fishing trip that other user groups with whom you experience conflict are using this area (from question #17 above). What would you do?**

- A I would still fish in this area
- B I would still fish, but elsewhere in the Florida Keys
- C I would temporarily participate in a different activity in the Florida Keys
- D I would temporarily participate in a different activity, but outside the Florida Keys

**25. If you could not fish in this area (from question #17 above), how many other areas in the Florida Keys do you think can offer you an overall experience that is just as good?**

\_\_\_\_\_ number of other areas in the Florida Keys

Don't Know

**26. If you could not fish in this area (from question #17 above), how many other areas in the Florida Keys do you think can offer you a similar, but not quite as good, overall experience?**

\_\_\_\_\_ number of other areas Florida Keys

Don't Know

**27. Please rate how similar you think the fishing experience is at your best similar fishing area compared to this area.**

Not as good				Equivalent				Better
1	2	3	4	5	6	7		

**28. There are many things that you might think about or consider when deciding to substitute one fishing area for another. Please indicate how important each of the following factors is in terms of deciding whether or not you would choose to fish in a substitute area.**

	Not at all important	Somewhat important	Moderately important	Very important	Extremely important
a) The number of fish at other areas.....	1	2	3	4	5
b) The difficulty of boating conditions.....	1	2	3	4	5
c) The distance to other areas.....	1	2	3	4	5
d) The charter boats and captains at other areas.....	1	2	3	4	5
e) The adequacy of my boat to get to other areas.....	1	2	3	4	5
f) The cost of fuel to get to other areas.....	1	2	3	4	5
g) The level of crowding at other areas.....	1	2	3	4	5
h) Area closures at desirable locations.....	1	2	3	4	5
i) The presence of other groups that I don't like.....	1	2	3	4	5
j) Other.....	1	2	3	4	5

**29. If you could not go fishing, either in the Florida Keys or elsewhere, are there any other recreation activities in the Florida Keys that would provide you with the same satisfaction and enjoyment that you receive from going fishing?**

Yes --- If yes, please go to question # 30 below

No --- If no, please go to question # 31 below

30. If you answered “yes” to question D29, please list up to three specific activities that you consider to be substitutes for fishing in the Florida Keys.

\_\_\_\_\_ activity

\_\_\_\_\_ activity

\_\_\_\_\_ activity

31. There are reasons why people cannot participate as often as they would like in an activity they enjoy doing. Please indicate the extent to which you agree or disagree with each of the following statements as they relate to your ability to fish in the Florida Keys as often as you would like.

	Completely disagree	Disagree	Neutral	Agree	Completely agree
a) I don't have enough leisure time.....	1	2	3	4	5
b) The equipment is too expensive.....	1	2	3	4	5
c) The cost of travel is too high.....	1	2	3	4	5
d) It is difficult to find fishing partners.....	1	2	3	4	5
e) Fuel prices for my boat are too high.....	1	2	3	4	5
f) Fishing areas are too crowded.....	1	2	3	4	5
g) Too many fishing areas are off-limits.....	1	2	3	4	5
h) Fishing charters are too expensive.....	1	2	3	4	5
i) Other.....	1	2	3	4	5

32. Below is a list of reasons why people saltwater fish in the Florida Keys. Please circle the number that indicates how important each item is to you as a reason for saltwater fishing in the Florida Keys.

	Not at all important	Somewhat important	Moderately important	Very important	Extremely important
a) To develop my skills.....	1	2	3	4	5
b) To experience excitement.....	1	2	3	4	5
c) For family recreation.....	1	2	3	4	5
d) To be with friends.....	1	2	3	4	5
e) To be outdoors.....	1	2	3	4	5
f) To experience new and different things.....	1	2	3	4	5
g) For the experience of the catch.....	1	2	3	4	5
h) To get away from the demands of other people.....	1	2	3	4	5
i) To get away from the regular routine.....	1	2	3	4	5
j) To catch a trophy fish.....	1	2	3	4	5
k) For the sport of fishing, not to obtain food to eat.....	1	2	3	4	5
l) For the fun of catching fish.....	1	2	3	4	5
m) To experience natural surroundings.....	1	2	3	4	5
n) For solitude.....	1	2	3	4	5
o) For relaxation.....	1	2	3	4	5
p) For the challenge of the catch.....	1	2	3	4	5
q) To obtain fish for eating, not for sport.....	1	2	3	4	5

**Management Alternatives**

**Snorkeler / SCUBA diver**  
 If not a snorkeler / SCUBA diver in the Florida Keys, but do recreational fishing, GO to page 16.  
 If not a snorkeler / SCUBA diver or recreational fisher in the Florida Keys, GO to last page.

Please think about a recreational snorkeling / SCUBA diving experience on a reef in the Florida Keys when answering the questions on the following pages. You will be offered eight (8) choices of two diving trips. Each choice has different features for you to evaluate. Please read each choice carefully. Although they may look similar, trips in each question differ in at least one way.

There is an example to assist you. Please note the following definitions before reviewing the example.

- Number of Snorkelers / Divers - the number of snorkelers / divers on a reef at any one time
- Restrictions- percent area of reef open to use
- Enforcement- the number of law enforcement patrols you observe per trip
- Number of Fish Species- the amount of different kinds of fish species observed on the reef
- Site Settings- the amount of live coral and/or algae on the reef
- Number of Fish- the overall amount of fish observed on the reef
- Size of Fish- the size of fish observed on the reef
- Travel cost / day – Travel cost that a snorkeler / diver spends for a diving trip per day (including gas and other trip expenses)

**Example**

If you were planning a snorkel / SCUBA dive trip to the Florida Keys, which trip would you prefer: Trip A, Trip B, or neither?

<b>ATTRIBUTE</b>	<b>Trip A</b>	<b>Trip B</b>
<b>Number of Snorkelers / Divers</b>	<i>15% fewer snorkelers / divers</i>	<i>30% fewer snorkelers/ divers</i>
<b>Site Settings</b>	<i>Mix of coral and algae cover</i>	<i>High live coral cover</i>
<b>Restrictions</b>	<i>25% of area closed</i>	<i>75 % of area closed</i>
<b>Number of Fish</b>	<i>40% more fish</i>	<i>No increase in numbers of fish</i>
<b>Size of Fish</b>	<i>40% more larger fish</i>	<i>20 % more larger fish</i>
<b>Species</b>	<i>No change in species numbers</i>	<i>Fewer species</i>
<b>Enforcement</b>	<i>Two additional patrols</i>	<i>No additional patrols</i>
<b>Travel Cost / Day</b>	<i>Your current total cost per day</i>	<i>10% more than your current total cost per day</i>

**Which trip do you prefer?** (check only one box below)

- Trip A     
  Trip B     
  I would not take either trip

33. If you were planning a snorkel / SCUBA dive trip to the Florida Keys, which trip would you prefer: Trip A, Trip B, or neither?

<b>ATTRIBUTE</b>	<b>Trip A</b>	<b>Trip B</b>
<b>Number of Snorkelers / Divers</b>	<i>The usual number of other snorkelers / divers at the site</i>	<i>30% fewer snorkelers /divers</i>
<b>Site Settings</b>	<i>Mix of coral and algae cover</i>	<i>High algae cover</i>
<b>Restrictions</b>	<i>25% of area closed</i>	<i>75 % of area closed</i>
<b>Number of Fish</b>	<i>40% more fish</i>	<i>No increase in numbers of fish</i>
<b>Size of Fish</b>	<i>40% more larger fish</i>	<i>20 % more larger fish</i>
<b>Species</b>	<i>No change in species numbers</i>	<i>Many species</i>
<b>Enforcement</b>	<i>No additional patrols</i>	<i>Two additional patrols</i>
<b>Travel Cost / Day</b>	<i>10% less than your current total cost per day</i>	<i>10% less than your current total cost per day</i>

Which trip do you prefer? (check only one box below)

Trip A     Trip B     I would not take either trip

34. If you were planning a snorkel / SCUBA dive trip to the Florida Keys, which trip would you prefer: Trip A, Trip B, or neither?

<b>ATTRIBUTE</b>	<b>Trip A</b>	<b>Trip B</b>
<b>Number of Snorkelers / Divers</b>	<i>The usual number of other snorkelers / divers at the site</i>	<i>The usual number of other snorkelers / divers at the site</i>
<b>Site Settings</b>	<i>High live coral cover</i>	<i>High live coral cover</i>
<b>Restrictions</b>	<i>No area closed</i>	<i>75% of area closed</i>
<b>Number of Fish</b>	<i>60% more fish</i>	<i>No increase in numbers of fish</i>
<b>Size of Fish</b>	<i>60% more larger fish</i>	<i>40% more larger fish</i>
<b>Species</b>	<i>No change in species numbers</i>	<i>Fewer species</i>
<b>Enforcement</b>	<i>One additional patrol</i>	<i>One additional patrol</i>
<b>Travel Cost / Day</b>	<i>10% more than your current total cost per day</i>	<i>10% more than your current total cost per day</i>

Which trip do you prefer? (check only one box below)

Trip A     Trip B     I would not take either trip



35. If you were planning a snorkel / SCUBA dive trip to the Florida Keys, which trip would you prefer: Trip A, Trip B, or neither?

<b>ATTRIBUTE</b>	<b>Trip A</b>	<b>Trip B</b>
<b>Number of Snorkelers / Divers</b>	<i>15% fewer snorkelers / divers</i>	<i>15% fewer snorkelers / divers</i>
<b>Site Settings</b>	<i>Mix of coral and algae cover</i>	<i>High live coral cover</i>
<b>Restrictions</b>	<i>75% of area closed</i>	<i>25% of area closed</i>
<b>Number of Fish</b>	<i>20% more fish</i>	<i>20% more fish</i>
<b>Size of Fish</b>	<i>60% more larger fish</i>	<i>No increase in larger fish</i>
<b>Species</b>	<i>Fewer species</i>	<i>Fewer species</i>
<b>Enforcement</b>	<i>Two additional patrols</i>	<i>No additional patrols</i>
<b>Travel Cost / Day</b>	<i>10% less than your current total cost per day</i>	<i>Your current total cost per day</i>

Which trip do you prefer? (check only one box below)

Trip A     Trip B     I would not take either trip

36. If you were planning a snorkel / SCUBA dive trip to the Florida Keys, which trip would you prefer: Trip A, Trip B, or neither?

<b>ATTRIBUTE</b>	<b>Trip A</b>	<b>Trip B</b>
<b>Number of Snorkelers / Divers</b>	<i>30% fewer snorkelers / divers</i>	<i>15% fewer snorkelers / divers</i>
<b>Site Settings</b>	<i>High algae cover</i>	<i>High algae cover</i>
<b>Restrictions</b>	<i>50% of area closed</i>	<i>No area closed</i>
<b>Number of Fish</b>	<i>20% more fish</i>	<i>60% more fish</i>
<b>Size of Fish</b>	<i>20% more larger fish</i>	<i>20% more larger fish</i>
<b>Species</b>	<i>No change in species numbers</i>	<i>Fewer species</i>
<b>Enforcement</b>	<i>No additional patrols</i>	<i>Two additional patrols</i>
<b>Travel Cost / Day</b>	<i>10% more than your current total cost per day</i>	<i>10% more than your current total cost per day</i>

Which trip do you prefer? (check only one box below)

Trip A     Trip B     I would not take either trip

37. If you were planning a snorkel / SCUBA dive trip to the Florida Keys, which trip would you prefer: Trip A, Trip B, or neither?

ATTRIBUTE	Trip A	Trip B
<b>Number of Snorkelers / Divers</b>	<i>15% fewer snorkelers / divers</i>	<i>The usual number of other snorkelers / divers</i>
<b>Site Settings</b>	<i>Mix of coral and algae cover</i>	<i>High algae cover</i>
<b>Restrictions</b>	<i>50% of area closed</i>	<i>75% of area closed</i>
<b>Number of Fish</b>	<i>No increase in numbers of fish</i>	<i>60% more fish</i>
<b>Size of Fish</b>	<i>20% more larger fish</i>	<i>40% more larger fish</i>
<b>Species</b>	<i>Many species</i>	<i>No change in species numbers</i>
<b>Enforcement</b>	<i>Two additional patrols</i>	<i>One additional patrol</i>
<b>Travel Cost / Day</b>	<i>Your current total cost per day</i>	<i>10% less than your current total cost per day</i>

Which trip do you prefer? (check only one box below)

Trip A     Trip B     I would not take either trip

38. If you were planning a snorkel / SCUBA dive trip to the Florida Keys, which trip would you prefer: Trip A, Trip B, or neither?

ATTRIBUTE	Trip A	Trip B
<b>Number of Snorkelers / Divers</b>	<i>The usual number of other snorkelers / divers at the site</i>	<i>15% fewer snorkelers / divers</i>
<b>Site Settings</b>	<i>High live coral cover</i>	<i>Mix of coral and algae cover</i>
<b>Restrictions</b>	<i>75% of area closed</i>	<i>50% of area closed</i>
<b>Number of Fish</b>	<i>No increase in numbers of fish</i>	<i>40% more fish</i>
<b>Size of Fish</b>	<i>20% more larger fish</i>	<i>60% more larger fish</i>
<b>Species</b>	<i>No change in species numbers</i>	<i>No change in species numbers</i>
<b>Enforcement</b>	<i>No additional patrols</i>	<i>No additional patrols</i>
<b>Travel Cost / Day</b>	<i>10% less than your current total cost per day</i>	<i>10% less than your current total cost per day</i>

Which trip do you prefer? (check only one box below)

Trip A     Trip B     I would not take either trip

39. If you were planning a snorkel / SCUBA dive trip to the Florida Keys, which trip would you prefer: Trip A, Trip B, or neither?

<b>ATTRIBUTE</b>	<b>Trip A</b>	<b>Trip B</b>
<b>Number of Snorkelers / Divers</b>	<i>15% fewer snorkelers / divers</i>	<i>15% fewer snorkelers / divers</i>
<b>Site Settings</b>	<i>High live coral cover</i>	<i>High algae cover</i>
<b>Restrictions</b>	<i>25% of area closed</i>	<i>No area closed</i>
<b>Number of Fish</b>	<i>40% more fish</i>	<i>40% more fish</i>
<b>Size of Fish</b>	<i>60% more larger fish</i>	<i>60% more larger fish</i>
<b>Species</b>	<i>No change in species numbers</i>	<i>Many species</i>
<b>Enforcement</b>	<i>One additional patrol</i>	<i>One additional patrol</i>
<b>Travel Cost / Day</b>	<i>Your current total cost per day</i>	<i>10% less than your current total cost per day</i>

Which trip do you prefer? (check only one box below)

Trip A     Trip B     I would not take either trip

40. If you were planning a snorkel / SCUBA dive trip to the Florida Keys, which trip would you prefer: Trip A, Trip B, or neither?

<b>ATTRIBUTE</b>	<b>Trip A</b>	<b>Trip B</b>
<b>Number of Snorkelers / Divers</b>	<i>30% fewer snorkelers / divers</i>	<i>The usual number of other snorkelers / divers at the site</i>
<b>Site Settings</b>	<i>High algae cover</i>	<i>High live coral cover</i>
<b>Restrictions</b>	<i>50% of area closed</i>	<i>50% of area closed</i>
<b>Number of Fish</b>	<i>40% more fish</i>	<i>40% more fish</i>
<b>Size of Fish</b>	<i>No increase in larger fish</i>	<i>40% more larger fish</i>
<b>Species</b>	<i>Fewer species</i>	<i>Many species</i>
<b>Enforcement</b>	<i>No additional patrols</i>	<i>Two additional patrols</i>
<b>Travel Cost / Day</b>	<i>Your current total cost per day</i>	<i>10% more than your current total cost per day</i>

Which trip do you prefer? (check only one box below)

Trip A     Trip B     I would not take either trip

**Recreational Fisher**

If not a Recreational fisher in the Florida Keys, GO to last page.

Please think about a recreational fishing experience in the Florida Keys when answering the questions on the following pages. You will be offered eight (8) choices of two fishing trips. Each choice has different features for you to evaluate. Please read each choice carefully. Although they may look similar, trips in each question differ in at least one way.

There is an example to assist you. Please note the following definitions before reviewing the example.

- Number of Recreational Fishing Boats- the number of recreational fishing boats near you at any one time
- Number of Non-fishing boats- the number of non-fishing boats near you at any one time
- Restrictions- the number of reefs closed to fishing per zone (upper Keys, middle Keys, lower Keys)
- Number of Fish Species- the amount of different kinds of fish species caught in a trip
- Number of Fish- the overall amount of fish caught on a trip
- Size of Fish- the number of legal sized fish caught on a trip
- Travel cost / day – Travel cost that an angler spends for a fishing trip per day (including gas and other trip expenses)

**Example**

Suppose that you could choose from the recreational fishing opportunities described below. Which of these fishing trips would you prefer?

<b>ATTRIBUTE</b>	<b>Trip A</b>	<b>Trip B</b>
<b>Number of Recreational Fishing Boats</b>	<i>30% fewer boats</i>	<i>The usual number of other boats near the location</i>
<b>Number of Non-fishing Boats</b>	<i>The usual number of other boats near the location</i>	<i>30% fewer boats</i>
<b>Restrictions</b>	<i>25% of area closed</i>	<i>25% of area closed</i>
<b>Number of Species</b>	<i>No change in species numbers</i>	<i>Fewer species fish caught</i>
<b>Number of fish</b>	<i>10% more fish caught</i>	<i>30% more fish caught</i>
<b>Size of Fish</b>	<i>60% more keepers</i>	<i>20% more keepers</i>
<b>Travel Cost / Day</b>	<i>10% more than your current total cost per day</i>	<i>10% less than your current total cost per day</i>

Which trip do you prefer? (check only one box below)

- Trip A
  Trip B
  I would not take either trip

41. Suppose that you could choose from the recreational fishing opportunities described below. Which of these fishing trips would you prefer?

ATTRIBUTE	Trip A	Trip B
<b>Number of Recreational Fishing Boats</b>	<i>15% fewer boats</i>	<i>15% fewer boats</i>
<b>Number of Non-fishing Boats</b>	<i>30% fewer boats</i>	<i>30% fewer boats</i>
<b>Restrictions</b>	<i>25% of area closed</i>	<i>25% of area closed</i>
<b>Number of Species</b>	<i>No change in species numbers</i>	<i>Fewer species fish caught</i>
<b>Number of fish</b>	<i>30% more fish caught</i>	<i>30% more fish caught</i>
<b>Size of Fish</b>	<i>20% more keepers</i>	<i>40% more keepers</i>
<b>Travel Cost / Day</b>	<i>Your current total cost per day</i>	<i>Your current total cost per day</i>

Which trip do you prefer? (check only one box below)

Trip A     Trip B     I would not take either trip

42. Suppose that you could choose from the recreational fishing opportunities described below. Which of these fishing trips would you prefer?

ATTRIBUTE	Trip A	Trip B
<b>Number of Recreational Fishing Boats</b>	<i>30% fewer boats</i>	<i>The usual number of other boats near the location</i>
<b>Number of Non-fishing Boats</b>	<i>30% fewer boats</i>	<i>The usual number of other boats near the location</i>
<b>Restrictions</b>	<i>75% of area closed</i>	<i>50% of area closed</i>
<b>Number of Species</b>	<i>Fewer species fish caught</i>	<i>More species fish caught</i>
<b>Number of fish</b>	<i>10% more fish caught</i>	<i>10% more fish caught</i>
<b>Size of Fish</b>	<i>No increase in the number of caught kept</i>	<i>60% more keepers</i>
<b>Travel Cost / Day</b>	<i>Your current total cost per day</i>	<i>Your current total cost per day</i>

Which trip do you prefer? (check only one box below)

Trip A     Trip B     I would not take either trip

43. Suppose that you could choose from the recreational fishing opportunities described below. Which of these fishing trips would you prefer?

ATTRIBUTE	Trip A	Trip B
<b>Number of Recreational Fishing Boats</b>	<i>15% fewer boats</i>	<i>15% fewer boats</i>
<b>Number of Non-fishing Boats</b>	<i>30% fewer boats</i>	<i>The usual number of other boats near the location</i>
<b>Restrictions</b>	<i>25% of area closed</i>	<i>75% of area closed</i>
<b>Number of Species</b>	<i>Fewer species fish caught</i>	<i>More species fish caught</i>
<b>Number of fish</b>	<i>No increase in numbers of fish caught</i>	<i>20% more fish caught</i>
<b>Size of Fish</b>	<i>60% more keepers</i>	<i>20% more keepers</i>
<b>Travel Cost / Day</b>	<i>Your current total cost per day</i>	<i>10% less than your current total cost per day</i>

Which trip do you prefer? (check only one box below)

Trip A     Trip B     I would not take either trip

44. Suppose that you could choose from the recreational fishing opportunities described below. Which of these fishing trips would you prefer?

ATTRIBUTE	Trip A	Trip B
<b>Number of Recreational Fishing Boats</b>	<i>15% fewer boats</i>	<i>15% fewer boats</i>
<b>Number of Non-fishing Boats</b>	<i>15% fewer boats</i>	<i>The usual number of other boats near the location</i>
<b>Restrictions</b>	<i>25% of area closed</i>	<i>50% of area closed</i>
<b>Number of Species</b>	<i>More species fish caught</i>	<i>No change in species numbers</i>
<b>Number of fish</b>	<i>20% more fish caught</i>	<i>30% more fish caught</i>
<b>Size of Fish</b>	<i>No increase in the number of caught kept</i>	<i>No increase in the number of caught kept</i>
<b>Travel Cost / Day</b>	<i>10% more than your current total cost per day</i>	<i>10% more than your current total cost per day</i>

Which trip do you prefer? (check only one box below)

Trip A     Trip B     I would not take either trip

45. Suppose that you could choose from the recreational fishing opportunities described below. Which of these fishing trips would you prefer?

ATTRIBUTE	Trip A	Trip B
<b>Number of Recreational Fishing Boats</b>	<i>30% fewer boats</i>	<i>30% fewer boats</i>
<b>Number of Non-fishing Boats</b>	<i>The usual number of other boats near the location</i>	<i>15% fewer boats</i>
<b>Restrictions</b>	<i>75% of area closed</i>	<i>75% of area closed</i>
<b>Number of Species</b>	<i>More species fish caught</i>	<i>More species fish caught</i>
<b>Number of fish</b>	<i>20% more fish caught</i>	<i>10% more fish caught</i>
<b>Size of Fish</b>	<i>20% more keepers</i>	<i>No increase in the number of caught kept</i>
<b>Travel Cost / Day</b>	<i>10% less than your current total cost per day</i>	<i>10% less than your current total cost per day</i>

Which trip do you prefer? (check only one box below)

Trip A     Trip B     I would not take either trip

46. Suppose that you could choose from the recreational fishing opportunities described below. Which of these fishing trips would you prefer?

ATTRIBUTE	Trip A	Trip B
<b>Number of Recreational Fishing Boats</b>	<i>30% fewer boats</i>	<i>The usual number of other boats near the location</i>
<b>Number of Non-fishing Boats</b>	<i>The usual number of other boats near the location</i>	<i>15% fewer boats</i>
<b>Restrictions</b>	<i>25% of area closed</i>	<i>25% of area closed</i>
<b>Number of Species</b>	<i>Fewer species fish caught</i>	<i>No change in species numbers</i>
<b>Number of fish</b>	<i>30% more fish caught</i>	<i>No increase in numbers of fish caught</i>
<b>Size of Fish</b>	<i>40% more keepers</i>	<i>60% more keepers</i>
<b>Travel Cost / Day</b>	<i>10% more than your current total cost per day</i>	<i>Your current total cost per day</i>

Which trip do you prefer? (check only one box below)

Trip A     Trip B     I would not take either trip

47. Suppose that you could choose from the recreational fishing opportunities described below. Which of these fishing trips would you prefer?

ATTRIBUTE	Trip A	Trip B
<b>Number of Recreational Fishing Boats</b>	<i>The usual number of other boats near the location</i>	<i>30% fewer boats</i>
<b>Number of Non-fishing Boats</b>	<i>The usual number of other boats near the location</i>	<i>30% fewer boats</i>
<b>Restrictions</b>	<i>50% of area closed</i>	<i>No area closed</i>
<b>Number of Species</b>	<i>No change in species numbers</i>	<i>Fewer species fish caught</i>
<b>Number of fish</b>	<i>10% more fish caught</i>	<i>30% more fish caught</i>
<b>Size of Fish</b>	<i>60% more keepers</i>	<i>20% more keepers</i>
<b>Travel Cost / Day</b>	<i>10% more than your current total cost per day</i>	<i>10% less than your current total cost per day</i>

Which trip do you prefer? (check only one box below)

- Trip A     Trip B     I would not take either trip

48. Suppose that you could choose from the recreational fishing opportunities described below. Which of these fishing trips would you prefer?

ATTRIBUTE	Trip A	Trip B
<b>Number of Recreational Fishing Boats</b>	<i>The usual number of other boats near the location</i>	<i>The usual number of other boats near the location</i>
<b>Number of Non-fishing Boats</b>	<i>15% fewer boats</i>	<i>30% fewer boats</i>
<b>Restrictions</b>	<i>75% of area closed</i>	<i>No area closed</i>
<b>Number of Species</b>	<i>No change in species numbers</i>	<i>More species fish caught</i>
<b>Number of fish</b>	<i>30% more fish caught</i>	<i>No increase in numbers of fish caught</i>
<b>Size of Fish</b>	<i>60% more keepers</i>	<i>No increase in the number of caught kept</i>
<b>Travel Cost / Day</b>	<i>10% more than your current total cost per day</i>	<i>10% more than your current total cost per day</i>

Which trip do you prefer? (check only one box below)

- Trip A     Trip B     I would not take either trip



That's All!! If you would like to be entered into a sweepstakes to win a free Vacation to the Florida Keys, fill out your name, address and phone number below. All prizes will be awarded in October of 2007.

Name: \_\_\_\_\_

Address: \_\_\_\_\_

City: \_\_\_\_\_

State: \_\_\_\_\_ Zip: \_\_\_\_\_ Phone: \_\_\_\_\_

Prizes to be awarded are:

GRAND PRIZE

- \* Airfare for two from anywhere in the continental United States to the Florida Keys
- \* Rental car with unlimited miles for one week (seven days)
- \* Accommodations for two for one week (six nights)
- \* Two complimentary "activities" for two (i.e., diving trip, fishing charter, sunset sail, etc.)
- \* Complimentary dinner for two at local restaurant

FIRST PRIZE

- \* Accommodations for two for five days (four nights)
- \* Two complimentary "activities" for two (i.e., diving trip, fishing charter, sunset sail, etc.)
- \* Complimentary dinner for two at local restaurant

SECOND PRIZE

- \* Accommodations for two for four days (three nights)
- \* One complimentary "activity" for two (i.e., diving trip, fishing charter, sunset sail, etc.)
- \* Complimentary dinner for two at local restaurant

SECOND PRIZE

- \* Accommodations for two for three days (two nights)
- \* One complimentary "activity" for two (i.e., diving trip, fishing charter, sunset sail, etc.)

This is a cooperative research project of the Monroe County Tourist Development Council and the National Oceanic and Atmospheric Administration. Public reporting burden for this collection of information is estimated to average 20 minutes including time for reviewing instructions, searching existing data sources, gathering and maintaining the data need, 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 this burden, to U.S. Department of Commerce, Clearance Officer, Office of Chief Information Officer, Rm. 6625, 14th and Constitution Avenue NW, Washington, DC 20230. Notwithstanding any other provisions of the law, no person is required to respond to, nor shall any person be subject to penalty for failure to comply with, a collection of information subject to requirements of the Paperwork Reduction Act, unless that collection of information displays a currently valid OMB Control Number.

## THANK YOU!

for  
participating in this  
Recreation Survey

Dear Visitor,

During your recent trip to the Florida Keys 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 answers are voluntary and confidential. Your name will never be released to anyone unless otherwise required by law. After the completion of the project all materials identifying you as an individual will be destroyed.

When you complete the questionnaire, please reverse-fold it so that our return address on the GREEN PAGE in the inside is folded to the outside. Please staple or tape to seal the questionnaire and mail it back to us. No postage is needed. Your cooperation in this effort is greatly appreciated.

Sincerely,

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

There are many places to engage in snorkeling/SCUBA diving activities. In the next several questions, we are attempting to understand the reason you may choose to snorkel/SCUBA dive on one reef versus another, or if necessary, choose to engage in activities other than snorkeling/SCUBA diving in the Florida Keys.

**When answering the following questions, please think about a favorite or most common reef that you dive on in the Florida Keys. If you do not have a favorite or most common reef that you dive on in the Keys, please think about the last reef that you dove on in the Florida Keys.**

**Read the choices and circle the letter that indicates your answer for that question.**

**1. Please circle which reef you are thinking of when responding to the following questions. (Please circle only one answer)**

- A Favorite reef to snorkel/dive on
- B Most common reef I snorkel/dive on
- C Most recent reef I snorkeled/dove on

**2. Is this reef a:**

- A Natural coral reef
- B Artificial reef

**3. Are you able to recall the name of this reef? If so, please list in below.**

\_\_\_\_\_ reef

**4. Imagine that you discovered that you could not snorkel/ SCUBA dive at this reef (from question #1 above) during your next planned snorkel/SCUBA dive trip. What would you do? (Please circle only one answer)**

- A I would still snorkel/ SCUBA dive, but elsewhere in the Florida Keys
- B I would still snorkel/ SCUBA dive, but at a location outside of the Florida Keys
- C I would temporarily participate in a different activity in the Florida Keys
- D I would temporarily participate in a different activity, but outside the Florida Keys

**5. Imagine that you discovered that you could not snorkel/ SCUBA dive at this reef (from question #1 above) for the next five years. What would you do?**

- A I would still snorkel/ SCUBA dive, but elsewhere in the Florida Keys
- B I would still snorkel/ SCUBA dive, but at a location outside of the Florida Keys
- C I would permanently participate in a different activity in the Florida Keys
- D I would permanently participate in a different activity, but outside the Florida Keys

**6. Imagine that you discovered during your next snorkel/ SCUBA dive trip that this reef (from question #1 above) was more crowded than you normally find acceptable. What would you do?**

- A I would make an exception and still snorkel/ SCUBA dive on this reef
- B I would still snorkel/ SCUBA dive, but elsewhere in the Florida Keys
- C I would temporarily participate in a different activity in the Florida Keys
- D I would temporarily participate in a different activity, but outside the Florida Keys

**7. Imagine that you discovered during your next snorkel/ SCUBA dive trip that this reef (from question #1 above) was more ecologically damaged (e.g., there wasn't enough healthy coral or fish) than normally find acceptable. What would you do?**

- A I would make an exception and still snorkel/ SCUBA dive on this reef
- B I would still snorkel/ SCUBA dive, but elsewhere in the Florida Keys
- C I would temporarily participate in a different activity in the Florida Keys
- D I would temporarily participate in a different activity, but outside the Florida Keys

**8. Imagine that you discovered during your next snorkel/ SCUBA dive trip that user groups with whom you experience conflict are using this reef (from question #1 above). What would you do?**

- A I would make an exception and still snorkel/ SCUBA dive on this reef
- B I would still snorkel/ SCUBA dive, but elsewhere in the Florida Keys
- C I would temporarily participate in a different activity in the Florida Keys
- D I would temporarily participate in a different activity, but outside the Florida Keys

**9. If you could not snorkel/SCUBA dive at this reef (from question #1 above), how many other Florida Keys reefs do you think can offer you just as good an experience as your favorite reefs?**

\_\_\_\_\_ number of other Florida Keys reefs

Don't Know

**10. If you could not snorkel/SCUBA dive at this reef (from question #1 above), how many other Florida Keys reefs do you think can offer you a similar, but not quite as good, experience?**

\_\_\_\_\_ number of other Florida Keys reefs

Don't Know

**11. Please rate how similar you think the snorkeling/SCUBA diving experience is at your best similar reef compared to this reef (from question #1 above).**

Not as good				Equivalent				Better
1	2	3	4	5	6	7		

12. There are many things that you might think about or consider when deciding to substitute one reef for another when snorkeling or SCUBA diving. Please indicate how important each of the following factors is in terms of deciding whether or not you would choose to snorkel/SCUBA dive at a substitute reef.

	Not at all important	Somewhat important	Moderately important	Very important	Extremely important
a) The quality of other reefs.....	1	2	3	4	5
b) The difficulty of the diving conditions on other reefs.....	1	2	3	4	5
c) The distance to other reefs.....	1	2	3	4	5
d) My familiarity with various dive shops.....	1	2	3	4	5
e) The adequacy of my boat to get to other reefs.....	1	2	3	4	5
f) The number of fish at other reefs.....	1	2	3	4	5
g) The cost of fuel to get to other reefs.....	1	2	3	4	5
h) The level of crowding at other reefs.....	1	2	3	4	5
i) The amount of live coral at other reefs.....	1	2	3	4	5
j) Area closures at desirable reef locations.....	1	2	3	4	5
k) The presence of other groups that I don't like.....	1	2	3	4	5
l) Other.....	1	2	3	4	5

13. If you could not go snorkeling/SCUBA diving, either in the Florida Keys or elsewhere, are there any other recreation activities in the Florida Keys that would provide you with the same satisfaction and enjoyment that you receive from going snorkeling/SCUBA diving?

Yes --- If yes, please go to question # 14 below

No --- If no, please go to question # 15 below

14. If you answered “yes” to question 13, please list up to three specific activities that you consider to be substitutes for snorkeling/SCUBA diving.

\_\_\_\_\_ activity

\_\_\_\_\_ activity

\_\_\_\_\_ activity

15. There are reasons why people cannot participate as often as they would like in an activity they enjoy doing. Please indicate the extent to which you agree or disagree with each of the following statements as they relate to your ability to snorkel/SCUBA dive in the Florida Keys as often as you would like.

	Completely disagree	Disagree	Neutral	Agree	Completely agree
a) I don't have enough leisure time.....	1	2	3	4	5
b) The equipment is too expensive.....	1	2	3	4	5
c) The cost of travel is too high.....	1	2	3	4	5
d) It is difficult to find snorkel/SCUBA diving partners.....	1	2	3	4	5
e) Fuel prices for my boat are too high.....	1	2	3	4	5
f) Snorkel/SCUBA diving areas are too crowded.....	1	2	3	4	5
g) Too many snorkel/SCUBA diving areas are off-limits.....	1	2	3	4	5
h) Dive boats are too expensive .....	1	2	3	4	5
i) Other.....	1	2	3	4	5

16. Below is a list of reasons why people snorkel/SCUBA dive in the Florida Keys. Please circle the number that indicates how important each item is to you as a reason for snorkel/SCUBA diving in the Florida Keys.

	Not at all important	Somewhat important	Moderately important	Very important	Extremely important
a) To develop my skills.....	1	2	3	4	5
b) To experience excitement.....	1	2	3	4	5
c) For family recreation.....	1	2	3	4	5
d) To be with friends.....	1	2	3	4	5
e) To be outdoors.....	1	2	3	4	5
f) To experience new and different things.....	1	2	3	4	5
g) For the experience of the dive.....	1	2	3	4	5
h) To get away from the demands of other people.....	1	2	3	4	5
i) To get away from the regular routine.....	1	2	3	4	5
j) To see diverse underwater life.....	1	2	3	4	5
k) To teach underwater skills to other people.....	1	2	3	4	5
l) To obtain additional dive ratings.....	1	2	3	4	5
m) To experience natural surroundings.....	1	2	3	4	5
n) For solitude.....	1	2	3	4	5
o) For relaxation.....	1	2	3	4	5
p) For the challenge of the dive.....	1	2	3	4	5

There are many places to engage in fishing. In the next several questions, we are attempting to understand the reason you may choose to fish in one location versus another, or if necessary, engage in an activity other than fishing in the Florida Keys.

When answering the following questions, please think about a favorite or most common area that you fish in off the Florida Keys. If you do not have a favorite or most common area that you fish in off the Keys, please think about the last area that you fished in off the Florida Keys.

17. Please indicate which reef you are thinking of when responding to the following questions. (Please circle only one answer)

- A My favorite reef to fish at
- B The most common area I fish at
- C The most recent area I fished in

18. Is this area:

- A A flat
- B A natural coral reef
- C Hawk Channel
- D An artificial reef
- E Other (please list) \_\_\_\_\_

19. Are you able to recall the name of this area? If so, please list it below.

\_\_\_\_\_ area

20. Imagine that you discovered that you could not fish in this area (from question #17 above) during your next planned fishing trip. What would you do? (Please circle only one answer)

- A I would still fish, but elsewhere in the Florida Keys
- B I would still fish, but at a location outside of the Florida Keys
- C I would temporarily participate in a different activity in the Florida Keys
- D I would temporarily participate in a different activity, but outside the Florida Keys

21. Imagine that you discovered that you could not fish in this area (from question #17 above) for the next five years. What would you do?

- A I would still fish, but elsewhere in the Florida Keys
- B I would still fish, but at a location outside of the Florida Keys
- C I would permanently participate in a different activity in the Florida Keys
- D I would permanently participate in a different activity, but outside the Florida Keys

22. Imagine that you discovered during your next fishing trip that this area (from question #17 above) was more crowded than you normally find acceptable. What would you do?

- A I would make an exception and still fish in this area
- B I would still fish, but elsewhere in the Florida Keys
- C I would temporarily participate in a different activity in the Florida Keys
- D I would temporarily participate in a different activity, but outside the Florida Keys



**23. Imagine that you discovered during your next fishing trip that this area (from question #17 above) was more ecologically damaged (e.g., there was no longer enough good fish habitat) than you normally find acceptable. What would you do?**

- A I would still fish in this area
- B I would still fish, but elsewhere in the Florida Keys
- C I would temporarily participate in a different activity in the Florida Keys
- D I would temporarily participate in a different activity, but outside the Florida Keys

**24. Imagine that you discovered during your next fishing trip that other user groups with whom you experience conflict are using this area (from question #17 above). What would you do?**

- A I would still fish in this area
- B I would still fish, but elsewhere in the Florida Keys
- C I would temporarily participate in a different activity in the Florida Keys
- D I would temporarily participate in a different activity, but outside the Florida Keys

**25. If you could not fish in this area (from question #17 above), how many other areas in the Florida Keys do you think can offer you an overall experience that is just as good?**

\_\_\_\_\_ number of other areas in the Florida Keys

Don't Know

**26. If you could not fish in this area (from question #17 above), how many other areas in the Florida Keys do you think can offer you a similar, but not quite as good, overall experience?**

\_\_\_\_\_ number of other areas Florida Keys

Don't Know

**27. Please rate how similar you think the fishing experience is at your best similar fishing area compared to this area.**

Not as good				Equivalent				Better
1	2	3	4	5	6	7		

28. There are many things that you might think about or consider when deciding to substitute one fishing area for another. Please indicate how important each of the following factors is in terms of deciding whether or not you would choose to fish in a substitute area.

	Not at all important	Somewhat important	Moderately important	Very important	Extremely important
a) The number of fish at other areas.....	1	2	3	4	5
b) The difficulty of boating conditions.....	1	2	3	4	5
c) The distance to other areas.....	1	2	3	4	5
d) The charter boats and captains at other areas.....	1	2	3	4	5
e) The adequacy of my boat to get to other areas.....	1	2	3	4	5
f) The cost of fuel to get to other areas.....	1	2	3	4	5
g) The level of crowding at other areas.....	1	2	3	4	5
h) Area closures at desirable locations.....	1	2	3	4	5
i) The presence of other groups that I don't like.....	1	2	3	4	5
j) Other.....	1	2	3	4	5

29. If you could not go fishing, either in the Florida Keys or elsewhere, are there any other recreation activities in the Florida Keys that would provide you with the same satisfaction and enjoyment that you receive from going fishing?

Yes --- If yes, please go to question # 30 below

No --- If no, please go to question # 31 below

30. If you answered “yes” to question D29, please list up to three specific activities that you consider to be substitutes for fishing in the Florida Keys.

\_\_\_\_\_ activity

\_\_\_\_\_ activity

\_\_\_\_\_ activity

31. There are reasons why people cannot participate as often as they would like in an activity they enjoy doing. Please indicate the extent to which you agree or disagree with each of the following statements as they relate to your ability to fish in the Florida Keys as often as you would like.

	Completely disagree	Disagree	Neutral	Agree	Completely agree
a) I don't have enough leisure time.....	1	2	3	4	5
b) The equipment is too expensive.....	1	2	3	4	5
c) The cost of travel is too high.....	1	2	3	4	5
d) It is difficult to find fishing partners.....	1	2	3	4	5
e) Fuel prices for my boat are too high.....	1	2	3	4	5
f) Fishing areas are too crowded.....	1	2	3	4	5
g) Too many fishing areas are off-limits.....	1	2	3	4	5
h) Fishing charters are too expensive.....	1	2	3	4	5
i) Other.....	1	2	3	4	5

32. Below is a list of reasons why people saltwater fish in the Florida Keys. Please circle the number that indicates how important each item is to you as a reason for saltwater fishing in the Florida Keys.

	Not at all important	Somewhat important	Moderately important	Very important	Extremely important
a) To develop my skills.....	1	2	3	4	5
b) To experience excitement.....	1	2	3	4	5
c) For family recreation.....	1	2	3	4	5
d) To be with friends.....	1	2	3	4	5
e) To be outdoors.....	1	2	3	4	5
f) To experience new and different things.....	1	2	3	4	5
g) For the experience of the catch.....	1	2	3	4	5
h) To get away from the demands of other people.....	1	2	3	4	5
i) To get away from the regular routine.....	1	2	3	4	5
j) To catch a trophy fish.....	1	2	3	4	5
k) For the sport of fishing, not to obtain food to eat.....	1	2	3	4	5
l) For the fun of catching fish.....	1	2	3	4	5
m) To experience natural surroundings.....	1	2	3	4	5
n) For solitude.....	1	2	3	4	5
o) For relaxation.....	1	2	3	4	5
p) For the challenge of the catch.....	1	2	3	4	5
q) To obtain fish for eating, not for sport.....	1	2	3	4	5

**Management Alternatives**

**Snorkeler / SCUBA diver**  
 If not a snorkeler / SCUBA diver in the Florida Keys, but do recreational fishing, GO to page 16.  
 If not a snorkeler / SCUBA diver or recreational fisher in the Florida Keys, GO to last page.

Please think about a recreational snorkeling / SCUBA diving experience on a reef in the Florida Keys when answering the questions on the following pages. You will be offered eight (8) choices of two diving trips. Each choice has different features for you to evaluate. Please read each choice carefully. Although they may look similar, trips in each question differ in at least one way.

There is an example to assist you. Please note the following definitions before reviewing the example.

- Number of Snorkelers / Divers - the number of snorkelers / divers on a reef at any one time
- Restrictions- percent area of reef open to use
- Enforcement- the number of law enforcement patrols you observe per trip
- Number of Fish Species- the amount of different kinds of fish species observed on the reef
- Site Settings- the amount of live coral and/or algae on the reef
- Number of Fish- the overall amount of fish observed on the reef
- Size of Fish- the size of fish observed on the reef
- Travel cost / day – Travel cost that a snorkeler / diver spends for a diving trip per day (including gas and other trip expenses)

**Example**

If you were planning a snorkel / SCUBA dive trip to the Florida Keys, which trip would you prefer: Trip A, Trip B, or neither?

<b>ATTRIBUTE</b>	<b>Trip A</b>	<b>Trip B</b>
<b>Number of Snorkelers / Divers</b>	<i>15% fewer snorkelers / divers</i>	<i>30% fewer snorkelers / divers</i>
<b>Site Settings</b>	<i>Mix of coral and algae cover</i>	<i>High live coral cover</i>
<b>Restrictions</b>	<i>25% of area closed</i>	<i>75 % of area closed</i>
<b>Number of Fish</b>	<i>40% more fish</i>	<i>No increase in numbers of fish</i>
<b>Size of Fish</b>	<i>40% more larger fish</i>	<i>20 % more larger fish</i>
<b>Species</b>	<i>No change in species numbers</i>	<i>Fewer species</i>
<b>Enforcement</b>	<i>Two additional patrols</i>	<i>No additional patrols</i>
<b>Travel Cost / Day</b>	<i>Your current total cost per day</i>	<i>10% more than your current total cost per day</i>

Which trip do you prefer? (check only one box below)

- Trip A     
  Trip B     
  I would not take either trip

33. If you were planning a snorkel / SCUBA dive trip to the Florida Keys, which trip would you prefer: Trip A, Trip B, or neither?

<b>ATTRIBUTE</b>	<b>Trip A</b>	<b>Trip B</b>
<b>Number of Snorkelers / Divers</b>	<i>15% fewer snorkelers / divers</i>	<i>30% fewer snorkelers / divers</i>
<b>Site Settings</b>	<i>High live coral cover</i>	<i>Mix of coral and algae cover</i>
<b>Restrictions</b>	<i>75% of area closed</i>	<i>75% of area closed</i>
<b>Number of Fish</b>	<i>No increase in numbers of fish</i>	<i>60% more fish</i>
<b>Size of Fish</b>	<i>20% more larger fish</i>	<i>20% more larger fish</i>
<b>Species</b>	<i>Fewer species</i>	<i>Many species</i>
<b>Enforcement</b>	<i>One additional patrol</i>	<i>Two additional patrols</i>
<b>Travel Cost / Day</b>	<i>Your current total cost per day</i>	<i>10% more than your current total cost per day</i>

Which trip do you prefer? (check only one box below)

Trip A     Trip B     I would not take either trip

34. If you were planning a snorkel / SCUBA dive trip to the Florida Keys, which trip would you prefer: Trip A, Trip B, or neither?

<b>ATTRIBUTE</b>	<b>Trip A</b>	<b>Trip B</b>
<b>Number of Snorkelers / Divers</b>	<i>30% fewer snorkelers / divers</i>	<i>15% fewer snorkelers / divers</i>
<b>Site Settings</b>	<i>High algae cover</i>	<i>Mix of coral and algae cover</i>
<b>Restrictions</b>	<i>50% of area closed</i>	<i>25% of area closed</i>
<b>Number of Fish</b>	<i>40% more fish</i>	<i>20% more fish</i>
<b>Size of Fish</b>	<i>40% more larger fish</i>	<i>No increase in larger fish</i>
<b>Species</b>	<i>No change in species numbers</i>	<i>No change in species numbers</i>
<b>Enforcement</b>	<i>One additional patrol</i>	<i>One additional patrol</i>
<b>Travel Cost / Day</b>	<i>Your current total cost per day</i>	<i>10% more than your current total cost per day</i>

Which trip do you prefer? (check only one box below)

Trip A     Trip B     I would not take either trip

35. If you were planning a snorkel / SCUBA dive trip to the Florida Keys, which trip would you prefer: Trip A, Trip B, or neither?

ATTRIBUTE	Trip A	Trip B
<b>Number of Snorkelers / Divers</b>	<i>15% fewer snorkelers / divers</i>	<i>15% fewer snorkelers / divers</i>
<b>Site Settings</b>	<i>High algae cover</i>	<i>Mix of coral and algae cover</i>
<b>Restrictions</b>	<i>25% of area closed</i>	<i>No area closed</i>
<b>Number of Fish</b>	<i>40% more fish</i>	<i>No increase in numbers of fish</i>
<b>Size of Fish</b>	<i>20% more larger fish</i>	<i>40% more larger fish</i>
<b>Species</b>	<i>Fewer species</i>	<i>Fewer species</i>
<b>Enforcement</b>	<i>Two additional patrols</i>	<i>No additional patrols</i>
<b>Travel Cost / Day</b>	<i>10% more than your current total cost per day</i>	<i>10% less than your current total cost per day</i>

Which trip do you prefer? (check only one box below)

- Trip A     Trip B     I would not take either trip

36. If you were planning a snorkel / SCUBA dive trip to the Florida Keys, which trip would you prefer: Trip A, Trip B, or neither?

ATTRIBUTE	Trip A	Trip B
<b>Number of Snorkelers / Divers</b>	<i>15% fewer snorkelers / divers</i>	<i>The usual number of other snorkelers / divers at the site</i>
<b>Site Settings</b>	<i>Mix of coral and algae cover</i>	<i>High algae cover</i>
<b>Restrictions</b>	<i>50% of area closed</i>	<i>25% of area closed</i>
<b>Number of Fish</b>	<i>No increase in numbers of fish</i>	<i>No increase in numbers of fish</i>
<b>Size of Fish</b>	<i>60% more larger fish</i>	<i>60% more larger fish</i>
<b>Species</b>	<i>No change in species numbers</i>	<i>Fewer species</i>
<b>Enforcement</b>	<i>No additional Patrols</i>	<i>Two additional patrols</i>
<b>Travel Cost / Day</b>	<i>10% more than your current total cost per day</i>	<i>10% more than your current total cost per day</i>

Which trip do you prefer? (check only one box below)

- Trip A     Trip B     I would not take either trip

37. If you were planning a snorkel / SCUBA dive trip to the Florida Keys, which trip would you prefer: Trip A, Trip B, or neither?

ATTRIBUTE	Trip A	Trip B
<b>Number of Snorkelers / Divers</b>	<i>15% fewer snorkelers / divers</i>	<i>30% fewer snorkelers / divers</i>
<b>Site Settings</b>	<i>High live coral cover</i>	<i>High algae cover</i>
<b>Restrictions</b>	<i>No area closed</i>	<i>50% of area closed</i>
<b>Number of Fish</b>	<i>20% more fish</i>	<i>40% more fish</i>
<b>Size of Fish</b>	<i>40% more larger fish</i>	<i>40% more larger fish</i>
<b>Species</b>	<i>No change in species numbers</i>	<i>Fewer species</i>
<b>Enforcement</b>	<i>No additional Patrols</i>	<i>No additional Patrols</i>
<b>Travel Cost / Day</b>	<i>Your current total cost per day</i>	<i>Your current total cost per day</i>

Which trip do you prefer? (check only one box below)

- Trip A     Trip B     I would not take either trip

38. If you were planning a snorkel / SCUBA dive trip to the Florida Keys, which trip would you prefer: Trip A, Trip B, or neither?

ATTRIBUTE	Trip A	Trip B
<b>Number of Snorkelers / Divers</b>	<i>The usual number of other snorkelers / divers at the site</i>	<i>The usual number of other snorkelers / divers at the site</i>
<b>Site Settings</b>	<i>High algae cover</i>	<i>High live coral cover</i>
<b>Restrictions</b>	<i>50% of area closed</i>	<i>75% of area closed</i>
<b>Number of Fish</b>	<i>20% more fish</i>	<i>40% more fish</i>
<b>Size of Fish</b>	<i>60% more larger fish</i>	<i>20% more larger fish</i>
<b>Species</b>	<i>Fewer species</i>	<i>No change in species numbers</i>
<b>Enforcement</b>	<i>One additional patrol</i>	<i>No additional Patrols</i>
<b>Travel Cost / Day</b>	<i>10% less than your current total cost per day</i>	<i>10% less than your current total cost per day</i>

Which trip do you prefer? (check only one box below)

- Trip A     Trip B     I would not take either trip



39. If you were planning a snorkel / SCUBA dive trip to the Florida Keys, which trip would you prefer: Trip A, Trip B, or neither?

ATTRIBUTE	Trip A	Trip B
<b>Number of Snorkelers / Divers</b>	<i>30% fewer snorkelers / divers</i>	<i>The usual number of other snorkelers / divers at the site</i>
<b>Site Settings</b>	<i>High live coral cover</i>	<i>High live coral cover</i>
<b>Restrictions</b>	<i>25% of area closed</i>	<i>25% of area closed</i>
<b>Number of Fish</b>	<i>60% more fish</i>	<i>60% more fish</i>
<b>Size of Fish</b>	<i>20% more larger fish</i>	<i>No increase in larger fish</i>
<b>Species</b>	<i>Many species</i>	<i>Fewer species</i>
<b>Enforcement</b>	<i>No additional patrols</i>	<i>One additional patrol</i>
<b>Travel Cost / Day</b>	<i>10% less than your current total cost per day</i>	<i>10% less than your current total cost per day</i>

Which trip do you prefer? (check only one box below)

Trip A     Trip B     I would not take either trip

40. If you were planning a snorkel / SCUBA dive trip to the Florida Keys, which trip would you prefer: Trip A, Trip B, or neither?

ATTRIBUTE	Trip A	Trip B
<b>Number of Snorkelers / Divers</b>	<i>The usual number of other snorkelers / divers at the site</i>	<i>30% fewer snorkelers / divers</i>
<b>Site Settings</b>	<i>Mix of coral and algae cover</i>	<i>Mix of coral and algae cover</i>
<b>Restrictions</b>	<i>75% of area closed</i>	<i>No area closed</i>
<b>Number of Fish</b>	<i>60% more fish</i>	<i>40% more fish</i>
<b>Size of Fish</b>	<i>No increase in larger fish</i>	<i>No increase in larger fish</i>
<b>Species</b>	<i>Many species</i>	<i>No change in species numbers</i>
<b>Enforcement</b>	<i>One additional patrol</i>	<i>Two additional patrols</i>
<b>Travel Cost / Day</b>	<i>10% more than your current total cost per day</i>	<i>10% less than your current total cost per day</i>

Which trip do you prefer? (check only one box below)

Trip A     Trip B     I would not take either trip

**Recreational Fisher**  
**If not a Recreational fisher in the Florida Keys, GO to last page.**

Please think about a recreational fishing experience in the Florida Keys when answering the questions on the following pages. You will be offered eight (8) choices of two fishing trips. Each choice has different features for you to evaluate. Please read each choice carefully. Although they may look similar, trips in each question differ in at least one way.

There is an example to assist you. Please note the following definitions before reviewing the example.

- Number of Recreational Fishing Boats- the number of recreational fishing boats near you at any one time
- Number of Non-fishing boats- the number of non-fishing boats near you at any one time
- Restrictions- the number of reefs closed to fishing per zone (upper Keys, middle Keys, lower Keys)
- Number of Fish Species- the amount of different kinds of fish species caught in a trip
- Number of Fish- the overall amount of fish caught on a trip
- Size of Fish- the number of legal sized fish caught on a trip
- Travel cost / day – Travel cost that an angler spends for a fishing trip per day (including gas and other trip expenses)

**Example**

Suppose that you could choose from the recreational fishing opportunities described below. Which of these fishing trips would you prefer?

<b>ATTRIBUTE</b>	<b>Trip A</b>	<b>Trip B</b>
<b>Number of Recreational Fishing Boats</b>	<i>30% fewer boats</i>	<i>The usual number of other boats near the location</i>
<b>Number of Non-fishing Boats</b>	<i>The usual number of other boats near the location</i>	<i>30% fewer boats</i>
<b>Restrictions</b>	<i>25% of area closed</i>	<i>25% of area closed</i>
<b>Number of Species</b>	<i>No change in species numbers</i>	<i>Fewer species fish caught</i>
<b>Number of fish</b>	<i>10% more fish caught</i>	<i>30% more fish caught</i>
<b>Size of Fish</b>	<i>60% more keepers</i>	<i>20% more keepers</i>
<b>Travel Cost / Day</b>	<i>10% more than your current total cost per day</i>	<i>10% less than your current total cost per day</i>

Which trip do you prefer? (check only one box below)

- Trip A     
  Trip B     
  I would not take either trip

41. Suppose that you could choose from the recreational fishing opportunities described below. Which of these fishing trips would you prefer?

ATTRIBUTE	Trip A	Trip B
<b>Number of Recreational Fishing Boats</b>	<i>The usual number of other boats near the location</i>	<i>The usual number of other boats near the location</i>
<b>Number of Non-fishing Boats</b>	<i>30% fewer boats</i>	<i>The usual number of other boats near the location</i>
<b>Restrictions</b>	<i>75% of area closed</i>	<i>25% of area closed</i>
<b>Number of Species</b>	<i>No change in species numbers</i>	<i>No change in species numbers</i>
<b>Number of fish</b>	<i>No increase in numbers of fish caught</i>	<i>20% more fish caught</i>
<b>Size of Fish</b>	<i>40% more keepers</i>	<i>No increase in the number of caught kept</i>
<b>Travel Cost / Day</b>	<i>10% more than your current total cost per day</i>	<i>10% less than your current total cost per day</i>

Which trip do you prefer? (check only one box below)

Trip A     Trip B     I would not take either trip

42. Suppose that you could choose from the recreational fishing opportunities described below. Which of these fishing trips would you prefer?

ATTRIBUTE	Trip A	Trip B
<b>Number of Recreational Fishing Boats</b>	<i>The usual number of other boats near the location</i>	<i>15% fewer boats</i>
<b>Number of Non-fishing Boats</b>	<i>15% fewer boats</i>	<i>The usual number of other boats near the location</i>
<b>Restrictions</b>	<i>No area closed</i>	<i>50% of area closed</i>
<b>Number of Species</b>	<i>More species fish caught</i>	<i>More species fish caught</i>
<b>Number of fish</b>	<i>30% more fish caught</i>	<i>10% more fish caught</i>
<b>Size of Fish</b>	<i>20% more keepers</i>	<i>60% more keepers</i>
<b>Travel Cost / Day</b>	<i>10% more than your current total cost per day</i>	<i>10% less than your current total cost per day</i>

Which trip do you prefer? (check only one box below)

Trip A     Trip B     I would not take either trip

43. Suppose that you could choose from the recreational fishing opportunities described below. Which of these fishing trips would you prefer?

ATTRIBUTE	Trip A	Trip B
<b>Number of Recreational Fishing Boats</b>	<i>15% fewer boats</i>	<i>30% fewer boats</i>
<b>Number of Non-fishing Boats</b>	<i>30% fewer boats</i>	<i>15% fewer boats</i>
<b>Restrictions</b>	<i>25% of area closed</i>	<i>No area closed</i>
<b>Number of Species</b>	<i>No change in species numbers</i>	<i>More species fish caught</i>
<b>Number of fish</b>	<i>20% more fish caught</i>	<i>20% more fish caught</i>
<b>Size of Fish</b>	<i>No increase in the number of caught kept</i>	<i>60% more keepers</i>
<b>Travel Cost / Day</b>	<i>10% less than your current total cost per day</i>	<i>Your current total cost per day</i>

Which trip do you prefer? (check only one box below)

Trip A     Trip B     I would not take either trip

44. Suppose that you could choose from the recreational fishing opportunities described below. Which of these fishing trips would you prefer?

ATTRIBUTE	Trip A	Trip B
<b>Number of Recreational Fishing Boats</b>	<i>30% fewer boats</i>	<i>15% fewer boats</i>
<b>Number of Non-fishing Boats</b>	<i>15% fewer boats</i>	<i>30% fewer boats</i>
<b>Restrictions</b>	<i>No area closed</i>	<i>No area closed</i>
<b>Number of Species</b>	<i>Fewer species fish caught fish caught</i>	<i>No change in species numbers</i>
<b>Number of fish</b>	<i>10% more fish caught</i>	<i>20% more fish caught</i>
<b>Size of Fish</b>	<i>40% more keepers</i>	<i>60% more keepers</i>
<b>Travel Cost / Day</b>	<i>10% less than your current total cost per day</i>	<i>10% more than your current total cost per day</i>

Which trip do you prefer? (check only one box below)

Trip A     Trip B     I would not take either trip

45. Suppose that you could choose from the recreational fishing opportunities described below. Which of these fishing trips would you prefer?

ATTRIBUTE	Trip A	Trip B
<b>Number of Recreational Fishing Boats</b>	<i>30% fewer boats</i>	<i>30% fewer boats</i>
<b>Number of Non-fishing Boats</b>	<i>30% fewer boats</i>	<i>The usual number of other boats near the location</i>
<b>Restrictions</b>	<i>50% of area closed</i>	<i>50% of area closed</i>
<b>Number of Species</b>	<i>More species fish caught</i>	<i>Fewer species fish caught</i>
<b>Number of fish</b>	<i>30% more fish caught</i>	<i>No increase in numbers of fish caught</i>
<b>Size of Fish</b>	<i>No increase in the number of caught kept</i>	<i>20% more keepers</i>
<b>Travel Cost / Day</b>	<i>10% less than your current total cost per day</i>	<i>10% more than your current total cost per day</i>

Which trip do you prefer? (check only one box below)

Trip A     Trip B     I would not take either trip

46. Suppose that you could choose from the recreational fishing opportunities described below. Which of these fishing trips would you prefer?

ATTRIBUTE	Trip A	Trip B
<b>Number of Recreational Fishing Boats</b>	<i>The usual number of other boats near the location</i>	<i>The usual number of other boats near the location</i>
<b>Number of Non-fishing Boats</b>	<i>15% fewer boats</i>	<i>30% fewer boats</i>
<b>Restrictions</b>	<i>25% of area closed</i>	<i>75% of area closed</i>
<b>Number of Species</b>	<i>Fewer species fish caught</i>	<i>Fewer species fish caught</i>
<b>Number of fish</b>	<i>20% more fish caught</i>	<i>No increase in numbers of fish caught</i>
<b>Size of Fish</b>	<i>No increase in the number of caught kept</i>	<i>40% more keepers</i>
<b>Travel Cost / Day</b>	<i>Your current total cost per day</i>	<i>10% less than your current total cost per day</i>

Which trip do you prefer? (check only one box below)

Trip A     Trip B     I would not take either trip

47. Suppose that you could choose from the recreational fishing opportunities described below. Which of these fishing trips would you prefer?

ATTRIBUTE	Trip A	Trip B
<b>Number of Recreational Fishing Boats</b>	<i>15% fewer boats</i>	<i>The usual number of other boats near the location</i>
<b>Number of Non-fishing Boats</b>	<i>The usual number of other boats near the location</i>	<i>15% fewer boats</i>
<b>Restrictions</b>	<i>50% of area closed</i>	<i>75% of area closed</i>
<b>Number of Species</b>	<i>Fewer species fish caught</i>	<i>No change in species numbers</i>
<b>Number of fish</b>	<i>10% more fish caught</i>	<i>10% more fish caught</i>
<b>Size of Fish</b>	<i>60% more keepers</i>	<i>No increase in the number of caught kept</i>
<b>Travel Cost / Day</b>	<i>Your current total cost per day</i>	<i>Your current total cost per day</i>

Which trip do you prefer? (check only one box below)

Trip A     Trip B     I would not take either trip

48. Suppose that you could choose from the recreational fishing opportunities described below. Which of these fishing trips would you prefer?

ATTRIBUTE	Trip A	Trip B
<b>Number of Recreational Fishing Boats</b>	<i>30% fewer boats</i>	<i>30% fewer boats</i>
<b>Number of Non-fishing Boats</b>	<i>15% fewer boats</i>	<i>15% fewer boats</i>
<b>Restrictions</b>	<i>25% of area closed</i>	<i>25% of area closed</i>
<b>Number of Species</b>	<i>More species fish caught</i>	<i>Fewer species fish caught</i>
<b>Number of fish</b>	<i>No increase in numbers of fish caught</i>	<i>30% more fish caught</i>
<b>Size of Fish</b>	<i>60% more keepers</i>	<i>40% more keepers</i>
<b>Travel Cost / Day</b>	<i>10% less than your current total cost per day</i>	<i>10% more than your current total cost per day</i>

Which trip do you prefer? (check only one box below)

Trip A     Trip B     I would not take either trip

That's All!! If you would like to be entered into a sweepstakes to win a free Vacation to the Florida Keys, fill out your name, address and phone number below. All prizes will be awarded in October of 2007.

Name: \_\_\_\_\_

Address: \_\_\_\_\_

City: \_\_\_\_\_

State: \_\_\_\_\_ Zip: \_\_\_\_\_ Phone: \_\_\_\_\_

Prizes to be awarded are:

GRAND PRIZE

- \* Airfare for two from anywhere in the continental United States to the Florida Keys
- \* Rental car with unlimited miles for one week (seven days)
- \* Accommodations for two for one week (six nights)
- \* Two complimentary "activities" for two (i.e., diving trip, fishing charter, sunset sail, etc.)
- \* Complimentary dinner for two at local restaurant

FIRST PRIZE

- \* Accommodations for two for five days (four nights)
- \* Two complimentary "activities" for two (i.e., diving trip, fishing charter, sunset sail, etc.)
- \* Complimentary dinner for two at local restaurant

SECOND PRIZE

- \* Accommodations for two for four days (three nights)
- \* One complimentary "activity" for two (i.e., diving trip, fishing charter, sunset sail, etc.)
- \* Complimentary dinner for two at local restaurant

SECOND PRIZE

- \* Accommodations for two for three days (two nights)
- \* One complimentary "activity" for two (i.e., diving trip, fishing charter, sunset sail, etc.)

This is a cooperative research project of the Monroe County Tourist Development Council and the National Oceanic and Atmospheric Administration. Public reporting burden for this collection of information is estimated to average 20 minutes including time for reviewing instructions, searching existing data sources, gathering and maintaining the data need, 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 this burden, to U.S. Department of Commerce, Clearance Officer, Office of Chief Information Officer, Rm. 6625, 14th and Constitution Avenue NW, Washington, DC 20230. Notwithstanding any other provisions of the law, no person is required to respond to, nor shall any person be subject to penalty for failure to comply with, a collection of information subject to requirements of the Paperwork Reduction Act, unless that collection of information displays a currently valid OMB Control Number.

## THANK YOU!

for  
participating in this  
Recreation Survey

Dear Visitor,

During your recent trip to the Florida Keys 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 answers are voluntary and confidential. Your name will never be released to anyone unless otherwise required by law. After the completion of the project all materials identifying you as an individual will be destroyed.

When you complete the questionnaire, please reverse-fold it so that our return address on the GREEN PAGE in the inside is folded to the outside. Please staple or tape to seal the questionnaire and mail it back to us. No postage is needed. Your cooperation in this effort is greatly appreciated.

Sincerely,

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



Coral reefs are sensitive ecosystems. The Florida Keys, the world's third-largest barrier reef and the only coral reef system along the US mainland coast, is no exception. It has long been recognized that human use of coral reefs and adjacent coastal activities inflict strains on these systems. Non-local factors associated with global human use of the planet's resources add to the strain through their impact on air and sea temperatures.

The Florida Keys National Marine Sanctuary (FKNMS) was founded through a Federal Act to manage issues such as the above. It is managed cooperatively by the National Oceanic and Atmospheric Administration (NOAA) and the State of Florida, with significant input from local government, businesses, non-government organizations and the general public. Your views are valuable in the formulation of FKNMS action plans and management strategies.

This mail survey explores your knowledge, attitudes and perceptions of the natural reefs of the Florida Keys. There are no right or wrong answers; we simply want your honest opinion. Again, your privacy will be protected. No one will be given information that will allow them to identify you from survey data.

[This page intentionally left blank. Proceed to next page.]

I. Please read each statement and rate the *importance* of each item during your recent visit in the Florida Keys area. If an item does not apply, indicate by circling n/a (not applicable). Likewise, if you don't know, circle (dk).

IMPORTANCE  
(with each of these items during  
your recent visit)

		Not Applicable	Don't Know	Not Important	Somewhat Important	Important	Very Important	Extremely Important
A)	Clear water (high visibility) . . . . .	n/a	dk	1	2	3	4	5
B)	Amount of living coral on reefs . . . . .	n/a	dk	1	2	3	4	5
C)	Many different kinds of fish and sea life to view . . . . .	n/a	dk	1	2	3	4	5
D)	Opportunity to view large wildlife: (manatees, whales, dolphins, sea turtles) . . . . .	n/a	dk	1	2	3	4	5
E)	Large numbers of fish . . . . .	n/a	dk	1	2	3	4	5
F)	Specially protected areas . . . . .	n/a	dk	1	2	3	4	5
G)	Mooring buoys near coral reefs . . . . .	n/a	dk	1	2	3	4	5
H)	Maps, brochures and other tourist information . . . . .	n/a	dk	1	2	3	4	5
I)	Customer service and friendliness of people . . . . .	n/a	dk	1	2	3	4	5
J)	Value for the price . . . . .	n/a	dk	1	2	3	4	5

2. In the previous question you rated the importance of a list of items during your recent visit. Now please read each of the items on this list and rate how *satisfied* you were with each during your recent visit. If an item does not apply, indicate by circling n/a (not applicable). Likewise, if you don't know, circle (dk).

SATISFACTION  
(with each of these items during  
your recent visit in the Florida Keys)

			Not Applicable	Don't Know	Terrible	Unhappy/Dissatisfied	Mixed	Happy/Satisfied	Delighted
A)	Clear water (high visibility) . . . . .	. . . . .	n/a	dk	1	2	3	4	5
B)	Amount of living coral on reefs . . . . .	. . . . .	n/a	dk	1	2	3	4	5
C)	Many different kinds of fish and sea life to view . . . . .	. . . . .	n/a	dk	1	2	3	4	5
D)	Opportunity to view large wildlife: (manatees, whales, dolphins, sea turtles) . . . . .	. . . . .	n/a	dk	1	2	3	4	5
E)	Large numbers of fish . . . . .	. . . . .	n/a	dk	1	2	3	4	5
F)	Specially protected areas . . . . .	. . . . .	n/a	dk	1	2	3	4	5
G)	Mooring buoys near coral reefs . . . . .	. . . . .	n/a	dk	1	2	3	4	5
H)	Maps, brochures and other tourist information . . . . .	. . . . .	n/a	dk	1	2	3	4	5
I)	Customer service and friendliness of people . . . . .	. . . . .	n/a	dk	1	2	3	4	5
J)	Value for the price . . . . .	. . . . .	n/a	dk	1	2	3	4	5

In this section we have a few special issues questions we would like to ask you.

3. Was your recent visit your first visit to the Florida Keys?

\_\_\_\_\_ Yes (go to Question 6) \_\_\_\_\_ No (go to Question 4)

4. When was your previous most recent visit to the Florida Keys?

- 20+ years ago
- 10-19 years ago
- 5-9 years ago
- More recently

SATISFACTION  
(with each of these items during  
your recent visit in the Florida Keys)

5. Please cast your mind back to your previous most recent visit and rate *how satisfied you were then* with the same items in the Florida Keys area. If an item does not apply, indicate by circling n/a (not applicable). Likewise, if you don't know, circle (dk).

		Not Applicable	Don't Know	Terrible	Unhappy/Dissatisfied	Mixed	Happy/Satisfied	Delighted
A) Clear water (high visibility) . . . . .	n/a	dk	1	2	3	4	5	
B) Amount of living coral on reefs . . . . .	n/a	dk	1	2	3	4	5	
C) Many different kinds of fish and sea life to view . . . . .	n/a	dk	1	2	3	4	5	
D) Opportunity to view large wildlife: (manatees, whales, dolphins, sea turtles) . . . . .	n/a	dk	1	2	3	4	5	
E) Large numbers of fish . . . . .	n/a	dk	1	2	3	4	5	
F) Specially protected areas . . . . .	n/a	dk	1	2	3	4	5	
G) Mooring buoys near coral reefs . . . . .	n/a	dk	1	2	3	4	5	
H) Maps, brochures and other tourist information . . . . .	n/a	dk	1	2	3	4	5	
I) Customer service and friendliness of people . . . . .	n/a	dk	1	2	3	4	5	
J) Value for the price . . . . .	n/a	dk	1	2	3	4	5	

6. What do you think are the greatest threats to the reefs in the Florida Keys in the following list? Please rank greatest threat=1, second-greatest threat=2, third-greatest threat=3, and so on for as many factors as you consider **important threats**. **Leave blank those you consider unimportant.**

- Spear fishers .....
- Scuba divers .....
- Urban development .....
- Ships and boats grounding on reefs, discharging pollutants
- Hurricanes .....
- Solid waste disposal (sewage) .....
- Climate change (global warming etc) .....
- Stormwater and wastewater runoff .....
- Overfishing by commercial and recreational fishers .....
- Number of tourists .....
- Chemical runoff (pesticides, herbicides, fertilizers) .....
- People collecting coral and live rock .....

7. Any other important factors we have omitted from the list?

If any, write in \_\_\_\_\_

8. What in your opinion should the Marine Sanctuary (FKNMS) do to reduce the main stress factors on the reef? Please rank your first recommendation=1, second=2, and so on for all recommendations you consider important. **Leave those blank that you consider unimportant.**

- Stringent control of pollutants to preserve water quality.....
- Enforced training/certification of scuba divers and snorkelers
- Prohibiting spear fishing.....
- Stronger shipping regulations.....
- Training, workshops and school programs.....
- Better management of waterways.....
- More no-catch fishing zones in the FKNMS.....

9. Do you have any other important recommendations on how FKNMS could reduce the main stress factors on the reef?

If any, write in \_\_\_\_\_

\_\_\_\_\_

• The main signs of coral stress are coral diseases and **coral bleaching**.

- The coral organism lives in a mutually dependent (symbiotic) relationship with tiny algae known as *zooxanthellae*. Their health is highly dependent on temperature and the coral expels them when the sea temperature gets above a certain level. This causes the coral to turn white and weaken, the phenomenon known as coral bleaching.
- There is general agreement among scientists that the world's climate is getting warmer and that this may cause large sections of the world's coral reefs to die.
- There is also a general consensus that control of other stress factors can make the coral organisms more resilient (able to resist and/or recover from stressful events).

10. Were you aware of coral bleaching before your recent visit, and if so to what extent?

- Highly aware  
 Conscious but not highly aware  
 Became aware on my recent visit  
 Still not aware (IF "Still not aware", go to Question 12.)  
 All other answers proceed to Question 11.

11. What in your opinion is the primary cause of coral bleaching?  
 (Check one only)

- Local factors exclusively  
 Non-local factors such as  
     global warming/climate change, exclusively  
 Non-local factors aggravated by local factors  
 Local factors aggravated by non-local factors  
 I don't know

12. How important do you consider climate change to be for the world of the 21st century? Circle the number that corresponds to your answer.

	Don't Know	Not Important	Somewhat Important	Important	Very Important	Extremely Important
dk	1	2	3	4	5	

13. And how important do you consider climate change to be for the future of the coral reefs in the Florida Keys?

	Don't Know	Not Important	Somewhat Important	Important	Very Important	Extremely Important
dk	1	2	3	4	5	

The final part of this mail survey explores a number of alternative management actions that might be applied to protect the Florida Keys. There is general agreement among scientists that the impact of these actions will be to reduce coral bleaching, but not to eliminate it.

- Coral reefs are affected by global and local forces.
- Global climate change and resulting rises in seawater temperatures are considered a major factor in coral bleaching.
- When corals bleach, the corals die and live coral cover is reduced.
- Scientists have found that more coral cover and complexity of corals is associated with more abundant and larger fish, and many different kinds of fish and sea life.
- Emissions of greenhouse gases are considered the main source of global climate change and coral bleaching.
- Water pollution can stress corals and make them more susceptible to disease or reduce their ability to recover from stressful events such as storms or bleaching events.
- Excess nutrients can lead to algal growth, which smothers the corals and kills them.

We present three global alternatives for coral health measured by the amount of live coral cover, before considering local management policies that could be applied to lessen the impact of each global scenario. In the absence of local management policies, living **coral cover** of comparable quality to what exists today is reduced by (a) a massive 95% in 20 years (by 2027) in the worst case scenario, (b) by 80% (intermediate case) or (c) by 50% (best case). Case (a) assumes that there is no further change in global strategies to reduce global warming, and that the average global temperature will increase by 6-8°C by the year 2100. In the intermediate case (b), the increase over the 21<sup>st</sup> century will be 4°C, and (c) using the most efficient policies nationally and internationally, there will be a 2°C increase in the average global temperature.

- Local forces also affect the health of coral reefs.
- Users can touch, step on, or drop their anchors on the corals.
- Fishermen can overfish a reef and remove fish species that eat algae that can smother and kill the corals.

## Local Management Strategies

There are four local strategies included in the FKNMS management plan designed to protect the health of the coral reefs. For each strategy, we present three levels of protection. The no change from current policy is always the low cost strategy.

1. **Education and outreach** are important activities in the FKNMS. The goal is to promote protection and sustainable use of Sanctuary reserves, and public understanding of the nature of marine sanctuaries. Activities include school programs, local community meetings, signage and exhibits in visitor centers, brochures, and TV and radio announcements. Team Ocean, a group of local volunteers, is provided with a FKNMS boat and fuel. They patrol the FKNMS and when they observe someone violating FKNMS rules and regulations, they educate them about how their activity harms the corals. Team Ocean and education and outreach staff also visit local businesses and distribute information on how users can better interact with corals to avoid damages. Education is also an integral element of other programs in the management plan and is considered a low-cost alternative to enforcement.

2. **Enforcement** includes a wide range of measures such as introducing no-anchor zones for vessels above a certain length, reinforcement of bans on spear fishing and touching corals, educating scuba divers and snorkelers about the reefs and enforcing reef protection, and restricting the use of personal vessels on or near the reef. It also involves the mooring buoy program set up around the restricted areas within the Sanctuary.

3. **Water quality** is a crucial issue as reflected by the FKNMS management plan: “Declining water quality continues to be a major concern for the Sanctuary.” Remedies include the development and implementation of wastewater and stormwater plans, efficient options to reduce loading of sediment, toxics and nutrients which damage water quality and the reef, targeting hot spots of industrial and commercial facilities, and reducing pollution from vessels and marinas. Improving water quality is a significantly higher-cost activity than the other items in this list.

4. **Zoning:** There are currently 24 no-take zones in the FKNMS. They cover less than five percent of FKNMS waters, but protect about 60% of the corals. Scientific monitoring of these zones has determined that coral health, fish abundance, size and diversity of fish and sea life have improved in protected areas versus non protected areas. The three levels of protection are (a) no change; or (b) 25% increase in coral cover protected, from 60% to 75%; or (c) 50% increase in coral cover protected, from 60% to 90%.

Reflecting current FKNMS management principles of running several parallel strategies, we have reduced these four policy options to two by combining education and outreach, enforcement, and water quality management into one group, with the options of (a) no change, (b) 5% increase in annual spending, and (c) 10% increase in annual spending. Zoning remains a separate strategy, with three possible levels of protection as shown above.



- A combination of global and local management strategies is required to save the health of the coral reefs.
- Scientists believe that global policies to minimize the increase in greenhouse gases are required to lower sea water temperatures from what they would otherwise have been, and so reduce coral bleaching.
- The more efficient the global strategy to reduce greenhouse gases, the more cost-efficient will be local management actions to protect the reef.
- If local forces are not addressed, the corals will not recover from coral bleaching when or if cooler waters return.
- Policies to reduce the increase in greenhouse gases will result in increased costs to your household through higher utility bills and the costs of products or services.
- Local management strategies will result in increased costs to your household if you are a resident or visitor to the Florida Keys. Costs will be passed on in terms of higher State and local taxes, local water/sewage bills and the costs of local goods and services purchased in the Florida Keys
- We have worked with scientists and managers to estimate the approximate annual costs to your household for the different mixes of global and local management strategies which scientists think will deliver some protection to the corals. The costs to your household are stated in dollars per year.

Questions 14-19 contain six multiple-choice situations to which you are asked to state your preferences and provide a brief explanation for your choices. Each choice presents different mixes of global and local management strategies and has an estimated cost to your household. Each choice always includes the option of choosing the status quo or NO CHANGE (Alt A). This alternative will cost your household \$0, but will result in 95% reduction in the amount of live coral cover in 20 years, and local actions such as improving water quality and increasing the no-take areas will become much less efficient.

**Each choice will be similar to the following example.** Alt A is always the no-change situation as just explained. Alt B assumes an intermediate global policy for greenhouse gas reduction, and Alt C is based on a stronger and costlier global policy. In each Alt B and C case, different combinations of local management strategies have been designed which yield different coral cover outcomes at different costs to your household, giving you three choices.

We can't help you state your preferences, which depend on your own experience and attitudes. We don't know the extent of your concern about future climate change, how much value you put on the quality of the coral reefs relative to other attractions of the Florida Keys, and the main activities that attracted you there including fishing, boating, snorkeling, and land-based activities. So the example below is purely illustrative, and has nothing whatever to do with what you actually think. It's just an example to assist you in answering questions 14-19.

	Alt A	Alt B	Alt C
Global policy for reductions in greenhouse gases (compared with no change in policy as in Alt A.)	No change	Medium reductions	Large reductions
<b>Local Florida Keys Management Strategies</b>			
Added spending on water quality, education and outreach, and enforcement	No change	+10%	No change
Increase in no-take zoning of coral reef areas (percent of coral reefs protected)	No change (60%)	From 60% to 75%	From 60% to 90%
<b>Coral cover loss by 2027, Florida Keys</b>	<b>95%</b>	<b>75%</b>	<b>44%</b>
<b>Total annual cost to your household for global and local strategies</b>	<b>\$0</b>	<b>\$67</b>	<b>\$80</b>
Your most preferred alternative (check one)?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Your least preferred alternative (check one)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Please explain briefly why you made this choice (for example): “I like to fish, and clear water is important. But I would prefer to have more open area to fish on the reefs.”

Please note the following general assumptions when you make your choices:

- The most efficient local management strategy is centered on improving water quality, supplemented by efficient education and enforcement policies. This strategy is also the most expensive local strategy.
- Protecting the reef by increasing the area of no-take zones is also efficient but less so. This relatively low-cost option will reduce reef-fishing activities (but fishing opportunities may be unaffected or may even increase elsewhere in the FKNMS).
- The less efficient the global greenhouse gas strategy to control the rise in sea temperatures, the less efficient the local management strategies will also be.
- Making a choice to spend money on protecting the amount of living coral on the reefs will mean that you have less money to spend on other goods and services.

14. Suppose you could only choose between the following three alternative combinations of global and local strategies, which would be your most preferred alternative and which would be your least preferred alternative?

	<b>Alt A</b>	<b>Alt B</b>	<b>Alt C</b>
Global policy for reductions in greenhouse gases (compared with no change in policy as in Alt A.)	No change	Medium reductions	Large reductions
<b>Local Florida Keys Management Strategies</b>			
Added spending on water quality, education and outreach, and enforcement	No change	+10%	+5%
Increase in no-take zoning of coral reef areas (percent of coral reefs protected)	No change (60%)	No change (60%)	No change (60%)
<b>Coral cover loss by 2027, Florida Keys</b>	<b>95%</b>	<b>76%</b>	<b>44%</b>
<b>Total annual cost to your household for global and local strategies</b>	<b>\$0</b>	<b>\$65</b>	<b>\$95</b>
Your most preferred alternative (check one)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Your least preferred alternative (check one)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Please explain briefly why you made this choice (for example): \_\_\_\_\_

15. Suppose you could only choose between the following three alternative combinations of global and local strategies, which would be your most preferred alternative and which would be your least preferred alternative?

	<b>Alt A</b>	<b>Alt B</b>	<b>Alt C</b>
Global policy for reductions in greenhouse gases (compared with no change in policy as in Alt A.)	No change	Medium reductions	Large reductions
<b>Local Florida Keys Management Strategies</b>			
Added spending on water quality, education and outreach, and enforcement	No change	No change	+5%
Increase in no-take zoning of coral reef areas (percent of coral reefs protected)	No change (60%)	From 60% to 75%	From 60% to 90%
<b>Coral cover loss by 2027, Florida Keys</b>	<b>95%</b>	<b>79%</b>	<b>38%</b>
<b>Total annual cost to your household for global and local strategies</b>	<b>\$0</b>	<b>\$27</b>	<b>\$100</b>
Your most preferred alternative (check one)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Your least preferred alternative (check one)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Please explain briefly why you made this choice (for example): \_\_\_\_\_

16. Suppose you could only choose between the following three alternative combinations of global and local strategies, which would be your most preferred alternative and which would be your least preferred alternative?

	<b>Alt A</b>	<b>Alt B</b>	<b>Alt C</b>
Global policy for reductions in greenhouse gases (compared with no change in policy as in Alt A.)	No change	Medium reductions	Large reductions
<b>Local Florida Keys Management Strategies</b>			
Added spending on water quality, education and outreach, and enforcement	No change	No change	No change
Increase in no-take zoning of coral reef areas (percent of coral reefs protected)	No change (60%)	From 60% to 75%	No change (60%)
<b>Coral cover loss by 2027, Florida Keys</b>	<b>95%</b>	<b>79%</b>	<b>50%</b>
<b>Total annual cost to your household for global and local strategies</b>	<b>\$0</b>	<b>\$27</b>	<b>\$75</b>
Your most preferred alternative (check one)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Your least preferred alternative (check one)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Please explain briefly why you made this choice (for example): \_\_\_\_\_

17. Suppose you could only choose between the following three alternative combinations of global and local strategies, which would be your most preferred alternative and which would be your least preferred alternative?

	<b>Alt A</b>	<b>Alt B</b>	<b>Alt C</b>
Global policy for reductions in greenhouse gases (compared with no change in policy as in Alt A.)	No change	Medium reductions	Large reductions
<b>Local Florida Keys Management Strategies</b>			
Added spending on water quality, education and outreach, and enforcement	No change	+5%	+10%
Increase in no-take zoning of coral reef areas (percent of coral reefs protected)	No change (60%)	From 60% to 90%	No change (60%)
<b>Coral cover loss by 2027, Florida Keys</b>	<b>95%</b>	<b>76%</b>	<b>40%</b>
<b>Total annual cost to your household for global and local strategies</b>	<b>\$0</b>	<b>\$50</b>	<b>\$115</b>
Your most preferred alternative (check one)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Your least preferred alternative (check one)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Please explain briefly why you made this choice (for example): \_\_\_\_\_

18. Suppose you could only choose between the following three alternative combinations of global and local strategies, which would be your most preferred alternative and which would be your least preferred alternative?

	<b>Alt A</b>	<b>Alt B</b>	<b>Alt C</b>
Global policy for reductions in greenhouse gases (compared with no change in policy as in Alt A.)	No change	Medium reductions	Large reductions
<b>Local Florida Keys Management Strategies</b>			
Added spending on water quality, education and outreach, and enforcement	No change	+10%	+5%
Increase in no-take zoning of coral reef areas (percent of coral reefs protected)	No change (60%)	From 60% to 75%	From 60% to 75%
<b>Coral cover loss by 2027, Florida Keys</b>	<b>95%</b>	<b>75%</b>	<b>40%</b>
<b>Total annual cost to your household for global and local strategies</b>	<b>\$0</b>	<b>\$67</b>	<b>\$97</b>
Your most preferred alternative (check one)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Your least preferred alternative (check one)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Please explain briefly why you made this choice (for example): \_\_\_\_\_

19. Suppose you could only choose between the following three alternative combinations of global and local strategies, which would be your most preferred alternative and which would be your least preferred alternative?

	<b>Alt A</b>	<b>Alt B</b>	<b>Alt C</b>
Global policy for reductions in greenhouse gases (compared with no change in policy as in Alt A.)	No change	Medium reductions	Large reductions
<b>Local Florida Keys Management Strategies</b>			
Added spending on water quality, education and outreach, and enforcement	No change	No change	+10%
Increase in no-take zoning of coral reef areas (percent of coral reefs protected)	No change (60%)	From 60% to 75%	No change (60%)
<b>Coral cover loss by 2027, Florida Keys</b>	<b>95%</b>	<b>79%</b>	<b>40%</b>
<b>Total annual cost to your household for global and local strategies</b>	<b>\$0</b>	<b>\$27</b>	<b>\$115</b>
Your most preferred alternative (check one)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Your least preferred alternative (check one)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Please explain briefly why you made this choice (for example): \_\_\_\_\_

In the survey we conducted with you on-site on your recent visit to the Florida Keys, you told us how many days you spent in the Florida Keys over the past 12 months. In the next set of questions, we would like you to tell us how many days less you would have visited the Florida Keys if coral cover conditions had been worse than they currently are.

Currently, 6% of the entire water area in the FKNMS is covered with living coral.

20. If the living coral cover were only 3% (half the current coral cover), how many days less would you have spent in the Florida Keys over the past 12 months?

- No change  
\_\_\_\_\_ (# of days less)
- I wouldn't have visited at all
- I don't know

[This page intentionally left blank. Proceed to next page.]

21. If there was no coral cover left or 0% coral cover, how many days less would you have spent in the Florida Keys over the past 12 months?

- No change  
\_\_\_\_\_ (# of days less)
- I wouldn't have visited at all
- I don't know

Thank you very much for your cooperation in this important survey.

That's All!! If you would like to be entered into a sweepstakes to win a free Vacation to the Florida Keys, fill out your name, address and phone number below. All prizes will be awarded in October of 2007.

Name: \_\_\_\_\_

Address: \_\_\_\_\_

City: \_\_\_\_\_

State: \_\_\_\_\_ Zip: \_\_\_\_\_ Phone: \_\_\_\_\_

Prizes to be awarded are:

GRAND PRIZE

- \* Airfare for two from anywhere in the continental United States to the Florida Keys
- \* Rental car with unlimited miles for one week (seven days)
- \* Accommodations for two for one week (six nights)
- \* Two complimentary "activities" for two (i.e., diving trip, fishing charter, sunset sail, etc.)
- \* Complimentary dinner for two at local restaurant

FIRST PRIZE

- \* Accommodations for two for five days (four nights)
- \* Two complimentary "activities" for two (i.e., diving trip, fishing charter, sunset sail, etc.)
- \* Complimentary dinner for two at local restaurant

SECOND PRIZE

- \* Accommodations for two for four days (three nights)
- \* One complimentary "activity" for two (i.e., diving trip, fishing charter, sunset sail, etc.)
- \* Complimentary dinner for two at local restaurant

SECOND PRIZE

- \* Accommodations for two for three days (two nights)
- \* One complimentary "activity" for two (i.e., diving trip, fishing charter, sunset sail, etc.)

This is a cooperative research project of the Monroe County Tourist Development Council and the National Oceanic and Atmospheric Administration. Public reporting burden for this collection of information is estimated to average 20 minutes including time for reviewing instructions, searching existing data sources, gathering and maintaining the data need, 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 this burden, to U.S. Department of Commerce, Clearance Officer, Office of Chief Information Officer, Rm. 6625, 14th and Constitution Avenue NW, Washington, DC 20230. Notwithstanding any other provisions of the law, no person is required to respond to, nor shall any person be subject to penalty for failure to comply with, a collection of information subject to requirements of the Paperwork Reduction Act, unless that collection of information displays a currently valid OMB Control Number.

## THANK YOU!

for  
participating in this  
Recreation Survey

Dear Visitor,

During your recent trip to the Florida Keys 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 answers are voluntary and confidential. Your name will never be released to anyone unless otherwise required by law. After the completion of the project all materials identifying you as an individual will be destroyed.

When you complete the questionnaire, please reverse-fold it so that our return address on the GREEN PAGE in the inside is folded to the outside. Please staple or tape to seal the questionnaire and mail it back to us. No postage is needed. Your cooperation in this effort is greatly appreciated.

Sincerely,

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



Coral reefs are sensitive ecosystems. The Florida Keys, the world's third-largest barrier reef and the only coral reef system along the US mainland coast, is no exception. It has long been recognized that human use of coral reefs and adjacent coastal activities inflict strains on these systems. Non-local factors associated with global human use of the planet's resources add to the strain through their impact on air and sea temperatures.

The Florida Keys National Marine Sanctuary (FKNMS) was founded through a Federal Act to manage issues such as the above. It is managed cooperatively by the National Oceanic and Atmospheric Administration (NOAA) and the State of Florida, with significant input from local government, businesses, non-government organizations and the general public. Your views are valuable in the formulation of FKNMS action plans and management strategies.

This mail survey explores your knowledge, attitudes and perceptions of the natural reefs of the Florida Keys. There are no right or wrong answers; we simply want your honest opinion. Again, your privacy will be protected. No one will be given information that will allow them to identify you from survey data.

[This page intentionally left blank. Proceed to next page.]

I. Please read each statement and rate the *importance* of each item during your recent visit in the Florida Keys area. If an item does not apply, indicate by circling n/a (not applicable). Likewise, if you don't know, circle (dk).

IMPORTANCE  
(with each of these items during  
your recent visit)

				Not Applicable	Don't Know	Not Important	Somewhat Important	Important	Very Important	Extremely Important
A)	Clear water (high visibility) . . . . .	. . . . .	n/a	dk	1	2	3	4	5	
B)	Amount of living coral on reefs . . . . .	. . . . .	n/a	dk	1	2	3	4	5	
C)	Many different kinds of fish and sea life to view . . . . .	. . . . .	n/a	dk	1	2	3	4	5	
D)	Opportunity to view large wildlife: (manatees, whales, dolphins, sea turtles) . . . . .	. . . . .	n/a	dk	1	2	3	4	5	
E)	Large numbers of fish . . . . .	. . . . .	n/a	dk	1	2	3	4	5	
F)	Specially protected areas . . . . .	. . . . .	n/a	dk	1	2	3	4	5	
G)	Mooring buoys near coral reefs . . . . .	. . . . .	n/a	dk	1	2	3	4	5	
H)	Maps, brochures and other tourist information . . . . .	. . . . .	n/a	dk	1	2	3	4	5	
I)	Customer service and friendliness of people . . . . .	. . . . .	n/a	dk	1	2	3	4	5	
J)	Value for the price . . . . .	. . . . .	n/a	dk	1	2	3	4	5	

2. In the previous question you rated the importance of a list of items during your recent visit. Now please read each of the items on this list and rate how *satisfied* you were with each during your recent visit. If an item does not apply, indicate by circling n/a (not applicable). Likewise, if you don't know, circle (dk).

SATISFACTION  
(with each of these items during  
your recent visit in the Florida Keys)

			Not Applicable	Don't Know	Terrible	Unhappy/Dissatisfied	Mixed	Happy/Satisfied	Delighted
A)	Clear water (high visibility) . . . . .	. . . . .	n/a	dk	1	2	3	4	5
B)	Amount of living coral on reefs . . . . .	. . . . .	n/a	dk	1	2	3	4	5
C)	Many different kinds of fish and sea life to view . . . . .	. . . . .	n/a	dk	1	2	3	4	5
D)	Opportunity to view large wildlife: (manatees, whales, dolphins, sea turtles) . . . . .	. . . . .	n/a	dk	1	2	3	4	5
E)	Large numbers of fish . . . . .	. . . . .	n/a	dk	1	2	3	4	5
F)	Specially protected areas . . . . .	. . . . .	n/a	dk	1	2	3	4	5
G)	Mooring buoys near coral reefs . . . . .	. . . . .	n/a	dk	1	2	3	4	5
H)	Maps, brochures and other tourist information . . . . .	. . . . .	n/a	dk	1	2	3	4	5
I)	Customer service and friendliness of people . . . . .	. . . . .	n/a	dk	1	2	3	4	5
J)	Value for the price . . . . .	. . . . .	n/a	dk	1	2	3	4	5

In this section we have a few special issues questions we would like to ask you.

3. Was your recent visit your first visit to the Florida Keys?

\_\_\_\_\_ Yes (go to Question 6) \_\_\_\_\_ No (go to Question 4)

4. When was your previous most recent visit to the Florida Keys?

- 20+ years ago
- 10-19 years ago
- 5-9 years ago
- More recently

SATISFACTION  
(with each of these items during  
your recent visit in the Florida Keys)

5. Please cast your mind back to your previous most recent visit and rate *how satisfied you were then* with the same items in the Florida Keys area. If an item does not apply, indicate by circling n/a (not applicable). Likewise, if you don't know, circle (dk).

		Not Applicable	Don't Know	Terrible	Unhappy/Dissatisfied	Mixed	Happy/Satisfied	Delighted
A) Clear water (high visibility) . . . . .	n/a	dk	1	2	3	4	5	
B) Amount of living coral on reefs . . . . .	n/a	dk	1	2	3	4	5	
C) Many different kinds of fish and sea life to view . . . . .	n/a	dk	1	2	3	4	5	
D) Opportunity to view large wildlife: (manatees, whales, dolphins, sea turtles) . . . . .	n/a	dk	1	2	3	4	5	
E) Large numbers of fish . . . . .	n/a	dk	1	2	3	4	5	
F) Specially protected areas . . . . .	n/a	dk	1	2	3	4	5	
G) Mooring buoys near coral reefs . . . . .	n/a	dk	1	2	3	4	5	
H) Maps, brochures and other tourist information . . . . .	n/a	dk	1	2	3	4	5	
I) Customer service and friendliness of people . . . . .	n/a	dk	1	2	3	4	5	
J) Value for the price . . . . .	n/a	dk	1	2	3	4	5	

6. What do you think are the greatest threats to the reefs in the Florida Keys in the following list? Please rank greatest threat=1, second-greatest threat=2, third-greatest threat=3, and so on for as many factors as you consider **important threats**. **Leave blank those you consider unimportant.**

- Spear fishers .....
- Scuba divers .....
- Urban development .....
- Ships and boats grounding on reefs, discharging pollutants
- Hurricanes .....
- Solid waste disposal (sewage) .....
- Climate change (global warming etc) .....
- Stormwater and wastewater runoff .....
- Overfishing by commercial and recreational fishers .....
- Number of tourists .....
- Chemical runoff (pesticides, herbicides, fertilizers) .....
- People collecting coral and live rock .....

7. Any other important factors we have omitted from the list?

If any, write in \_\_\_\_\_

8. What in your opinion should the Marine Sanctuary (FKNMS) do to reduce the main stress factors on the reef? Please rank your first recommendation=1, second=2, and so on for all recommendations you consider important. **Leave those blank that you consider unimportant.**

- Stringent control of pollutants to preserve water quality.....
- Enforced training/certification of scuba divers and snorkelers
- Prohibiting spear fishing.....
- Stronger shipping regulations.....
- Training, workshops and school programs.....
- Better management of waterways.....
- More no-catch fishing zones in the FKNMS.....

9. Do you have any other important recommendations on how FKNMS could reduce the main stress factors on the reef?

If any, write in \_\_\_\_\_  
\_\_\_\_\_

• The main signs of coral stress are coral diseases and **coral bleaching**.

- The coral organism lives in a mutually dependent (symbiotic) relationship with tiny algae known as *zooxanthellae*. Their health is highly dependent on temperature and the coral expels them when the sea temperature gets above a certain level. This causes the coral to turn white and weaken, the phenomenon known as coral bleaching.
- There is general agreement among scientists that the world's climate is getting warmer and that this may cause large sections of the world's coral reefs to die.
- There is also a general consensus that control of other stress factors can make the coral organisms more resilient (able to resist and/or recover from stressful events).

10. Were you aware of coral bleaching before your recent visit, and if so to what extent?

- Highly aware  
 Conscious but not highly aware  
 Became aware on my recent visit  
 Still not aware (IF "Still not aware", go to Question 12.)  
 All other answers proceed to Question 11.

11. What in your opinion is the primary cause of coral bleaching?  
 (Check one only)

- Local factors exclusively  
 Non-local factors such as  
     global warming/climate change, exclusively  
 Non-local factors aggravated by local factors  
 Local factors aggravated by non-local factors  
 I don't know

12. How important do you consider climate change to be for the world of the 21st century? Circle the number that corresponds to your answer.

	Don't Know	Not Important	Somewhat Important	Important	Very Important	Extremely Important
dk	1	2	3	4	5	

13. And how important do you consider climate change to be for the future of the coral reefs in the Florida Keys?

	Don't Know	Not Important	Somewhat Important	Important	Very Important	Extremely Important
dk	1	2	3	4	5	

The final part of this mail survey explores a number of alternative management actions that might be applied to protect the Florida Keys. There is general agreement among scientists that the impact of these actions will be to reduce coral bleaching, but not to eliminate it.

- Coral reefs are affected by global and local forces.
- Global climate change and resulting rises in seawater temperatures are considered a major factor in coral bleaching.
- When corals bleach, the corals die and live coral cover is reduced.
- Scientists have found that more coral cover and complexity of corals is associated with more abundant and larger fish, and many different kinds of fish and sea life.
- Emissions of greenhouse gases are considered the main source of global climate change and coral bleaching.
- Water pollution can stress corals and make them more susceptible to disease or reduce their ability to recover from stressful events such as storms or bleaching events.
- Excess nutrients can lead to algal growth, which smothers the corals and kills them.

We present three global alternatives for coral health measured by the amount of live coral cover, before considering local management policies that could be applied to lessen the impact of each global scenario. In the absence of local management policies, living **coral cover** of comparable quality to what exists today is reduced by (a) a massive 95% in 20 years (by 2027) in the worst case scenario, (b) by 80% (intermediate case) or (c) by 50% (best case). Case (a) assumes that there is no further change in global strategies to reduce global warming, and that the average global temperature will increase by 6-8°C by the year 2100. In the intermediate case (b), the increase over the 21<sup>st</sup> century will be 4°C, and (c) using the most efficient policies nationally and internationally, there will be a 2°C increase in the average global temperature.

- Local forces also affect the health of coral reefs.
- Users can touch, step on, or drop their anchors on the corals.
- Fishermen can overfish a reef and remove fish species that eat algae that can smother and kill the corals.

## Local Management Strategies

There are four local strategies included in the FKNMS management plan designed to protect the health of the coral reefs. For each strategy, we present three levels of protection. The no change from current policy is always the low cost strategy.

1. **Education and outreach** are important activities in the FKNMS. The goal is to promote protection and sustainable use of Sanctuary reserves, and public understanding of the nature of marine sanctuaries. Activities include school programs, local community meetings, signage and exhibits in visitor centers, brochures, and TV and radio announcements. Team Ocean, a group of local volunteers, is provided with a FKNMS boat and fuel. They patrol the FKNMS and when they observe someone violating FKNMS rules and regulations, they educate them about how their activity harms the corals. Team Ocean and education and outreach staff also visit local businesses and distribute information on how users can better interact with corals to avoid damages. Education is also an integral element of other programs in the management plan and is considered a low-cost alternative to enforcement.

2. **Enforcement** includes a wide range of measures such as introducing no-anchor zones for vessels above a certain length, reinforcement of bans on spear fishing and touching corals, educating scuba divers and snorkelers about the reefs and enforcing reef protection, and restricting the use of personal vessels on or near the reef. It also involves the mooring buoy program set up around the restricted areas within the Sanctuary.

3. **Water quality** is a crucial issue as reflected by the FKNMS management plan: “Declining water quality continues to be a major concern for the Sanctuary.” Remedies include the development and implementation of wastewater and stormwater plans, efficient options to reduce loading of sediment, toxics and nutrients which damage water quality and the reef, targeting hot spots of industrial and commercial facilities, and reducing pollution from vessels and marinas. Improving water quality is a significantly higher-cost activity than the other items in this list.

4. **Zoning:** There are currently 24 no-take zones in the FKNMS. They cover less than five percent of FKNMS waters, but protect about 60% of the corals. Scientific monitoring of these zones has determined that coral health, fish abundance, size and diversity of fish and sea life have improved in protected areas versus non protected areas. The three levels of protection are (a) no change; or (b) 25% increase in coral cover protected, from 60% to 75%; or (c) 50% increase in coral cover protected, from 60% to 90%.

Reflecting current FKNMS management principles of running several parallel strategies, we have reduced these four policy options to two by combining education and outreach, enforcement, and water quality management into one group, with the options of (a) no change, (b) 5% increase in annual spending, and (c) 10% increase in annual spending. Zoning remains a separate strategy, with three possible levels of protection as shown above.



- A combination of global and local management strategies is required to save the health of the coral reefs.
- Scientists believe that global policies to minimize the increase in greenhouse gases are required to lower sea water temperatures from what they would otherwise have been, and so reduce coral bleaching.
- The more efficient the global strategy to reduce greenhouse gases, the more cost-efficient will be local management actions to protect the reef.
- If local forces are not addressed, the corals will not recover from coral bleaching when or if cooler waters return.
- Policies to reduce the increase in greenhouse gases will result in increased costs to your household through higher utility bills and the costs of products or services.
- Local management strategies will result in increased costs to your household if you are a resident or visitor to the Florida Keys. Costs will be passed on in terms of higher State and local taxes, local water/sewage bills and the costs of local goods and services purchased in the Florida Keys
- We have worked with scientists and managers to estimate the approximate annual costs to your household for the different mixes of global and local management strategies which scientists think will deliver some protection to the corals. The costs to your household are stated in dollars per year.

Questions 14-19 contain six multiple-choice situations to which you are asked to state your preferences and provide a brief explanation for your choices. Each choice presents different mixes of global and local management strategies and has an estimated cost to your household. Each choice always includes the option of choosing the status quo or NO CHANGE (Alt A). This alternative will cost your household \$0, but will result in 95% reduction in the amount of live coral cover in 20 years, and local actions such as improving water quality and increasing the no-take areas will become much less efficient.

**Each choice will be similar to the following example.** Alt A is always the no-change situation as just explained. Alt B assumes an intermediate global policy for greenhouse gas reduction, and Alt C is based on a stronger and costlier global policy. In each Alt B and C case, different combinations of local management strategies have been designed which yield different coral cover outcomes at different costs to your household, giving you three choices.

We can't help you state your preferences, which depend on your own experience and attitudes. We don't know the extent of your concern about future climate change, how much value you put on the quality of the coral reefs relative to other attractions of the Florida Keys, and the main activities that attracted you there including fishing, boating, snorkeling, and land-based activities. So the example below is purely illustrative, and has nothing whatever to do with what you actually think. It's just an example to assist you in answering questions 14-19.

	Alt A	Alt B	Alt C
Global policy for reductions in greenhouse gases (compared with no change in policy as in Alt A.)	No change	Medium reductions	Large reductions
<b>Local Florida Keys Management Strategies</b>			
Added spending on water quality, education and outreach, and enforcement	No change	+10%	No change
Increase in no-take zoning of coral reef areas (percent of coral reefs protected)	No change (60%)	From 60% to 75%	From 60% to 90%
<b>Coral cover loss by 2027, Florida Keys</b>	<b>95%</b>	<b>75%</b>	<b>44%</b>
<b>Total annual cost to your household for global and local strategies</b>	<b>\$0</b>	<b>\$134</b>	<b>\$160</b>
Your most preferred alternative (check one)?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Your least preferred alternative (check one)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Please explain briefly why you made this choice (for example): “I like to fish, and clear water is important. But I would prefer to have more open area to fish on the reefs.”

Please note the following general assumptions when you make your choices:

- The most efficient local management strategy is centered on improving water quality, supplemented by efficient education and enforcement policies. This strategy is also the most expensive local strategy.
- Protecting the reef by increasing the area of no-take zones is also efficient but less so. This relatively low-cost option will reduce reef-fishing activities (but fishing opportunities may be unaffected or may even increase elsewhere in the FKNMS).
- The less efficient the global greenhouse gas strategy to control the rise in sea temperatures, the less efficient the local management strategies will also be.
- Making a choice to spend money on protecting the amount of living coral on the reefs will mean that you have less money to spend on other goods and services.

14. Suppose you could only choose between the following three alternative combinations of global and local strategies, which would be your most preferred alternative and which would be your least preferred alternative?

	<b>Alt A</b>	<b>Alt B</b>	<b>Alt C</b>
Global policy for reductions in greenhouse gases (compared with no change in policy as in Alt A.)	No change	Medium reductions	Large reductions
<b>Local Florida Keys Management Strategies</b>			
Added spending on water quality, education and outreach, and enforcement	No change	+5%	+5%
Increase in no-take zoning of coral reef areas (percent of coral reefs protected)	No change (60%)	From 60% to 90%	No change (60%)
<b>Coral cover loss by 2027, Florida Keys</b>	<b>95%</b>	<b>76%</b>	<b>44%</b>
<b>Total annual cost to your household for global and local strategies</b>	<b>\$0</b>	<b>\$100</b>	<b>\$190</b>
Your most preferred alternative (check one)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Your least preferred alternative (check one)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Please explain briefly why you made this choice (for example): \_\_\_\_\_

15. Suppose you could only choose between the following three alternative combinations of global and local strategies, which would be your most preferred alternative and which would be your least preferred alternative?

	<b>Alt A</b>	<b>Alt B</b>	<b>Alt C</b>
Global policy for reductions in greenhouse gases (compared with no change in policy as in Alt A.)	No change	Medium reductions	Large reductions
<b>Local Florida Keys Management Strategies</b>			
Added spending on water quality, education and outreach, and enforcement	No change	No change	+10%
Increase in no-take zoning of coral reef areas (percent of coral reefs protected)	No change (60%)	No change (60%)	No change (60%)
<b>Coral cover loss by 2027, Florida Keys</b>	<b>95%</b>	<b>80%</b>	<b>40%</b>
<b>Total annual cost to your household for global and local strategies</b>	<b>\$0</b>	<b>\$50</b>	<b>\$230</b>
Your most preferred alternative (check one)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Your least preferred alternative (check one)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Please explain briefly why you made this choice (for example): \_\_\_\_\_

16. Suppose you could only choose between the following three alternative combinations of global and local strategies, which would be your most preferred alternative and which would be your least preferred alternative?

	<b>Alt A</b>	<b>Alt B</b>	<b>Alt C</b>
Global policy for reductions in greenhouse gases (compared with no change in policy as in Alt A.)	No change	Medium reductions	Large reductions
<b>Local Florida Keys Management Strategies</b>			
Added spending on water quality, education and outreach, and enforcement	No change	+10%	No change
Increase in no-take zoning of coral reef areas (percent of coral reefs protected)	No change (60%)	From 60% to 90%	No change (60%)
<b>Coral cover loss by 2027, Florida Keys</b>	<b>95%</b>	<b>74%</b>	<b>50%</b>
<b>Total annual cost to your household for global and local strategies</b>	<b>\$0</b>	<b>\$140</b>	<b>\$150</b>
Your most preferred alternative (check one)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Your least preferred alternative (check one)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Please explain briefly why you made this choice (for example): \_\_\_\_\_

17. Suppose you could only choose between the following three alternative combinations of global and local strategies, which would be your most preferred alternative and which would be your least preferred alternative?

	<b>Alt A</b>	<b>Alt B</b>	<b>Alt C</b>
Global policy for reductions in greenhouse gases (compared with no change in policy as in Alt A.)	No change	Medium reductions	Large reductions
<b>Local Florida Keys Management Strategies</b>			
Added spending on water quality, education and outreach, and enforcement	No change	+5%	+10%
Increase in no-take zoning of coral reef areas (percent of coral reefs protected)	No change (60%)	From 60% to 75%	No change (60%)
<b>Coral cover loss by 2027, Florida Keys</b>	<b>95%</b>	<b>77%</b>	<b>40%</b>
<b>Total annual cost to your household for global and local strategies</b>	<b>\$0</b>	<b>\$94</b>	<b>\$230</b>
Your most preferred alternative (check one)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Your least preferred alternative (check one)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Please explain briefly why you made this choice (for example): \_\_\_\_\_

18. Suppose you could only choose between the following three alternative combinations of global and local strategies, which would be your most preferred alternative and which would be your least preferred alternative?

	<b>Alt A</b>	<b>Alt B</b>	<b>Alt C</b>
Global policy for reductions in greenhouse gases (compared with no change in policy as in Alt A.)	No change	Medium reductions	Large reductions
<b>Local Florida Keys Management Strategies</b>			
Added spending on water quality, education and outreach, and enforcement	No change	+10%	+5%
Increase in no-take zoning of coral reef areas (percent of coral reefs protected)	No change (60%)	No change (60%)	From 60% to 75%
<b>Coral cover loss by 2027, Florida Keys</b>	<b>95%</b>	<b>76%</b>	<b>40%</b>
<b>Total annual cost to your household for global and local strategies</b>	<b>\$0</b>	<b>\$130</b>	<b>\$194</b>
Your most preferred alternative (check one)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Your least preferred alternative (check one)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Please explain briefly why you made this choice (for example): \_\_\_\_\_

19. Suppose you could only choose between the following three alternative combinations of global and local strategies, which would be your most preferred alternative and which would be your least preferred alternative?

	<b>Alt A</b>	<b>Alt B</b>	<b>Alt C</b>
Global policy for reductions in greenhouse gases (compared with no change in policy as in Alt A.)	No change	Medium reductions	Large reductions
<b>Local Florida Keys Management Strategies</b>			
Added spending on water quality, education and outreach, and enforcement	No change	No change	+10%
Increase in no-take zoning of coral reef areas (percent of coral reefs protected)	No change (60%)	From 60% to 90%	No change (60%)
<b>Coral cover loss by 2027, Florida Keys</b>	<b>95%</b>	<b>78%</b>	<b>40%</b>
<b>Total annual cost to your household for global and local strategies</b>	<b>\$0</b>	<b>\$60</b>	<b>\$230</b>
Your most preferred alternative (check one)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Your least preferred alternative (check one)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Please explain briefly why you made this choice (for example): \_\_\_\_\_

In the survey we conducted with you on-site on your recent visit to the Florida Keys, you told us how many days you spent in the Florida Keys over the past 12 months. In the next set of questions, we would like you to tell us how many days less you would have visited the Florida Keys if coral cover conditions had been worse than they currently are.

Currently, 6% of the entire water area in the FKNMS is covered with living coral.

20. If the living coral cover were only 3% (half the current coral cover), how many days less would you have spent in the Florida Keys over the past 12 months?

- No change  
\_\_\_\_\_ (# of days less)
- I wouldn't have visited at all
- I don't know

[This page intentionally left blank. Proceed to next page.]

21. If there was no coral cover left or 0% coral cover, how many days less would you have spent in the Florida Keys over the past 12 months?

- No change  
\_\_\_\_\_ (# of days less)
- I wouldn't have visited at all
- I don't know

Thank you very much for your cooperation in this important survey.

That's All!! If you would like to be entered into a sweepstakes to win a free Vacation to the Florida Keys, fill out your name, address and phone number below. All prizes will be awarded in October of 2007.

Name: \_\_\_\_\_

Address: \_\_\_\_\_

City: \_\_\_\_\_

State: \_\_\_\_\_ Zip: \_\_\_\_\_ Phone: \_\_\_\_\_

Prizes to be awarded are:

GRAND PRIZE

- \* Airfare for two from anywhere in the continental United States to the Florida Keys
- \* Rental car with unlimited miles for one week (seven days)
- \* Accommodations for two for one week (six nights)
- \* Two complimentary "activities" for two (i.e., diving trip, fishing charter, sunset sail, etc.)
- \* Complimentary dinner for two at local restaurant

FIRST PRIZE

- \* Accommodations for two for five days (four nights)
- \* Two complimentary "activities" for two (i.e., diving trip, fishing charter, sunset sail, etc.)
- \* Complimentary dinner for two at local restaurant

SECOND PRIZE

- \* Accommodations for two for four days (three nights)
- \* One complimentary "activity" for two (i.e., diving trip, fishing charter, sunset sail, etc.)
- \* Complimentary dinner for two at local restaurant

SECOND PRIZE

- \* Accommodations for two for three days (two nights)
- \* One complimentary "activity" for two (i.e., diving trip, fishing charter, sunset sail, etc.)

This is a cooperative research project of the Monroe County Tourist Development Council and the National Oceanic and Atmospheric Administration. Public reporting burden for this collection of information is estimated to average 20 minutes including time for reviewing instructions, searching existing data sources, gathering and maintaining the data need, 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 this burden, to U.S. Department of Commerce, Clearance Officer, Office of Chief Information Officer, Rm. 6625, 14th and Constitution Avenue NW, Washington, DC 20230. Notwithstanding any other provisions of the law, no person is required to respond to, nor shall any person be subject to penalty for failure to comply with, a collection of information subject to requirements of the Paperwork Reduction Act, unless that collection of information displays a currently valid OMB Control Number.

## THANK YOU!

for  
participating in this  
Recreation Survey

Dear Visitor,

During your recent trip to the Florida Keys 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 answers are voluntary and confidential. Your name will never be released to anyone unless otherwise required by law. After the completion of the project all materials identifying you as an individual will be destroyed.

When you complete the questionnaire, please reverse-fold it so that our return address on the GREEN PAGE in the inside is folded to the outside. Please staple or tape to seal the questionnaire and mail it back to us. No postage is needed. Your cooperation in this effort is greatly appreciated.

Sincerely,

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



Coral reefs are sensitive ecosystems. The Florida Keys, the world's third-largest barrier reef and the only coral reef system along the US mainland coast, is no exception. It has long been recognized that human use of coral reefs and adjacent coastal activities inflict strains on these systems. Non-local factors associated with global human use of the planet's resources add to the strain through their impact on air and sea temperatures.

The Florida Keys National Marine Sanctuary (FKNMS) was founded through a Federal Act to manage issues such as the above. It is managed cooperatively by the National Oceanic and Atmospheric Administration (NOAA) and the State of Florida, with significant input from local government, businesses, non-government organizations and the general public. Your views are valuable in the formulation of FKNMS action plans and management strategies.

This mail survey explores your knowledge, attitudes and perceptions of the natural reefs of the Florida Keys. There are no right or wrong answers; we simply want your honest opinion. Again, your privacy will be protected. No one will be given information that will allow them to identify you from survey data.

[This page intentionally left blank. Proceed to next page.]

I. Please read each statement and rate the *importance* of each item during your recent visit in the Florida Keys area. If an item does not apply, indicate by circling n/a (not applicable). Likewise, if you don't know, circle (dk).

IMPORTANCE  
(with each of these items during  
your recent visit)

				Not Applicable	Don't Know	Not Important	Somewhat Important	Important	Very Important	Extremely Important
A)	Clear water (high visibility) . . . . .	. . . . .	n/a	dk	1	2	3	4	5	
B)	Amount of living coral on reefs . . . . .	. . . . .	n/a	dk	1	2	3	4	5	
C)	Many different kinds of fish and sea life to view . . . . .	. . . . .	n/a	dk	1	2	3	4	5	
D)	Opportunity to view large wildlife: (manatees, whales, dolphins, sea turtles) . . . . .	. . . . .	n/a	dk	1	2	3	4	5	
E)	Large numbers of fish . . . . .	. . . . .	n/a	dk	1	2	3	4	5	
F)	Specially protected areas . . . . .	. . . . .	n/a	dk	1	2	3	4	5	
G)	Mooring buoys near coral reefs . . . . .	. . . . .	n/a	dk	1	2	3	4	5	
H)	Maps, brochures and other tourist information . . . . .	. . . . .	n/a	dk	1	2	3	4	5	
I)	Customer service and friendliness of people . . . . .	. . . . .	n/a	dk	1	2	3	4	5	
J)	Value for the price . . . . .	. . . . .	n/a	dk	1	2	3	4	5	

2. In the previous question you rated the importance of a list of items during your recent visit. Now please read each of the items on this list and rate how *satisfied* you were with each during your recent visit. If an item does not apply, indicate by circling n/a (not applicable). Likewise, if you don't know, circle (dk).

SATISFACTION  
(with each of these items during  
your recent visit in the Florida Keys)

			Not Applicable	Don't Know	Terrible	Unhappy/Dissatisfied	Mixed	Happy/Satisfied	Delighted
A)	Clear water (high visibility) . . . . .	. . . . .	n/a	dk	1	2	3	4	5
B)	Amount of living coral on reefs . . . . .	. . . . .	n/a	dk	1	2	3	4	5
C)	Many different kinds of fish and sea life to view . . . . .	. . . . .	n/a	dk	1	2	3	4	5
D)	Opportunity to view large wildlife: (manatees, whales, dolphins, sea turtles) . . . . .	. . . . .	n/a	dk	1	2	3	4	5
E)	Large numbers of fish . . . . .	. . . . .	n/a	dk	1	2	3	4	5
F)	Specially protected areas . . . . .	. . . . .	n/a	dk	1	2	3	4	5
G)	Mooring buoys near coral reefs . . . . .	. . . . .	n/a	dk	1	2	3	4	5
H)	Maps, brochures and other tourist information . . . . .	. . . . .	n/a	dk	1	2	3	4	5
I)	Customer service and friendliness of people . . . . .	. . . . .	n/a	dk	1	2	3	4	5
J)	Value for the price . . . . .	. . . . .	n/a	dk	1	2	3	4	5

In this section we have a few special issues questions we would like to ask you.

3. Was your recent visit your first visit to the Florida Keys?

\_\_\_\_\_ Yes (go to Question 6) \_\_\_\_\_ No (go to Question 4)

4. When was your previous most recent visit to the Florida Keys?

- 20+ years ago
- 10-19 years ago
- 5-9 years ago
- More recently

SATISFACTION  
(with each of these items during  
your recent visit in the Florida Keys)

5. Please cast your mind back to your previous most recent visit and rate *how satisfied you were then* with the same items in the Florida Keys area. If an item does not apply, indicate by circling n/a (not applicable). Likewise, if you don't know, circle (dk).

		Not Applicable	Don't Know	Terrible	Unhappy/Dissatisfied	Mixed	Happy/Satisfied	Delighted
A) Clear water (high visibility) . . . . .	n/a	dk	1	2	3	4	5	
B) Amount of living coral on reefs . . . . .	n/a	dk	1	2	3	4	5	
C) Many different kinds of fish and sea life to view . . . . .	n/a	dk	1	2	3	4	5	
D) Opportunity to view large wildlife: (manatees, whales, dolphins, sea turtles) . . . . .	n/a	dk	1	2	3	4	5	
E) Large numbers of fish . . . . .	n/a	dk	1	2	3	4	5	
F) Specially protected areas . . . . .	n/a	dk	1	2	3	4	5	
G) Mooring buoys near coral reefs . . . . .	n/a	dk	1	2	3	4	5	
H) Maps, brochures and other tourist information . . . . .	n/a	dk	1	2	3	4	5	
I) Customer service and friendliness of people . . . . .	n/a	dk	1	2	3	4	5	
J) Value for the price . . . . .	n/a	dk	1	2	3	4	5	

6. What do you think are the greatest threats to the reefs in the Florida Keys in the following list? Please rank greatest threat=1, second-greatest threat=2, third-greatest threat=3, and so on for as many factors as you consider **important threats**. **Leave blank those you consider unimportant.**

- Spear fishers .....
- Scuba divers .....
- Urban development .....
- Ships and boats grounding on reefs, discharging pollutants
- Hurricanes .....
- Solid waste disposal (sewage) .....
- Climate change (global warming etc) .....
- Stormwater and wastewater runoff .....
- Overfishing by commercial and recreational fishers .....
- Number of tourists .....
- Chemical runoff (pesticides, herbicides, fertilizers) .....
- People collecting coral and live rock .....

7. Any other important factors we have omitted from the list?

If any, write in \_\_\_\_\_

8. What in your opinion should the Marine Sanctuary (FKNMS) do to reduce the main stress factors on the reef? Please rank your first recommendation=1, second=2, and so on for all recommendations you consider important. **Leave those blank that you consider unimportant.**

- Stringent control of pollutants to preserve water quality.....
- Enforced training/certification of scuba divers and snorkelers
- Prohibiting spear fishing.....
- Stronger shipping regulations.....
- Training, workshops and school programs.....
- Better management of waterways.....
- More no-catch fishing zones in the FKNMS.....

9. Do you have any other important recommendations on how FKNMS could reduce the main stress factors on the reef?

If any, write in \_\_\_\_\_  
\_\_\_\_\_

• The main signs of coral stress are coral diseases and **coral bleaching**.

- The coral organism lives in a mutually dependent (symbiotic) relationship with tiny algae known as *zooxanthellae*. Their health is highly dependent on temperature and the coral expels them when the sea temperature gets above a certain level. This causes the coral to turn white and weaken, the phenomenon known as coral bleaching.
- There is general agreement among scientists that the world's climate is getting warmer and that this may cause large sections of the world's coral reefs to die.
- There is also a general consensus that control of other stress factors can make the coral organisms more resilient (able to resist and/or recover from stressful events).

10. Were you aware of coral bleaching before your recent visit, and if so to what extent?

- Highly aware  
 Conscious but not highly aware  
 Became aware on my recent visit  
 Still not aware (IF "Still not aware", go to Question 12.)  
 All other answers proceed to Question 11.

11. What in your opinion is the primary cause of coral bleaching?  
 (Check one only)

- Local factors exclusively  
 Non-local factors such as  
     global warming/climate change, exclusively  
 Non-local factors aggravated by local factors  
 Local factors aggravated by non-local factors  
 I don't know

12. How important do you consider climate change to be for the world of the 21st century? Circle the number that corresponds to your answer.

	Don't Know	Not Important	Somewhat Important	Important	Very Important	Extremely Important
dk	1	2	3	4	5	

13. And how important do you consider climate change to be for the future of the coral reefs in the Florida Keys?

	Don't Know	Not Important	Somewhat Important	Important	Very Important	Extremely Important
dk	1	2	3	4	5	

The final part of this mail survey explores a number of alternative management actions that might be applied to protect the Florida Keys. There is general agreement among scientists that the impact of these actions will be to reduce coral bleaching, but not to eliminate it.

- Coral reefs are affected by global and local forces.
- Global climate change and resulting rises in seawater temperatures are considered a major factor in coral bleaching.
- When corals bleach, the corals die and live coral cover is reduced.
- Scientists have found that more coral cover and complexity of corals is associated with more abundant and larger fish, and many different kinds of fish and sea life.
- Emissions of greenhouse gases are considered the main source of global climate change and coral bleaching.
- Water pollution can stress corals and make them more susceptible to disease or reduce their ability to recover from stressful events such as storms or bleaching events.
- Excess nutrients can lead to algal growth, which smothers the corals and kills them.

We present three global alternatives for coral health measured by the amount of live coral cover, before considering local management policies that could be applied to lessen the impact of each global scenario. In the absence of local management policies, living **coral cover** of comparable quality to what exists today is reduced by (a) a massive 95% in 20 years (by 2027) in the worst case scenario, (b) by 80% (intermediate case) or (c) by 50% (best case). Case (a) assumes that there is no further change in global strategies to reduce global warming, and that the average global temperature will increase by 6-8°C by the year 2100. In the intermediate case (b), the increase over the 21<sup>st</sup> century will be 4°C, and (c) using the most efficient policies nationally and internationally, there will be a 2°C increase in the average global temperature.

- Local forces also affect the health of coral reefs.
- Users can touch, step on, or drop their anchors on the corals.
- Fishermen can overfish a reef and remove fish species that eat algae that can smother and kill the corals.

## Local Management Strategies

There are four local strategies included in the FKNMS management plan designed to protect the health of the coral reefs. For each strategy, we present three levels of protection. The no change from current policy is always the low cost strategy.

1. **Education and outreach** are important activities in the FKNMS. The goal is to promote protection and sustainable use of Sanctuary reserves, and public understanding of the nature of marine sanctuaries. Activities include school programs, local community meetings, signage and exhibits in visitor centers, brochures, and TV and radio announcements. Team Ocean, a group of local volunteers, is provided with a FKNMS boat and fuel. They patrol the FKNMS and when they observe someone violating FKNMS rules and regulations, they educate them about how their activity harms the corals. Team Ocean and education and outreach staff also visit local businesses and distribute information on how users can better interact with corals to avoid damages. Education is also an integral element of other programs in the management plan and is considered a low-cost alternative to enforcement.

2. **Enforcement** includes a wide range of measures such as introducing no-anchor zones for vessels above a certain length, reinforcement of bans on spear fishing and touching corals, educating scuba divers and snorkelers about the reefs and enforcing reef protection, and restricting the use of personal vessels on or near the reef. It also involves the mooring buoy program set up around the restricted areas within the Sanctuary.

3. **Water quality** is a crucial issue as reflected by the FKNMS management plan: “Declining water quality continues to be a major concern for the Sanctuary.” Remedies include the development and implementation of wastewater and stormwater plans, efficient options to reduce loading of sediment, toxics and nutrients which damage water quality and the reef, targeting hot spots of industrial and commercial facilities, and reducing pollution from vessels and marinas. Improving water quality is a significantly higher-cost activity than the other items in this list.

4. **Zoning:** There are currently 24 no-take zones in the FKNMS. They cover less than five percent of FKNMS waters, but protect about 60% of the corals. Scientific monitoring of these zones has determined that coral health, fish abundance, size and diversity of fish and sea life have improved in protected areas versus non protected areas. The three levels of protection are (a) no change; or (b) 25% increase in coral cover protected, from 60% to 75%; or (c) 50% increase in coral cover protected, from 60% to 90%.

Reflecting current FKNMS management principles of running several parallel strategies, we have reduced these four policy options to two by combining education and outreach, enforcement, and water quality management into one group, with the options of (a) no change, (b) 5% increase in annual spending, and (c) 10% increase in annual spending. Zoning remains a separate strategy, with three possible levels of protection as shown above.



- A combination of global and local management strategies is required to save the health of the coral reefs.
- Scientists believe that global policies to minimize the increase in greenhouse gases are required to lower sea water temperatures from what they would otherwise have been, and so reduce coral bleaching.
- The more efficient the global strategy to reduce greenhouse gases, the more cost-efficient will be local management actions to protect the reef.
- If local forces are not addressed, the corals will not recover from coral bleaching when or if cooler waters return.
- Policies to reduce the increase in greenhouse gases will result in increased costs to your household through higher utility bills and the costs of products or services.
- Local management strategies will result in increased costs to your household if you are a resident or visitor to the Florida Keys. Costs will be passed on in terms of higher State and local taxes, local water/sewage bills and the costs of local goods and services purchased in the Florida Keys
- We have worked with scientists and managers to estimate the approximate annual costs to your household for the different mixes of global and local management strategies which scientists think will deliver some protection to the corals. The costs to your household are stated in dollars per year.

Questions 14-19 contain six multiple-choice situations to which you are asked to state your preferences and provide a brief explanation for your choices. Each choice presents different mixes of global and local management strategies and has an estimated cost to your household. Each choice always includes the option of choosing the status quo or NO CHANGE (Alt A). This alternative will cost your household \$0, but will result in 95% reduction in the amount of live coral cover in 20 years, and local actions such as improving water quality and increasing the no-take areas will become much less efficient.

**Each choice will be similar to the following example.** Alt A is always the no-change situation as just explained. Alt B assumes an intermediate global policy for greenhouse gas reduction, and Alt C is based on a stronger and costlier global policy. In each Alt B and C case, different combinations of local management strategies have been designed which yield different coral cover outcomes at different costs to your household, giving you three choices.

We can't help you state your preferences, which depend on your own experience and attitudes. We don't know the extent of your concern about future climate change, how much value you put on the quality of the coral reefs relative to other attractions of the Florida Keys, and the main activities that attracted you there including fishing, boating, snorkeling, and land-based activities. So the example below is purely illustrative, and has nothing whatever to do with what you actually think. It's just an example to assist you in answering questions 14-19.

	Alt A	Alt B	Alt C
Global policy for reductions in greenhouse gases (compared with no change in policy as in Alt A.)	No change	Medium reductions	Large reductions
<b>Local Florida Keys Management Strategies</b>			
Added spending on water quality, education and outreach, and enforcement	No change	+10%	No change
Increase in no-take zoning of coral reef areas (percent of coral reefs protected)	No change (60%)	From 60% to 75%	From 60% to 90%
<b>Coral cover loss by 2027, Florida Keys</b>	<b>95%</b>	<b>75%</b>	<b>44%</b>
<b>Total annual cost to your household for global and local strategies</b>	<b>\$0</b>	<b>\$201</b>	<b>\$240</b>
Your most preferred alternative (check one)?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Your least preferred alternative (check one)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Please explain briefly why you made this choice (for example): “I like to fish, and clear water is important. But I would prefer to have more open area to fish on the reefs.”

Please note the following general assumptions when you make your choices:

- The most efficient local management strategy is centered on improving water quality, supplemented by efficient education and enforcement policies. This strategy is also the most expensive local strategy.
- Protecting the reef by increasing the area of no-take zones is also efficient but less so. This relatively low-cost option will reduce reef-fishing activities (but fishing opportunities may be unaffected or may even increase elsewhere in the FKNMS).
- The less efficient the global greenhouse gas strategy to control the rise in sea temperatures, the less efficient the local management strategies will also be.
- Making a choice to spend money on protecting the amount of living coral on the reefs will mean that you have less money to spend on other goods and services.

14. Suppose you could only choose between the following three alternative combinations of global and local strategies, which would be your most preferred alternative and which would be your least preferred alternative?

	<b>Alt A</b>	<b>Alt B</b>	<b>Alt C</b>
Global policy for reductions in greenhouse gases (compared with no change in policy as in Alt A.)	No change	Medium reductions	Large reductions
<b>Local Florida Keys Management Strategies</b>			
Added spending on water quality, education and outreach, and enforcement	No change	No change	+5%
Increase in no-take zoning of coral reef areas (percent of coral reefs protected)	No change (60%)	From 60% to 75%	From 60% to 75%
<b>Coral cover loss by 2027, Florida Keys</b>	<b>95%</b>	<b>79%</b>	<b>40%</b>
<b>Total annual cost to your household for global and local strategies</b>	<b>\$0</b>	<b>\$81</b>	<b>\$291</b>
Your most preferred alternative (check one)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Your least preferred alternative (check one)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Please explain briefly why you made this choice (for example): \_\_\_\_\_

15. Suppose you could only choose between the following three alternative combinations of global and local strategies, which would be your most preferred alternative and which would be your least preferred alternative?

	<b>Alt A</b>	<b>Alt B</b>	<b>Alt C</b>
Global policy for reductions in greenhouse gases (compared with no change in policy as in Alt A.)	No change	Medium reductions	Large reductions
<b>Local Florida Keys Management Strategies</b>			
Added spending on water quality, education and outreach, and enforcement	No change	+5%	+10%
Increase in no-take zoning of coral reef areas (percent of coral reefs protected)	No change (60%)	No change (60%)	No change (60%)
<b>Coral cover loss by 2027, Florida Keys</b>	<b>95%</b>	<b>78%</b>	<b>40%</b>
<b>Total annual cost to your household for global and local strategies</b>	<b>\$0</b>	<b>\$135</b>	<b>\$345</b>
Your most preferred alternative (check one)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Your least preferred alternative (check one)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Please explain briefly why you made this choice (for example): \_\_\_\_\_

16. Suppose you could only choose between the following three alternative combinations of global and local strategies, which would be your most preferred alternative and which would be your least preferred alternative?

	<b>Alt A</b>	<b>Alt B</b>	<b>Alt C</b>
Global policy for reductions in greenhouse gases (compared with no change in policy as in Alt A.)	No change	Medium reductions	Large reductions
<b>Local Florida Keys Management Strategies</b>			
Added spending on water quality, education and outreach, and enforcement	No change	+10%	No change
Increase in no-take zoning of coral reef areas (percent of coral reefs protected)	No change (60%)	From 60% to 75%	From 60% to 75%
<b>Coral cover loss by 2027, Florida Keys</b>	<b>95%</b>	<b>75%</b>	<b>46%</b>
<b>Total annual cost to your household for global and local strategies</b>	<b>\$0</b>	<b>\$201</b>	<b>\$231</b>
Your most preferred alternative (check one)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Your least preferred alternative (check one)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Please explain briefly why you made this choice (for example): \_\_\_\_\_

17. Suppose you could only choose between the following three alternative combinations of global and local strategies, which would be your most preferred alternative and which would be your least preferred alternative?

	<b>Alt A</b>	<b>Alt B</b>	<b>Alt C</b>
Global policy for reductions in greenhouse gases (compared with no change in policy as in Alt A.)	No change	Medium reductions	Large reductions
<b>Local Florida Keys Management Strategies</b>			
Added spending on water quality, education and outreach, and enforcement	No change	No change	No change
Increase in no-take zoning of coral reef areas (percent of coral reefs protected)	No change (60%)	From 60% to 90%	No change (60%)
<b>Coral cover loss by 2027, Florida Keys</b>	<b>95%</b>	<b>78%</b>	<b>50%</b>
<b>Total annual cost to your household for global and local strategies</b>	<b>\$0</b>	<b>\$90</b>	<b>\$225</b>
Your most preferred alternative (check one)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Your least preferred alternative (check one)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Please explain briefly why you made this choice (for example): \_\_\_\_\_

18. Suppose you could only choose between the following three alternative combinations of global and local strategies, which would be your most preferred alternative and which would be your least preferred alternative?

	<b>Alt A</b>	<b>Alt B</b>	<b>Alt C</b>
Global policy for reductions in greenhouse gases (compared with no change in policy as in Alt A.)	No change	Medium reductions	Large reductions
<b>Local Florida Keys Management Strategies</b>			
Added spending on water quality, education and outreach, and enforcement	No change	+10%	+10%
Increase in no-take zoning of coral reef areas (percent of coral reefs protected)	No change (60%)	From 60% to 75%	From 60% to 50%
<b>Coral cover loss by 2027, Florida Keys</b>	<b>95%</b>	<b>75%</b>	<b>34%</b>
<b>Total annual cost to your household for global and local strategies</b>	<b>\$0</b>	<b>\$201</b>	<b>\$360</b>
Your most preferred alternative (check one)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Your least preferred alternative (check one)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Please explain briefly why you made this choice (for example): \_\_\_\_\_

19. Suppose you could only choose between the following three alternative combinations of global and local strategies, which would be your most preferred alternative and which would be your least preferred alternative?

	<b>Alt A</b>	<b>Alt B</b>	<b>Alt C</b>
Global policy for reductions in greenhouse gases (compared with no change in policy as in Alt A.)	No change	Medium reductions	Large reductions
<b>Local Florida Keys Management Strategies</b>			
Added spending on water quality, education and outreach, and enforcement	No change	+5%	No change
Increase in no-take zoning of coral reef areas (percent of coral reefs protected)	No change (60%)	From 60% to 75%	From 60% to 90%
<b>Coral cover loss by 2027, Florida Keys</b>	<b>95%</b>	<b>77%</b>	<b>44%</b>
<b>Total annual cost to your household for global and local strategies</b>	<b>\$0</b>	<b>\$141</b>	<b>\$240</b>
Your most preferred alternative (check one)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Your least preferred alternative (check one)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Please explain briefly why you made this choice (for example): \_\_\_\_\_

In the survey we conducted with you on-site on your recent visit to the Florida Keys, you told us how many days you spent in the Florida Keys over the past 12 months. In the next set of questions, we would like you to tell us how many days less you would have visited the Florida Keys if coral cover conditions had been worse than they currently are.

Currently, 6% of the entire water area in the FKNMS is covered with living coral.

20. If the living coral cover were only 3% (half the current coral cover), how many days less would you have spent in the Florida Keys over the past 12 months?

- No change  
\_\_\_\_\_ (# of days less)
- I wouldn't have visited at all
- I don't know

[This page intentionally left blank. Proceed to next page.]

21. If there was no coral cover left or 0% coral cover, how many days less would you have spent in the Florida Keys over the past 12 months?

- No change  
\_\_\_\_\_ (# of days less)
- I wouldn't have visited at all
- I don't know

Thank you very much for your cooperation in this important survey.

That's All!! If you would like to be entered into a sweepstakes to win a free Vacation to the Florida Keys, fill out your name, address and phone number below. All prizes will be awarded in October of 2007.

Name: \_\_\_\_\_

Address: \_\_\_\_\_

City: \_\_\_\_\_

State: \_\_\_\_\_ Zip: \_\_\_\_\_ Phone: \_\_\_\_\_

Prizes to be awarded are:

GRAND PRIZE

- \* Airfare for two from anywhere in the continental United States to the Florida Keys
- \* Rental car with unlimited miles for one week (seven days)
- \* Accommodations for two for one week (six nights)
- \* Two complimentary "activities" for two (i.e., diving trip, fishing charter, sunset sail, etc.)
- \* Complimentary dinner for two at local restaurant

FIRST PRIZE

- \* Accommodations for two for five days (four nights)
- \* Two complimentary "activities" for two (i.e., diving trip, fishing charter, sunset sail, etc.)
- \* Complimentary dinner for two at local restaurant

SECOND PRIZE

- \* Accommodations for two for four days (three nights)
- \* One complimentary "activity" for two (i.e., diving trip, fishing charter, sunset sail, etc.)
- \* Complimentary dinner for two at local restaurant

SECOND PRIZE

- \* Accommodations for two for three days (two nights)
- \* One complimentary "activity" for two (i.e., diving trip, fishing charter, sunset sail, etc.)

This is a cooperative research project of the Monroe County Tourist Development Council and the National Oceanic and Atmospheric Administration. Public reporting burden for this collection of information is estimated to average 20 minutes including time for reviewing instructions, searching existing data sources, gathering and maintaining the data need, 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 this burden, to U.S. Department of Commerce, Clearance Officer, Office of Chief Information Officer, Rm. 6625, 14th and Constitution Avenue NW, Washington, DC 20230.

## THANK YOU!

for  
participating in this  
Recreation Survey

Dear Visitor,

During your recent trip to the Florida Keys 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 answers are voluntary and confidential. Your name will never be released to anyone unless otherwise required by law. After the completion of the project all materials identifying you as an individual will be destroyed.

When you complete the questionnaire, please reverse-fold it so that our return address on the GREEN PAGE in the inside is folded to the outside. Please staple or tape to seal the questionnaire and mail it back to us. No postage is needed. Your cooperation in this effort is greatly appreciated.

Sincerely,

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



Coral reefs are sensitive ecosystems. The Florida Keys, the world's third-largest barrier reef and the only coral reef system along the US mainland coast, is no exception. It has long been recognized that human use of coral reefs and adjacent coastal activities inflict strains on these systems. Non-local factors associated with global human use of the planet's resources add to the strain through their impact on air and sea temperatures.

The Florida Keys National Marine Sanctuary (FKNMS) was founded through a Federal Act to manage issues such as the above. It is managed cooperatively by the National Oceanic and Atmospheric Administration (NOAA) and the State of Florida, with significant input from local government, businesses, non-government organizations and the general public. Your views are valuable in the formulation of FKNMS action plans and management strategies.

This mail survey explores your knowledge, attitudes and perceptions of the natural reefs of the Florida Keys. There are no right or wrong answers; we simply want your honest opinion. Again, your privacy will be protected. No one will be given information that will allow them to identify you from survey data.

[This page intentionally left blank. Proceed to next page.]

I. Please read each statement and rate the *importance* of each item during your recent visit in the Florida Keys area. If an item does not apply, indicate by circling n/a (not applicable). Likewise, if you don't know, circle (dk).

IMPORTANCE  
(with each of these items during  
your recent visit)

				Not Applicable	Don't Know	Not Important	Somewhat Important	Important	Very Important	Extremely Important
A)	Clear water (high visibility) . . . . .	. . . . .	n/a	dk	1	2	3	4	5	
B)	Amount of living coral on reefs . . . . .	. . . . .	n/a	dk	1	2	3	4	5	
C)	Many different kinds of fish and sea life to view . . . . .	. . . . .	n/a	dk	1	2	3	4	5	
D)	Opportunity to view large wildlife: (manatees, whales, dolphins, sea turtles) . . . . .	. . . . .	n/a	dk	1	2	3	4	5	
E)	Large numbers of fish . . . . .	. . . . .	n/a	dk	1	2	3	4	5	
F)	Specially protected areas . . . . .	. . . . .	n/a	dk	1	2	3	4	5	
G)	Mooring buoys near coral reefs . . . . .	. . . . .	n/a	dk	1	2	3	4	5	
H)	Maps, brochures and other tourist information . . . . .	. . . . .	n/a	dk	1	2	3	4	5	
I)	Customer service and friendliness of people . . . . .	. . . . .	n/a	dk	1	2	3	4	5	
J)	Value for the price . . . . .	. . . . .	n/a	dk	1	2	3	4	5	

2. In the previous question you rated the importance of a list of items during your recent visit. Now please read each of the items on this list and rate how *satisfied* you were with each during your recent visit. If an item does not apply, indicate by circling n/a (not applicable). Likewise, if you don't know, circle (dk).

SATISFACTION  
(with each of these items during  
your recent visit in the Florida Keys)

				Not Applicable	Don't Know	Terrible	Unhappy/Dissatisfied	Mixed	Happy/Satisfied	Delighted
A)	Clear water (high visibility) . . . . .	. . . . .	n/a	dk	1	2	3	4	5	
B)	Amount of living coral on reefs . . . . .	. . . . .	n/a	dk	1	2	3	4	5	
C)	Many different kinds of fish and sea life to view . . . . .	. . . . .	n/a	dk	1	2	3	4	5	
D)	Opportunity to view large wildlife: (manatees, whales, dolphins, sea turtles) . . . . .	. . . . .	n/a	dk	1	2	3	4	5	
E)	Large numbers of fish . . . . .	. . . . .	n/a	dk	1	2	3	4	5	
F)	Specially protected areas . . . . .	. . . . .	n/a	dk	1	2	3	4	5	
G)	Mooring buoys near coral reefs . . . . .	. . . . .	n/a	dk	1	2	3	4	5	
H)	Maps, brochures and other tourist information . . . . .	. . . . .	n/a	dk	1	2	3	4	5	
I)	Customer service and friendliness of people . . . . .	. . . . .	n/a	dk	1	2	3	4	5	
J)	Value for the price . . . . .	. . . . .	n/a	dk	1	2	3	4	5	

In this section we have a few special issues questions we would like to ask you.

3. Was your recent visit your first visit to the Florida Keys?

\_\_\_\_\_ Yes (go to Question 6) \_\_\_\_\_ No (go to Question 4)

4. When was your previous most recent visit to the Florida Keys?

- 20+ years ago
- 10-19 years ago
- 5-9 years ago
- More recently

SATISFACTION  
(with each of these items during  
your recent visit in the Florida Keys)

5. Please cast your mind back to your previous most recent visit and rate *how satisfied you were then* with the same items in the Florida Keys area. If an item does not apply, indicate by circling n/a (not applicable). Likewise, if you don't know, circle (dk).

		Not Applicable	Don't Know	Terrible	Unhappy/Dissatisfied	Mixed	Happy/Satisfied	Delighted
A) Clear water (high visibility) . . . . .	n/a	dk	1	2	3	4	5	
B) Amount of living coral on reefs . . . . .	n/a	dk	1	2	3	4	5	
C) Many different kinds of fish and sea life to view . . . . .	n/a	dk	1	2	3	4	5	
D) Opportunity to view large wildlife: (manatees, whales, dolphins, sea turtles) . . . . .	n/a	dk	1	2	3	4	5	
E) Large numbers of fish . . . . .	n/a	dk	1	2	3	4	5	
F) Specially protected areas . . . . .	n/a	dk	1	2	3	4	5	
G) Mooring buoys near coral reefs . . . . .	n/a	dk	1	2	3	4	5	
H) Maps, brochures and other tourist information . . . . .	n/a	dk	1	2	3	4	5	
I) Customer service and friendliness of people . . . . .	n/a	dk	1	2	3	4	5	
J) Value for the price . . . . .	n/a	dk	1	2	3	4	5	

6. What do you think are the greatest threats to the reefs in the Florida Keys in the following list? Please rank greatest threat=1, second-greatest threat=2, third-greatest threat=3, and so on for as many factors as you consider **important threats**. **Leave blank those you consider unimportant.**

- Spear fishers .....
- Scuba divers .....
- Urban development .....
- Ships and boats grounding on reefs, discharging pollutants
- Hurricanes .....
- Solid waste disposal (sewage) .....
- Climate change (global warming etc) .....
- Stormwater and wastewater runoff .....
- Overfishing by commercial and recreational fishers .....
- Number of tourists .....
- Chemical runoff (pesticides, herbicides, fertilizers) .....
- People collecting coral and live rock .....

7. Any other important factors we have omitted from the list?

If any, write in \_\_\_\_\_

8. What in your opinion should the Marine Sanctuary (FKNMS) do to reduce the main stress factors on the reef? Please rank your first recommendation=1, second=2, and so on for all recommendations you consider important. **Leave those blank that you consider unimportant.**

- Stringent control of pollutants to preserve water quality.....
- Enforced training/certification of scuba divers and snorkelers
- Prohibiting spear fishing.....
- Stronger shipping regulations.....
- Training, workshops and school programs.....
- Better management of waterways.....
- More no-catch fishing zones in the FKNMS.....

9. Do you have any other important recommendations on how FKNMS could reduce the main stress factors on the reef?

If any, write in \_\_\_\_\_  
\_\_\_\_\_

• The main signs of coral stress are coral diseases and **coral bleaching**.

- The coral organism lives in a mutually dependent (symbiotic) relationship with tiny algae known as *zooxanthellae*. Their health is highly dependent on temperature and the coral expels them when the sea temperature gets above a certain level. This causes the coral to turn white and weaken, the phenomenon known as coral bleaching.
- There is general agreement among scientists that the world's climate is getting warmer and that this may cause large sections of the world's coral reefs to die.
- There is also a general consensus that control of other stress factors can make the coral organisms more resilient (able to resist and/or recover from stressful events).

10. Were you aware of coral bleaching before your recent visit, and if so to what extent?

- Highly aware  
 Conscious but not highly aware  
 Became aware on my recent visit  
 Still not aware (IF "Still not aware", go to Question 12.)  
 All other answers proceed to Question 11.

11. What in your opinion is the primary cause of coral bleaching?  
 (Check one only)

- Local factors exclusively  
 Non-local factors such as  
     global warming/climate change, exclusively  
 Non-local factors aggravated by local factors  
 Local factors aggravated by non-local factors  
 I don't know

12. How important do you consider climate change to be for the world of the 21st century? Circle the number that corresponds to your answer.

	Don't Know	Not Important	Somewhat Important	Important	Very Important	Extremely Important
dk	1	2	3	4	5	

13. And how important do you consider climate change to be for the future of the coral reefs in the Florida Keys?

	Don't Know	Not Important	Somewhat Important	Important	Very Important	Extremely Important
dk	1	2	3	4	5	

The final part of this mail survey explores a number of alternative management actions that might be applied to protect the Florida Keys. There is general agreement among scientists that the impact of these actions will be to reduce coral bleaching, but not to eliminate it.

- Coral reefs are affected by global and local forces.
- Global climate change and resulting rises in seawater temperatures are considered a major factor in coral bleaching.
- When corals bleach, the corals die and live coral cover is reduced.
- Scientists have found that more coral cover and complexity of corals is associated with more abundant and larger fish, and many different kinds of fish and sea life.
- Emissions of greenhouse gases are considered the main source of global climate change and coral bleaching.
- Water pollution can stress corals and make them more susceptible to disease or reduce their ability to recover from stressful events such as storms or bleaching events.
- Excess nutrients can lead to algal growth, which smothers the corals and kills them.

We present three global alternatives for coral health measured by the amount of live coral cover, before considering local management policies that could be applied to lessen the impact of each global scenario. In the absence of local management policies, living **coral cover** of comparable quality to what exists today is reduced by (a) a massive 95% in 20 years (by 2027) in the worst case scenario, (b) by 80% (intermediate case) or (c) by 50% (best case). Case (a) assumes that there is no further change in global strategies to reduce global warming, and that the average global temperature will increase by 6-8°C by the year 2100. In the intermediate case (b), the increase over the 21<sup>st</sup> century will be 4°C, and (c) using the most efficient policies nationally and internationally, there will be a 2°C increase in the average global temperature.

- Local forces also affect the health of coral reefs.
- Users can touch, step on, or drop their anchors on the corals.
- Fishermen can overfish a reef and remove fish species that eat algae that can smother and kill the corals.

## Local Management Strategies

There are four local strategies included in the FKNMS management plan designed to protect the health of the coral reefs. For each strategy, we present three levels of protection. The no change from current policy is always the low cost strategy.

1. **Education and outreach** are important activities in the FKNMS. The goal is to promote protection and sustainable use of Sanctuary reserves, and public understanding of the nature of marine sanctuaries. Activities include school programs, local community meetings, signage and exhibits in visitor centers, brochures, and TV and radio announcements. Team Ocean, a group of local volunteers, is provided with a FKNMS boat and fuel. They patrol the FKNMS and when they observe someone violating FKNMS rules and regulations, they educate them about how their activity harms the corals. Team Ocean and education and outreach staff also visit local businesses and distribute information on how users can better interact with corals to avoid damages. Education is also an integral element of other programs in the management plan and is considered a low-cost alternative to enforcement.

2. **Enforcement** includes a wide range of measures such as introducing no-anchor zones for vessels above a certain length, reinforcement of bans on spear fishing and touching corals, educating scuba divers and snorkelers about the reefs and enforcing reef protection, and restricting the use of personal vessels on or near the reef. It also involves the mooring buoy program set up around the restricted areas within the Sanctuary.

3. **Water quality** is a crucial issue as reflected by the FKNMS management plan: “Declining water quality continues to be a major concern for the Sanctuary.” Remedies include the development and implementation of wastewater and stormwater plans, efficient options to reduce loading of sediment, toxics and nutrients which damage water quality and the reef, targeting hot spots of industrial and commercial facilities, and reducing pollution from vessels and marinas. Improving water quality is a significantly higher-cost activity than the other items in this list.

4. **Zoning:** There are currently 24 no-take zones in the FKNMS. They cover less than five percent of FKNMS waters, but protect about 60% of the corals. Scientific monitoring of these zones has determined that coral health, fish abundance, size and diversity of fish and sea life have improved in protected areas versus non protected areas. The three levels of protection are (a) no change; or (b) 25% increase in coral cover protected, from 60% to 75%; or (c) 50% increase in coral cover protected, from 60% to 90%.

Reflecting current FKNMS management principles of running several parallel strategies, we have reduced these four policy options to two by combining education and outreach, enforcement, and water quality management into one group, with the options of (a) no change, (b) 5% increase in annual spending, and (c) 10% increase in annual spending. Zoning remains a separate strategy, with three possible levels of protection as shown above.



- A combination of global and local management strategies is required to save the health of the coral reefs.
- Scientists believe that global policies to minimize the increase in greenhouse gases are required to lower sea water temperatures from what they would otherwise have been, and so reduce coral bleaching.
- The more efficient the global strategy to reduce greenhouse gases, the more cost-efficient will be local management actions to protect the reef.
- If local forces are not addressed, the corals will not recover from coral bleaching when or if cooler waters return.
- Policies to reduce the increase in greenhouse gases will result in increased costs to your household through higher utility bills and the costs of products or services.
- Local management strategies will result in increased costs to your household if you are a resident or visitor to the Florida Keys. Costs will be passed on in terms of higher State and local taxes, local water/sewage bills and the costs of local goods and services purchased in the Florida Keys
- We have worked with scientists and managers to estimate the approximate annual costs to your household for the different mixes of global and local management strategies which scientists think will deliver some protection to the corals. The costs to your household are stated in dollars per year.

Questions 14-19 contain six multiple-choice situations to which you are asked to state your preferences and provide a brief explanation for your choices. Each choice presents different mixes of global and local management strategies and has an estimated cost to your household. Each choice always includes the option of choosing the status quo or NO CHANGE (Alt A). This alternative will cost your household \$0, but will result in 95% reduction in the amount of live coral cover in 20 years, and local actions such as improving water quality and increasing the no-take areas will become much less efficient.

**Each choice will be similar to the following example.** Alt A is always the no-change situation as just explained. Alt B assumes an intermediate global policy for greenhouse gas reduction, and Alt C is based on a stronger and costlier global policy. In each Alt B and C case, different combinations of local management strategies have been designed which yield different coral cover outcomes at different costs to your household, giving you three choices.

We can't help you state your preferences, which depend on your own experience and attitudes. We don't know the extent of your concern about future climate change, how much value you put on the quality of the coral reefs relative to other attractions of the Florida Keys, and the main activities that attracted you there including fishing, boating, snorkeling, and land-based activities. So the example below is purely illustrative, and has nothing whatever to do with what you actually think. It's just an example to assist you in answering questions 14-19.

	Alt A	Alt B	Alt C
Global policy for reductions in greenhouse gases (compared with no change in policy as in Alt A.)	No change	Medium reductions	Large reductions
<b>Local Florida Keys Management Strategies</b>			
Added spending on water quality, education and outreach, and enforcement	No change	+10%	No change
Increase in no-take zoning of coral reef areas (percent of coral reefs protected)	No change (60%)	From 60% to 75%	From 60% to 90%
<b>Coral cover loss by 2027, Florida Keys</b>	<b>95%</b>	<b>75%</b>	<b>44%</b>
<b>Total annual cost to your household for global and local strategies</b>	<b>\$0</b>	<b>\$268</b>	<b>\$320</b>
Your most preferred alternative (check one)?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Your least preferred alternative (check one)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Please explain briefly why you made this choice (for example): “I like to fish, and clear water is important. But I would prefer to have more open area to fish on the reefs.”

Please note the following general assumptions when you make your choices:

- The most efficient local management strategy is centered on improving water quality, supplemented by efficient education and enforcement policies. This strategy is also the most expensive local strategy.
- Protecting the reef by increasing the area of no-take zones is also efficient but less so. This relatively low-cost option will reduce reef-fishing activities (but fishing opportunities may be unaffected or may even increase elsewhere in the FKNMS).
- The less efficient the global greenhouse gas strategy to control the rise in sea temperatures, the less efficient the local management strategies will also be.
- Making a choice to spend money on protecting the amount of living coral on the reefs will mean that you have less money to spend on other goods and services.

14. Suppose you could only choose between the following three alternative combinations of global and local strategies, which would be your most preferred alternative and which would be your least preferred alternative?

	<b>Alt A</b>	<b>Alt B</b>	<b>Alt C</b>
Global policy for reductions in greenhouse gases (compared with no change in policy as in Alt A.)	No change	Medium reductions	Large reductions
<b>Local Florida Keys Management Strategies</b>			
Added spending on water quality, education and outreach, and enforcement	No change	+5%	+5%
Increase in no-take zoning of coral reef areas (percent of coral reefs protected)	No change (60%)	No change (60%)	From 60% to 90%
<b>Coral cover loss by 2027, Florida Keys</b>	<b>95%</b>	<b>78%</b>	<b>38%</b>
<b>Total annual cost to your household for global and local strategies</b>	<b>\$0</b>	<b>\$108</b>	<b>\$400</b>
Your most preferred alternative (check one)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Your least preferred alternative (check one)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Please explain briefly why you made this choice (for example): \_\_\_\_\_

15. Suppose you could only choose between the following three alternative combinations of global and local strategies, which would be your most preferred alternative and which would be your least preferred alternative?

	<b>Alt A</b>	<b>Alt B</b>	<b>Alt C</b>
Global policy for reductions in greenhouse gases (compared with no change in policy as in Alt A.)	No change	Medium reductions	Large reductions
<b>Local Florida Keys Management Strategies</b>			
Added spending on water quality, education and outreach, and enforcement	No change	+5%	No change
Increase in no-take zoning of coral reef areas (percent of coral reefs protected)	No change (60%)	From 60% to 90%	From 60% to 90%
<b>Coral cover loss by 2027, Florida Keys</b>	<b>95%</b>	<b>76%</b>	<b>44%</b>
<b>Total annual cost to your household for global and local strategies</b>	<b>\$0</b>	<b>\$200</b>	<b>\$320</b>
Your most preferred alternative (check one)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Your least preferred alternative (check one)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Please explain briefly why you made this choice (for example): \_\_\_\_\_

16. Suppose you could only choose between the following three alternative combinations of global and local strategies, which would be your most preferred alternative and which would be your least preferred alternative?

	<b>Alt A</b>	<b>Alt B</b>	<b>Alt C</b>
Global policy for reductions in greenhouse gases (compared with no change in policy as in Alt A.)	No change	Medium reductions	Large reductions
<b>Local Florida Keys Management Strategies</b>			
Added spending on water quality, education and outreach, and enforcement	No change	+5%	+5%
Increase in no-take zoning of coral reef areas (percent of coral reefs protected)	No change (60%)	No change (60%)	From 60% to 75%
<b>Coral cover loss by 2027, Florida Keys</b>	<b>95%</b>	<b>78%</b>	<b>40%</b>
<b>Total annual cost to your household for global and local strategies</b>	<b>\$0</b>	<b>\$108</b>	<b>\$388</b>
Your most preferred alternative (check one)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Your least preferred alternative (check one)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Please explain briefly why you made this choice (for example): \_\_\_\_\_

17. Suppose you could only choose between the following three alternative combinations of global and local strategies, which would be your most preferred alternative and which would be your least preferred alternative?

	<b>Alt A</b>	<b>Alt B</b>	<b>Alt C</b>
Global policy for reductions in greenhouse gases (compared with no change in policy as in Alt A.)	No change	Medium reductions	Large reductions
<b>Local Florida Keys Management Strategies</b>			
Added spending on water quality, education and outreach, and enforcement	No change	+10%	+10%
Increase in no-take zoning of coral reef areas (percent of coral reefs protected)	No change (60%)	No change (60%)	From 60% to 75%
<b>Coral cover loss by 2027, Florida Keys</b>	<b>95%</b>	<b>76%</b>	<b>36%</b>
<b>Total annual cost to your household for global and local strategies</b>	<b>\$0</b>	<b>\$260</b>	<b>\$468</b>
Your most preferred alternative (check one)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Your least preferred alternative (check one)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Please explain briefly why you made this choice (for example): \_\_\_\_\_

18. Suppose you could only choose between the following three alternative combinations of global and local strategies, which would be your most preferred alternative and which would be your least preferred alternative?

	<b>Alt A</b>	<b>Alt B</b>	<b>Alt C</b>
Global policy for reductions in greenhouse gases (compared with no change in policy as in Alt A.)	No change	Medium reductions	Large reductions
<b>Local Florida Keys Management Strategies</b>			
Added spending on water quality, education and outreach, and enforcement	No change	+10%	No change
Increase in no-take zoning of coral reef areas (percent of coral reefs protected)	No change (60%)	From 60% to 90%	From 60% to 90%
<b>Coral cover loss by 2027, Florida Keys</b>	<b>95%</b>	<b>74%</b>	<b>44%</b>
<b>Total annual cost to your household for global and local strategies</b>	<b>\$0</b>	<b>\$280</b>	<b>\$320</b>
Your most preferred alternative (check one)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Your least preferred alternative (check one)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Please explain briefly why you made this choice (for example): \_\_\_\_\_

19. Suppose you could only choose between the following three alternative combinations of global and local strategies, which would be your most preferred alternative and which would be your least preferred alternative?

	<b>Alt A</b>	<b>Alt B</b>	<b>Alt C</b>
Global policy for reductions in greenhouse gases (compared with no change in policy as in Alt A.)	No change	Medium reductions	Large reductions
<b>Local Florida Keys Management Strategies</b>			
Added spending on water quality, education and outreach, and enforcement	No change	+5%	No change
Increase in no-take zoning of coral reef areas (percent of coral reefs protected)	No change (60%)	No change (60%)	No change (60%)
<b>Coral cover loss by 2027, Florida Keys</b>	<b>95%</b>	<b>78%</b>	<b>50%</b>
<b>Total annual cost to your household for global and local strategies</b>	<b>\$0</b>	<b>\$108</b>	<b>\$300</b>
Your most preferred alternative (check one)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Your least preferred alternative (check one)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Please explain briefly why you made this choice (for example): \_\_\_\_\_

In the survey we conducted with you on-site on your recent visit to the Florida Keys, you told us how many days you spent in the Florida Keys over the past 12 months. In the next set of questions, we would like you to tell us how many days less you would have visited the Florida Keys if coral cover conditions had been worse than they currently are.

Currently, 6% of the entire water area in the FKNMS is covered with living coral.

20. If the living coral cover were only 3% (half the current coral cover), how many days less would you have spent in the Florida Keys over the past 12 months?

- No change  
\_\_\_\_\_ (# of days less)
- I wouldn't have visited at all
- I don't know

[This page intentionally left blank. Proceed to next page.]

21. If there was no coral cover left or 0% coral cover, how many days less would you have spent in the Florida Keys over the past 12 months?

- No change  
\_\_\_\_\_ (# of days less)
- I wouldn't have visited at all
- I don't know

Thank you very much for your cooperation in this important survey.

That's All!! If you would like to be entered into a sweepstakes to win a free Vacation to the Florida Keys, fill out your name, address and phone number below. All prizes will be awarded in October of 2007.

Name: \_\_\_\_\_

Address: \_\_\_\_\_

City: \_\_\_\_\_

State: \_\_\_\_\_ Zip: \_\_\_\_\_ Phone: \_\_\_\_\_

Prizes to be awarded are:

GRAND PRIZE

- \* Airfare for two from anywhere in the continental United States to the Florida Keys
- \* Rental car with unlimited miles for one week (seven days)
- \* Accommodations for two for one week (six nights)
- \* Two complimentary "activities" for two (i.e., diving trip, fishing charter, sunset sail, etc.)
- \* Complimentary dinner for two at local restaurant

FIRST PRIZE

- \* Accommodations for two for five days (four nights)
- \* Two complimentary "activities" for two (i.e., diving trip, fishing charter, sunset sail, etc.)
- \* Complimentary dinner for two at local restaurant

SECOND PRIZE

- \* Accommodations for two for four days (three nights)
- \* One complimentary "activity" for two (i.e., diving trip, fishing charter, sunset sail, etc.)
- \* Complimentary dinner for two at local restaurant

SECOND PRIZE

- \* Accommodations for two for three days (two nights)
- \* One complimentary "activity" for two (i.e., diving trip, fishing charter, sunset sail, etc.)

This is a cooperative research project of the Monroe County Tourist Development Council and the National Oceanic and Atmospheric Administration. Public reporting burden for this collection of information is estimated to average 20 minutes including time for reviewing instructions, searching existing data sources, gathering and maintaining the data need, 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 this burden, to U.S. Department of Commerce, Clearance Officer, Office of Chief Information Officer, Rm. 6625, 14th and Constitution Avenue NW, Washington, DC 20230. Notwithstanding any other provisions of the law, no person is required to respond to, nor shall any person be subject to penalty for failure to comply with, a collection of information subject to requirements of the Paperwork Reduction Act, unless that collection of information displays a currently valid OMB Control Number.

## THANK YOU!

for  
participating in this  
Recreation Survey

Dear Visitor,

During your recent trip to the Florida Keys 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 answers are voluntary and confidential. Your name will never be released to anyone unless otherwise required by law. After the completion of the project all materials identifying you as an individual will be destroyed.

When you complete the questionnaire, please reverse-fold it so that our return address on the GREEN PAGE in the inside is folded to the outside. Please staple or tape to seal the questionnaire and mail it back to us. No postage is needed. Your cooperation in this effort is greatly appreciated.

Sincerely,

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



There are many places to engage in snorkeling/SCUBA diving activities. In the next several questions, we are attempting to understand the reason you may choose to snorkel/SCUBA dive on one reef versus another, or if necessary, choose to engage in activities other than snorkeling/SCUBA diving in the Florida Keys.

**When answering the following questions, please think about a favorite or most common reef that you dive on in the Florida Keys. If you do not have a favorite or most common reef that you dive on in the Keys, please think about the last reef that you dove on in the Florida Keys.**

**Read the choices and circle the letter that indicates your answer for that question.**

**1. Please circle which reef you are thinking of when responding to the following questions. (Please circle only one answer)**

- A Favorite reef to snorkel/dive on
- B Most common reef I snorkel/dive on
- C Most recent reef I snorkeled/dove on

**2. Is this reef a:**

- A Natural coral reef
- B Artificial reef

**3. Are you able to recall the name of this reef? If so, please list in below.**

\_\_\_\_\_ reef

**4. Imagine that you discovered that you could not snorkel/ SCUBA dive at this reef (from question #1 above) during your next planned snorkel/SCUBA dive trip. What would you do? (Please circle only one answer)**

- A I would still snorkel/ SCUBA dive, but elsewhere in the Florida Keys
- B I would still snorkel/ SCUBA dive, but at a location outside of the Florida Keys
- C I would temporarily participate in a different activity in the Florida Keys
- D I would temporarily participate in a different activity, but outside the Florida Keys

**5. Imagine that you discovered that you could not snorkel/ SCUBA dive at this reef (from question #1 above) for the next five years. What would you do?**

- A I would still snorkel/ SCUBA dive, but elsewhere in the Florida Keys
- B I would still snorkel/ SCUBA dive, but at a location outside of the Florida Keys
- C I would permanently participate in a different activity in the Florida Keys
- D I would permanently participate in a different activity, but outside the Florida Keys

**6. Imagine that you discovered during your next snorkel/ SCUBA dive trip that this reef (from question #1 above) was more crowded than you normally find acceptable. What would you do?**

- A I would make an exception and still snorkel/ SCUBA dive on this reef
- B I would still snorkel/ SCUBA dive, but elsewhere in the Florida Keys
- C I would temporarily participate in a different activity in the Florida Keys
- D I would temporarily participate in a different activity, but outside the Florida Keys

**7. Imagine that you discovered during your next snorkel/ SCUBA dive trip that this reef (from question #1 above) was more ecologically damaged (e.g., there wasn't enough healthy coral or fish) than normally find acceptable. What would you do?**

- A I would make an exception and still snorkel/ SCUBA dive on this reef
- B I would still snorkel/ SCUBA dive, but elsewhere in the Florida Keys
- C I would temporarily participate in a different activity in the Florida Keys
- D I would temporarily participate in a different activity, but outside the Florida Keys

**8. Imagine that you discovered during your next snorkel/ SCUBA dive trip that user groups with whom you experience conflict are using this reef (from question #1 above). What would you do?**

- A I would make an exception and still snorkel/ SCUBA dive on this reef
- B I would still snorkel/ SCUBA dive, but elsewhere in the Florida Keys
- C I would temporarily participate in a different activity in the Florida Keys
- D I would temporarily participate in a different activity, but outside the Florida Keys

**9. If you could not snorkel/SCUBA dive at this reef (from question #1 above), how many other Florida Keys reefs do you think can offer you just as good an experience as your favorite reefs?**

\_\_\_\_\_ number of other Florida Keys reefs

Don't Know

**10. If you could not snorkel/SCUBA dive at this reef (from question #1 above), how many other Florida Keys reefs do you think can offer you a similar, but not quite as good, experience?**

\_\_\_\_\_ number of other Florida Keys reefs

Don't Know

**11. Please rate how similar you think the snorkeling/SCUBA diving experience is at your best similar reef compared to this reef (from question #1 above).**

Not as good				Equivalent				Better
1	2	3	4	5	6	7		

12. There are many things that you might think about or consider when deciding to substitute one reef for another when snorkeling or SCUBA diving. Please indicate how important each of the following factors is in terms of deciding whether or not you would choose to snorkel/SCUBA dive at a substitute reef.

	Not at all important	Somewhat important	Moderately important	Very important	Extremely important
a) The quality of other reefs.....	1	2	3	4	5
b) The difficulty of the diving conditions on other reefs.....	1	2	3	4	5
c) The distance to other reefs.....	1	2	3	4	5
d) My familiarity with various dive shops.....	1	2	3	4	5
e) The adequacy of my boat to get to other reefs.....	1	2	3	4	5
f) The number of fish at other reefs.....	1	2	3	4	5
g) The cost of fuel to get to other reefs.....	1	2	3	4	5
h) The level of crowding at other reefs.....	1	2	3	4	5
i) The amount of live coral at other reefs.....	1	2	3	4	5
j) Area closures at desirable reef locations.....	1	2	3	4	5
k) The presence of other groups that I don't like.....	1	2	3	4	5
l) Other.....	1	2	3	4	5

13. If you could not go snorkeling/SCUBA diving, either in the Florida Keys or elsewhere, are there any other recreation activities in the Florida Keys that would provide you with the same satisfaction and enjoyment that you receive from going snorkeling/SCUBA diving?

Yes --- If yes, please go to question # 14 below

No --- If no, please go to question # 15 below

14. If you answered “yes” to question 13, please list up to three specific activities that you consider to be substitutes for snorkeling/SCUBA diving.

\_\_\_\_\_ activity

\_\_\_\_\_ activity

\_\_\_\_\_ activity

15. There are reasons why people cannot participate as often as they would like in an activity they enjoy doing. Please indicate the extent to which you agree or disagree with each of the following statements as they relate to your ability to snorkel/SCUBA dive in the Florida Keys as often as you would like.

	Completely disagree	Disagree	Neutral	Agree	Completely agree
a) I don't have enough leisure time.....	1	2	3	4	5
b) The equipment is too expensive.....	1	2	3	4	5
c) The cost of travel is too high.....	1	2	3	4	5
d) It is difficult to find snorkel/SCUBA diving partners.....	1	2	3	4	5
e) Fuel prices for my boat are too high.....	1	2	3	4	5
f) Snorkel/SCUBA diving areas are too crowded.....	1	2	3	4	5
g) Too many snorkel/SCUBA diving areas are off-limits.....	1	2	3	4	5
h) Dive boats are too expensive .....	1	2	3	4	5
i) Other.....	1	2	3	4	5

16. Below is a list of reasons why people snorkel/SCUBA dive in the Florida Keys. Please circle the number that indicates how important each item is to you as a reason for snorkel/SCUBA diving in the Florida Keys.

	Not at all important	Somewhat important	Moderately important	Very important	Extremely important
a) To develop my skills.....	1	2	3	4	5
b) To experience excitement.....	1	2	3	4	5
c) For family recreation.....	1	2	3	4	5
d) To be with friends.....	1	2	3	4	5
e) To be outdoors.....	1	2	3	4	5
f) To experience new and different things.....	1	2	3	4	5
g) For the experience of the dive.....	1	2	3	4	5
h) To get away from the demands of other people.....	1	2	3	4	5
i) To get away from the regular routine.....	1	2	3	4	5
j) To see diverse underwater life.....	1	2	3	4	5
k) To teach underwater skills to other people.....	1	2	3	4	5
l) To obtain additional dive ratings.....	1	2	3	4	5
m) To experience natural surroundings.....	1	2	3	4	5
n) For solitude.....	1	2	3	4	5
o) For relaxation.....	1	2	3	4	5
p) For the challenge of the dive.....	1	2	3	4	5

There are many places to engage in fishing. In the next several questions, we are attempting to understand the reason you may choose to fish in one location versus another, or if necessary, engage in an activity other than fishing in the Florida Keys.

**When answering the following questions, please think about a favorite or most common area that you fish in off the Florida Keys. If you do not have a favorite or most common area that you fish in off the Keys, please think about the last area that you fished in off the Florida Keys.**

**17. Please indicate which reef you are thinking of when responding to the following questions. (Please circle only one answer)**

- A My favorite reef to fish at
- B The most common area I fish at
- C The most recent area I fished in

**18. Is this area:**

- A A flat
- B A natural coral reef
- C Hawk Channel
- D An artificial reef
- E Other (please list) \_\_\_\_\_

**19. Are you able to recall the name of this area? If so, please list it below.**

\_\_\_\_\_ area

**20. Imagine that you discovered that you could not fish in this area (from question #17 above) during your next planned fishing trip. What would you do? (Please circle only one answer)**

- A I would still fish, but elsewhere in the Florida Keys
- B I would still fish, but at a location outside of the Florida Keys
- C I would temporarily participate in a different activity in the Florida Keys
- D I would temporarily participate in a different activity, but outside the Florida Keys

**21. Imagine that you discovered that you could not fish in this area (from question #17 above) for the next five years. What would you do?**

- A I would still fish, but elsewhere in the Florida Keys
- B I would still fish, but at a location outside of the Florida Keys
- C I would permanently participate in a different activity in the Florida Keys
- D I would permanently participate in a different activity, but outside the Florida Keys

**22. Imagine that you discovered during your next fishing trip that this area (from question #17 above) was more crowded than you normally find acceptable. What would you do?**

- A I would make an exception and still fish in this area
- B I would still fish, but elsewhere in the Florida Keys
- C I would temporarily participate in a different activity in the Florida Keys
- D I would temporarily participate in a different activity, but outside the Florida Keys

**23. Imagine that you discovered during your next fishing trip that this area (from question #17 above) was more ecologically damaged (e.g., there was no longer enough good fish habitat) than you normally find acceptable. What would you do?**

- A I would still fish in this area
- B I would still fish, but elsewhere in the Florida Keys
- C I would temporarily participate in a different activity in the Florida Keys
- D I would temporarily participate in a different activity, but outside the Florida Keys

**24. Imagine that you discovered during your next fishing trip that other user groups with whom you experience conflict are using this area (from question #17 above). What would you do?**

- A I would still fish in this area
- B I would still fish, but elsewhere in the Florida Keys
- C I would temporarily participate in a different activity in the Florida Keys
- D I would temporarily participate in a different activity, but outside the Florida Keys

**25. If you could not fish in this area (from question #17 above), how many other areas in the Florida Keys do you think can offer you an overall experience that is just as good?**

\_\_\_\_\_ number of other areas in the Florida Keys

Don't Know

**26. If you could not fish in this area (from question #17 above), how many other areas in the Florida Keys do you think can offer you a similar, but not quite as good, overall experience?**

\_\_\_\_\_ number of other areas Florida Keys

Don't Know

**27. Please rate how similar you think the fishing experience is at your best similar fishing area compared to this area.**

Not as good				Equivalent				Better
1	2	3	4	5	6	7		

**28. There are many things that you might think about or consider when deciding to substitute one fishing area for another. Please indicate how important each of the following factors is in terms of deciding whether or not you would choose to fish in a substitute area.**

	Not at all important	Somewhat important	Moderately important	Very important	Extremely important
a) The number of fish at other areas.....	1	2	3	4	5
b) The difficulty of boating conditions.....	1	2	3	4	5
c) The distance to other areas.....	1	2	3	4	5
d) The charter boats and captains at other areas.....	1	2	3	4	5
e) The adequacy of my boat to get to other areas.....	1	2	3	4	5
f) The cost of fuel to get to other areas.....	1	2	3	4	5
g) The level of crowding at other areas.....	1	2	3	4	5
h) Area closures at desirable locations.....	1	2	3	4	5
i) The presence of other groups that I don't like.....	1	2	3	4	5
j) Other.....	1	2	3	4	5

**29. If you could not go fishing, either in the Florida Keys or elsewhere, are there any other recreation activities in the Florida Keys that would provide you with the same satisfaction and enjoyment that you receive from going fishing?**

Yes --- If yes, please go to question # 30 below

No --- If no, please go to question # 31 below



30. If you answered “yes” to question D29, please list up to three specific activities that you consider to be substitutes for fishing in the Florida Keys.

\_\_\_\_\_ activity

\_\_\_\_\_ activity

\_\_\_\_\_ activity

31. There are reasons why people cannot participate as often as they would like in an activity they enjoy doing. Please indicate the extent to which you agree or disagree with each of the following statements as they relate to your ability to fish in the Florida Keys as often as you would like.

	Completely disagree	Disagree	Neutral	Agree	Completely agree
a) I don't have enough leisure time.....	1	2	3	4	5
b) The equipment is too expensive.....	1	2	3	4	5
c) The cost of travel is too high.....	1	2	3	4	5
d) It is difficult to find fishing partners.....	1	2	3	4	5
e) Fuel prices for my boat are too high.....	1	2	3	4	5
f) Fishing areas are too crowded.....	1	2	3	4	5
g) Too many fishing areas are off-limits.....	1	2	3	4	5
h) Fishing charters are too expensive.....	1	2	3	4	5
i) Other.....	1	2	3	4	5

32. Below is a list of reasons why people saltwater fish in the Florida Keys. Please circle the number that indicates how important each item is to you as a reason for saltwater fishing in the Florida Keys.

	Not at all important	Somewhat important	Moderately important	Very important	Extremely important
a) To develop my skills.....	1	2	3	4	5
b) To experience excitement.....	1	2	3	4	5
c) For family recreation.....	1	2	3	4	5
d) To be with friends.....	1	2	3	4	5
e) To be outdoors.....	1	2	3	4	5
f) To experience new and different things.....	1	2	3	4	5
g) For the experience of the catch.....	1	2	3	4	5
h) To get away from the demands of other people.....	1	2	3	4	5
i) To get away from the regular routine.....	1	2	3	4	5
j) To catch a trophy fish.....	1	2	3	4	5
k) For the sport of fishing, not to obtain food to eat.....	1	2	3	4	5
l) For the fun of catching fish.....	1	2	3	4	5
m) To experience natural surroundings.....	1	2	3	4	5
n) For solitude.....	1	2	3	4	5
o) For relaxation.....	1	2	3	4	5
p) For the challenge of the catch.....	1	2	3	4	5
q) To obtain fish for eating, not for sport.....	1	2	3	4	5

**Management Alternatives**

**Snorkeler / SCUBA diver**  
 If not a snorkeler / SCUBA diver in the Florida Keys, but do recreational fishing, GO to page 16.  
 If not a snorkeler / SCUBA diver or recreational fisher in the Florida Keys, GO to last page.

Please think about a recreational snorkeling / SCUBA diving experience on a reef in the Florida Keys when answering the questions on the following pages. You will be offered eight (8) choices of two diving trips. Each choice has different features for you to evaluate. Please read each choice carefully. Although they may look similar, trips in each question differ in at least one way.

There is an example to assist you. Please note the following definitions before reviewing the example.

- Number of Snorkelers / Divers - the number of snorkelers / divers on a reef at any one time
- Restrictions- percent area of reef open to use
- Enforcement- the number of law enforcement patrols you observe per trip
- Number of Fish Species- the amount of different kinds of fish species observed on the reef
- Site Settings- the amount of live coral and/or algae on the reef
- Number of Fish- the overall amount of fish observed on the reef
- Size of Fish- the size of fish observed on the reef
- Travel cost / day – Travel cost that a snorkeler / diver spends for a diving trip per day (including gas and other trip expenses)

**Example**

If you were planning a snorkel / SCUBA dive trip to the Florida Keys, which trip would you prefer: Trip A, Trip B, or neither?

ATTRIBUTE	Trip A	Trip B
<b>Number of Snorkelers / Divers</b>	<i>15% fewer snorkelers / divers</i>	<i>30% fewer snorkelers/ divers</i>
<b>Site Settings</b>	<i>Mix of coral and algae cover</i>	<i>High live coral cover</i>
<b>Restrictions</b>	<i>25% of area closed</i>	<i>75 % of area closed</i>
<b>Number of Fish</b>	<i>40% more fish</i>	<i>No increase in numbers of fish</i>
<b>Size of Fish</b>	<i>40% more larger fish</i>	<i>20 % more larger fish</i>
<b>Species</b>	<i>No change in species numbers</i>	<i>Fewer species</i>
<b>Enforcement</b>	<i>Two additional patrols</i>	<i>No additional patrols</i>
<b>Travel Cost / Day</b>	<i>Your current total cost per day</i>	<i>10% more than your current total cost per day</i>

**Which trip do you prefer?** (check only one box below)

- Trip A     
  Trip B     
  I would not take either trip

33. If you were planning a snorkel / SCUBA dive trip to the Florida Keys, which trip would you prefer: Trip A, Trip B, or neither?

<b>ATTRIBUTE</b>	<b>Trip A</b>	<b>Trip B</b>
<b>Number of Snorkelers / Divers</b>	<i>The usual number of other snorkelers / divers at the site</i>	<i>30% fewer snorkelers /divers</i>
<b>Site Settings</b>	<i>Mix of coral and algae cover</i>	<i>High algae cover</i>
<b>Restrictions</b>	<i>25% of area closed</i>	<i>75 % of area closed</i>
<b>Number of Fish</b>	<i>40% more fish</i>	<i>No increase in numbers of fish</i>
<b>Size of Fish</b>	<i>40% more larger fish</i>	<i>20 % more larger fish</i>
<b>Species</b>	<i>No change in species numbers</i>	<i>Many species</i>
<b>Enforcement</b>	<i>No additional patrols</i>	<i>Two additional patrols</i>
<b>Travel Cost / Day</b>	<i>10% less than your current total cost per day</i>	<i>10% less than your current total cost per day</i>

Which trip do you prefer? (check only one box below)

Trip A     Trip B     I would not take either trip

34. If you were planning a snorkel / SCUBA dive trip to the Florida Keys, which trip would you prefer: Trip A, Trip B, or neither?

<b>ATTRIBUTE</b>	<b>Trip A</b>	<b>Trip B</b>
<b>Number of Snorkelers / Divers</b>	<i>The usual number of other snorkelers / divers at the site</i>	<i>The usual number of other snorkelers / divers at the site</i>
<b>Site Settings</b>	<i>High live coral cover</i>	<i>High live coral cover</i>
<b>Restrictions</b>	<i>No area closed</i>	<i>75% of area closed</i>
<b>Number of Fish</b>	<i>60% more fish</i>	<i>No increase in numbers of fish</i>
<b>Size of Fish</b>	<i>60% more larger fish</i>	<i>40% more larger fish</i>
<b>Species</b>	<i>No change in species numbers</i>	<i>Fewer species</i>
<b>Enforcement</b>	<i>One additional patrol</i>	<i>One additional patrol</i>
<b>Travel Cost / Day</b>	<i>10% more than your current total cost per day</i>	<i>10% more than your current total cost per day</i>

Which trip do you prefer? (check only one box below)

Trip A     Trip B     I would not take either trip

35. If you were planning a snorkel / SCUBA dive trip to the Florida Keys, which trip would you prefer: Trip A, Trip B, or neither?

<b>ATTRIBUTE</b>	<b>Trip A</b>	<b>Trip B</b>
<b>Number of Snorkelers / Divers</b>	<i>15% fewer snorkelers / divers</i>	<i>15% fewer snorkelers / divers</i>
<b>Site Settings</b>	<i>Mix of coral and algae cover</i>	<i>High live coral cover</i>
<b>Restrictions</b>	<i>75% of area closed</i>	<i>25% of area closed</i>
<b>Number of Fish</b>	<i>20% more fish</i>	<i>20% more fish</i>
<b>Size of Fish</b>	<i>60% more larger fish</i>	<i>No increase in larger fish</i>
<b>Species</b>	<i>Fewer species</i>	<i>Fewer species</i>
<b>Enforcement</b>	<i>Two additional patrols</i>	<i>No additional patrols</i>
<b>Travel Cost / Day</b>	<i>10% less than your current total cost per day</i>	<i>Your current total cost per day</i>

Which trip do you prefer? (check only one box below)

Trip A     Trip B     I would not take either trip

36. If you were planning a snorkel / SCUBA dive trip to the Florida Keys, which trip would you prefer: Trip A, Trip B, or neither?

<b>ATTRIBUTE</b>	<b>Trip A</b>	<b>Trip B</b>
<b>Number of Snorkelers / Divers</b>	<i>30% fewer snorkelers / divers</i>	<i>15% fewer snorkelers / divers</i>
<b>Site Settings</b>	<i>High algae cover</i>	<i>High algae cover</i>
<b>Restrictions</b>	<i>50% of area closed</i>	<i>No area closed</i>
<b>Number of Fish</b>	<i>20% more fish</i>	<i>60% more fish</i>
<b>Size of Fish</b>	<i>20% more larger fish</i>	<i>20% more larger fish</i>
<b>Species</b>	<i>No change in species numbers</i>	<i>Fewer species</i>
<b>Enforcement</b>	<i>No additional patrols</i>	<i>Two additional patrols</i>
<b>Travel Cost / Day</b>	<i>10% more than your current total cost per day</i>	<i>10% more than your current total cost per day</i>

Which trip do you prefer? (check only one box below)

Trip A     Trip B     I would not take either trip

37. If you were planning a snorkel / SCUBA dive trip to the Florida Keys, which trip would you prefer: Trip A, Trip B, or neither?

ATTRIBUTE	Trip A	Trip B
<b>Number of Snorkelers / Divers</b>	<i>15% fewer snorkelers / divers</i>	<i>The usual number of other snorkelers / divers</i>
<b>Site Settings</b>	<i>Mix of coral and algae cover</i>	<i>High algae cover</i>
<b>Restrictions</b>	<i>50% of area closed</i>	<i>75% of area closed</i>
<b>Number of Fish</b>	<i>No increase in numbers of fish</i>	<i>60% more fish</i>
<b>Size of Fish</b>	<i>20% more larger fish</i>	<i>40% more larger fish</i>
<b>Species</b>	<i>Many species</i>	<i>No change in species numbers</i>
<b>Enforcement</b>	<i>Two additional patrols</i>	<i>One additional patrol</i>
<b>Travel Cost / Day</b>	<i>Your current total cost per day</i>	<i>10% less than your current total cost per day</i>

Which trip do you prefer? (check only one box below)

Trip A     Trip B     I would not take either trip

38. If you were planning a snorkel / SCUBA dive trip to the Florida Keys, which trip would you prefer: Trip A, Trip B, or neither?

ATTRIBUTE	Trip A	Trip B
<b>Number of Snorkelers / Divers</b>	<i>The usual number of other snorkelers / divers at the site</i>	<i>15% fewer snorkelers / divers</i>
<b>Site Settings</b>	<i>High live coral cover</i>	<i>Mix of coral and algae cover</i>
<b>Restrictions</b>	<i>75% of area closed</i>	<i>50% of area closed</i>
<b>Number of Fish</b>	<i>No increase in numbers of fish</i>	<i>40% more fish</i>
<b>Size of Fish</b>	<i>20% more larger fish</i>	<i>60% more larger fish</i>
<b>Species</b>	<i>No change in species numbers</i>	<i>No change in species numbers</i>
<b>Enforcement</b>	<i>No additional patrols</i>	<i>No additional patrols</i>
<b>Travel Cost / Day</b>	<i>10% less than your current total cost per day</i>	<i>10% less than your current total cost per day</i>

Which trip do you prefer? (check only one box below)

Trip A     Trip B     I would not take either trip

39. If you were planning a snorkel / SCUBA dive trip to the Florida Keys, which trip would you prefer: Trip A, Trip B, or neither?

<b>ATTRIBUTE</b>	<b>Trip A</b>	<b>Trip B</b>
<b>Number of Snorkelers / Divers</b>	<i>15% fewer snorkelers / divers</i>	<i>15% fewer snorkelers / divers</i>
<b>Site Settings</b>	<i>High live coral cover</i>	<i>High algae cover</i>
<b>Restrictions</b>	<i>25% of area closed</i>	<i>No area closed</i>
<b>Number of Fish</b>	<i>40% more fish</i>	<i>40% more fish</i>
<b>Size of Fish</b>	<i>60% more larger fish</i>	<i>60% more larger fish</i>
<b>Species</b>	<i>No change in species numbers</i>	<i>Many species</i>
<b>Enforcement</b>	<i>One additional patrol</i>	<i>One additional patrol</i>
<b>Travel Cost / Day</b>	<i>Your current total cost per day</i>	<i>10% less than your current total cost per day</i>

Which trip do you prefer? (check only one box below)

Trip A     Trip B     I would not take either trip

40. If you were planning a snorkel / SCUBA dive trip to the Florida Keys, which trip would you prefer: Trip A, Trip B, or neither?

<b>ATTRIBUTE</b>	<b>Trip A</b>	<b>Trip B</b>
<b>Number of Snorkelers / Divers</b>	<i>30% fewer snorkelers / divers</i>	<i>The usual number of other snorkelers / divers at the site</i>
<b>Site Settings</b>	<i>High algae cover</i>	<i>High live coral cover</i>
<b>Restrictions</b>	<i>50% of area closed</i>	<i>50% of area closed</i>
<b>Number of Fish</b>	<i>40% more fish</i>	<i>40% more fish</i>
<b>Size of Fish</b>	<i>No increase in larger fish</i>	<i>40% more larger fish</i>
<b>Species</b>	<i>Fewer species</i>	<i>Many species</i>
<b>Enforcement</b>	<i>No additional patrols</i>	<i>Two additional patrols</i>
<b>Travel Cost / Day</b>	<i>Your current total cost per day</i>	<i>10% more than your current total cost per day</i>

Which trip do you prefer? (check only one box below)

Trip A     Trip B     I would not take either trip

**Recreational Fisher**

If not a Recreational fisher in the Florida Keys, GO to last page.

Please think about a recreational fishing experience in the Florida Keys when answering the questions on the following pages. You will be offered eight (8) choices of two fishing trips. Each choice has different features for you to evaluate. Please read each choice carefully. Although they may look similar, trips in each question differ in at least one way.

There is an example to assist you. Please note the following definitions before reviewing the example.

- Number of Recreational Fishing Boats- the number of recreational fishing boats near you at any one time
- Number of Non-fishing boats- the number of non-fishing boats near you at any one time
- Restrictions- the number of reefs closed to fishing per zone (upper Keys, middle Keys, lower Keys)
- Number of Fish Species- the amount of different kinds of fish species caught in a trip
- Number of Fish- the overall amount of fish caught on a trip
- Size of Fish- the number of legal sized fish caught on a trip
- Travel cost / day – Travel cost that an angler spends for a fishing trip per day (including gas and other trip expenses)

**Example**

Suppose that you could choose from the recreational fishing opportunities described below. Which of these fishing trips would you prefer?

ATTRIBUTE	Trip A	Trip B
<b>Number of Recreational Fishing Boats</b>	<i>30% fewer boats</i>	<i>The usual number of other boats near the location</i>
<b>Number of Non-fishing Boats</b>	<i>The usual number of other boats near the location</i>	<i>30% fewer boats</i>
<b>Restrictions</b>	<i>25% of area closed</i>	<i>25% of area closed</i>
<b>Number of Species</b>	<i>No change in species numbers</i>	<i>Fewer species fish caught</i>
<b>Number of fish</b>	<i>10% more fish caught</i>	<i>30% more fish caught</i>
<b>Size of Fish</b>	<i>60% more keepers</i>	<i>20% more keepers</i>
<b>Travel Cost / Day</b>	<i>10% more than your current total cost per day</i>	<i>10% less than your current total cost per day</i>

Which trip do you prefer? (check only one box below)

- Trip A
  Trip B
  I would not take either trip



41. Suppose that you could choose from the recreational fishing opportunities described below. Which of these fishing trips would you prefer?

ATTRIBUTE	Trip A	Trip B
<b>Number of Recreational Fishing Boats</b>	<i>15% fewer boats</i>	<i>15% fewer boats</i>
<b>Number of Non-fishing Boats</b>	<i>30% fewer boats</i>	<i>30% fewer boats</i>
<b>Restrictions</b>	<i>25% of area closed</i>	<i>25% of area closed</i>
<b>Number of Species</b>	<i>No change in species numbers</i>	<i>Fewer species fish caught</i>
<b>Number of fish</b>	<i>30% more fish caught</i>	<i>30% more fish caught</i>
<b>Size of Fish</b>	<i>20% more keepers</i>	<i>40% more keepers</i>
<b>Travel Cost / Day</b>	<i>Your current total cost per day</i>	<i>Your current total cost per day</i>

Which trip do you prefer? (check only one box below)

Trip A     Trip B     I would not take either trip

42. Suppose that you could choose from the recreational fishing opportunities described below. Which of these fishing trips would you prefer?

ATTRIBUTE	Trip A	Trip B
<b>Number of Recreational Fishing Boats</b>	<i>30% fewer boats</i>	<i>The usual number of other boats near the location</i>
<b>Number of Non-fishing Boats</b>	<i>30% fewer boats</i>	<i>The usual number of other boats near the location</i>
<b>Restrictions</b>	<i>75% of area closed</i>	<i>50% of area closed</i>
<b>Number of Species</b>	<i>Fewer species fish caught</i>	<i>More species fish caught</i>
<b>Number of fish</b>	<i>10% more fish caught</i>	<i>10% more fish caught</i>
<b>Size of Fish</b>	<i>No increase in the number of caught kept</i>	<i>60% more keepers</i>
<b>Travel Cost / Day</b>	<i>Your current total cost per day</i>	<i>Your current total cost per day</i>

Which trip do you prefer? (check only one box below)

Trip A     Trip B     I would not take either trip

43. Suppose that you could choose from the recreational fishing opportunities described below. Which of these fishing trips would you prefer?

ATTRIBUTE	Trip A	Trip B
<b>Number of Recreational Fishing Boats</b>	<i>15% fewer boats</i>	<i>15% fewer boats</i>
<b>Number of Non-fishing Boats</b>	<i>30% fewer boats</i>	<i>The usual number of other boats near the location</i>
<b>Restrictions</b>	<i>25% of area closed</i>	<i>75% of area closed</i>
<b>Number of Species</b>	<i>Fewer species fish caught</i>	<i>More species fish caught</i>
<b>Number of fish</b>	<i>No increase in numbers of fish caught</i>	<i>20% more fish caught</i>
<b>Size of Fish</b>	<i>60% more keepers</i>	<i>20% more keepers</i>
<b>Travel Cost / Day</b>	<i>Your current total cost per day</i>	<i>10% less than your current total cost per day</i>

Which trip do you prefer? (check only one box below)

Trip A     Trip B     I would not take either trip

44. Suppose that you could choose from the recreational fishing opportunities described below. Which of these fishing trips would you prefer?

ATTRIBUTE	Trip A	Trip B
<b>Number of Recreational Fishing Boats</b>	<i>15% fewer boats</i>	<i>15% fewer boats</i>
<b>Number of Non-fishing Boats</b>	<i>15% fewer boats</i>	<i>The usual number of other boats near the location</i>
<b>Restrictions</b>	<i>25% of area closed</i>	<i>50% of area closed</i>
<b>Number of Species</b>	<i>More species fish caught</i>	<i>No change in species numbers</i>
<b>Number of fish</b>	<i>20% more fish caught</i>	<i>30% more fish caught</i>
<b>Size of Fish</b>	<i>No increase in the number of caught kept</i>	<i>No increase in the number of caught kept</i>
<b>Travel Cost / Day</b>	<i>10% more than your current total cost per day</i>	<i>10% more than your current total cost per day</i>

Which trip do you prefer? (check only one box below)

Trip A     Trip B     I would not take either trip

45. Suppose that you could choose from the recreational fishing opportunities described below. Which of these fishing trips would you prefer?

ATTRIBUTE	Trip A	Trip B
<b>Number of Recreational Fishing Boats</b>	<i>30% fewer boats</i>	<i>30% fewer boats</i>
<b>Number of Non-fishing Boats</b>	<i>The usual number of other boats near the location</i>	<i>15% fewer boats</i>
<b>Restrictions</b>	<i>75% of area closed</i>	<i>75% of area closed</i>
<b>Number of Species</b>	<i>More species fish caught</i>	<i>More species fish caught</i>
<b>Number of fish</b>	<i>20% more fish caught</i>	<i>10% more fish caught</i>
<b>Size of Fish</b>	<i>20% more keepers</i>	<i>No increase in the number of caught kept</i>
<b>Travel Cost / Day</b>	<i>10% less than your current total cost per day</i>	<i>10% less than your current total cost per day</i>

Which trip do you prefer? (check only one box below)

Trip A     Trip B     I would not take either trip

46. Suppose that you could choose from the recreational fishing opportunities described below. Which of these fishing trips would you prefer?

ATTRIBUTE	Trip A	Trip B
<b>Number of Recreational Fishing Boats</b>	<i>30% fewer boats</i>	<i>The usual number of other boats near the location</i>
<b>Number of Non-fishing Boats</b>	<i>The usual number of other boats near the location</i>	<i>15% fewer boats</i>
<b>Restrictions</b>	<i>25% of area closed</i>	<i>25% of area closed</i>
<b>Number of Species</b>	<i>Fewer species fish caught</i>	<i>No change in species numbers</i>
<b>Number of fish</b>	<i>30% more fish caught</i>	<i>No increase in numbers of fish caught</i>
<b>Size of Fish</b>	<i>40% more keepers</i>	<i>60% more keepers</i>
<b>Travel Cost / Day</b>	<i>10% more than your current total cost per day</i>	<i>Your current total cost per day</i>

Which trip do you prefer? (check only one box below)

Trip A     Trip B     I would not take either trip

47. Suppose that you could choose from the recreational fishing opportunities described below. Which of these fishing trips would you prefer?

ATTRIBUTE	Trip A	Trip B
<b>Number of Recreational Fishing Boats</b>	<i>The usual number of other boats near the location</i>	<i>30% fewer boats</i>
<b>Number of Non-fishing Boats</b>	<i>The usual number of other boats near the location</i>	<i>30% fewer boats</i>
<b>Restrictions</b>	<i>50% of area closed</i>	<i>No area closed</i>
<b>Number of Species</b>	<i>No change in species numbers</i>	<i>Fewer species fish caught</i>
<b>Number of fish</b>	<i>10% more fish caught</i>	<i>30% more fish caught</i>
<b>Size of Fish</b>	<i>60% more keepers</i>	<i>20% more keepers</i>
<b>Travel Cost / Day</b>	<i>10% more than your current total cost per day</i>	<i>10% less than your current total cost per day</i>

Which trip do you prefer? (check only one box below)

- Trip A     Trip B     I would not take either trip

48. Suppose that you could choose from the recreational fishing opportunities described below. Which of these fishing trips would you prefer?

ATTRIBUTE	Trip A	Trip B
<b>Number of Recreational Fishing Boats</b>	<i>The usual number of other boats near the location</i>	<i>The usual number of other boats near the location</i>
<b>Number of Non-fishing Boats</b>	<i>15% fewer boats</i>	<i>30% fewer boats</i>
<b>Restrictions</b>	<i>75% of area closed</i>	<i>No area closed</i>
<b>Number of Species</b>	<i>No change in species numbers</i>	<i>More species fish caught</i>
<b>Number of fish</b>	<i>30% more fish caught</i>	<i>No increase in numbers of fish caught</i>
<b>Size of Fish</b>	<i>60% more keepers</i>	<i>No increase in the number of caught kept</i>
<b>Travel Cost / Day</b>	<i>10% more than your current total cost per day</i>	<i>10% more than your current total cost per day</i>

Which trip do you prefer? (check only one box below)

- Trip A     Trip B     I would not take either trip

That's All!! If you would like to be entered into a sweepstakes to win a free Vacation to the Florida Keys, fill out your name, address and phone number below. All prizes will be awarded in October of 2007.

Name: \_\_\_\_\_

Address: \_\_\_\_\_

City: \_\_\_\_\_

State: \_\_\_\_\_ Zip: \_\_\_\_\_ Phone: \_\_\_\_\_

Prizes to be awarded are:

GRAND PRIZE

- \* Airfare for two from anywhere in the continental United States to the Florida Keys
- \* Rental car with unlimited miles for one week (seven days)
- \* Accommodations for two for one week (six nights)
- \* Two complimentary "activities" for two (i.e., diving trip, fishing charter, sunset sail, etc.)
- \* Complimentary dinner for two at local restaurant

FIRST PRIZE

- \* Accommodations for two for five days (four nights)
- \* Two complimentary "activities" for two (i.e., diving trip, fishing charter, sunset sail, etc.)
- \* Complimentary dinner for two at local restaurant

SECOND PRIZE

- \* Accommodations for two for four days (three nights)
- \* One complimentary "activity" for two (i.e., diving trip, fishing charter, sunset sail, etc.)
- \* Complimentary dinner for two at local restaurant

SECOND PRIZE

- \* Accommodations for two for three days (two nights)
- \* One complimentary "activity" for two (i.e., diving trip, fishing charter, sunset sail, etc.)

This is a cooperative research project of the Monroe County Tourist Development Council and the National Oceanic and Atmospheric Administration. Public reporting burden for this collection of information is estimated to average 20 minutes including time for reviewing instructions, searching existing data sources, gathering and maintaining the data need, 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 this burden, to U.S. Department of Commerce, Clearance Officer, Office of Chief Information Officer, Rm. 6625, 14th and Constitution Avenue NW, Washington, DC 20230. Notwithstanding any other provisions of the law, no person is required to respond to, nor shall any person be subject to penalty for failure to comply with, a collection of information subject to requirements of the Paperwork Reduction Act, unless that collection of information displays a currently valid OMB Control Number.

## THANK YOU!

for  
participating in this  
Recreation Survey

Dear Visitor,

During your recent trip to the Florida Keys 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 answers are voluntary and confidential. Your name will never be released to anyone unless otherwise required by law. After the completion of the project all materials identifying you as an individual will be destroyed.

When you complete the questionnaire, please reverse-fold it so that our return address on the GREEN PAGE in the inside is folded to the outside. Please staple or tape to seal the questionnaire and mail it back to us. No postage is needed. Your cooperation in this effort is greatly appreciated.

Sincerely,

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

There are many places to engage in snorkeling/SCUBA diving activities. In the next several questions, we are attempting to understand the reason you may choose to snorkel/SCUBA dive on one reef versus another, or if necessary, choose to engage in activities other than snorkeling/SCUBA diving in the Florida Keys.

**When answering the following questions, please think about a favorite or most common reef that you dive on in the Florida Keys. If you do not have a favorite or most common reef that you dive on in the Keys, please think about the last reef that you dove on in the Florida Keys.**

**Read the choices and circle the letter that indicates your answer for that question.**

**1. Please circle which reef you are thinking of when responding to the following questions. (Please circle only one answer)**

- A Favorite reef to snorkel/dive on
- B Most common reef I snorkel/dive on
- C Most recent reef I snorkeled/dove on

**2. Is this reef a:**

- A Natural coral reef
- B Artificial reef

**3. Are you able to recall the name of this reef? If so, please list in below.**

\_\_\_\_\_ reef

**4. Imagine that you discovered that you could not snorkel/ SCUBA dive at this reef (from question #1 above) during your next planned snorkel/SCUBA dive trip. What would you do? (Please circle only one answer)**

- A I would still snorkel/ SCUBA dive, but elsewhere in the Florida Keys
- B I would still snorkel/ SCUBA dive, but at a location outside of the Florida Keys
- C I would temporarily participate in a different activity in the Florida Keys
- D I would temporarily participate in a different activity, but outside the Florida Keys

**5. Imagine that you discovered that you could not snorkel/ SCUBA dive at this reef (from question #1 above) for the next five years. What would you do?**

- A I would still snorkel/ SCUBA dive, but elsewhere in the Florida Keys
- B I would still snorkel/ SCUBA dive, but at a location outside of the Florida Keys
- C I would permanently participate in a different activity in the Florida Keys
- D I would permanently participate in a different activity, but outside the Florida Keys

6. Imagine that you discovered during your next snorkel/ SCUBA dive trip that this reef (from question #1 above) was more crowded than you normally find acceptable. What would you do?

- A I would make an exception and still snorkel/ SCUBA dive on this reef
- B I would still snorkel/ SCUBA dive, but elsewhere in the Florida Keys
- C I would temporarily participate in a different activity in the Florida Keys
- D I would temporarily participate in a different activity, but outside the Florida Keys

7. Imagine that you discovered during your next snorkel/ SCUBA dive trip that this reef (from question #1 above) was more ecologically damaged (e.g., there wasn't enough healthy coral or fish) than normally find acceptable. What would you do?

- A I would make an exception and still snorkel/ SCUBA dive on this reef
- B I would still snorkel/ SCUBA dive, but elsewhere in the Florida Keys
- C I would temporarily participate in a different activity in the Florida Keys
- D I would temporarily participate in a different activity, but outside the Florida Keys

8. Imagine that you discovered during your next snorkel/ SCUBA dive trip that user groups with whom you experience conflict are using this reef (from question #1 above). What would you do?

- A I would make an exception and still snorkel/ SCUBA dive on this reef
- B I would still snorkel/ SCUBA dive, but elsewhere in the Florida Keys
- C I would temporarily participate in a different activity in the Florida Keys
- D I would temporarily participate in a different activity, but outside the Florida Keys

9. If you could not snorkel/SCUBA dive at this reef (from question #1 above), how many other Florida Keys reefs do you think can offer you just as good an experience as your favorite reefs?

\_\_\_\_\_ number of other Florida Keys reefs

Don't Know

10. If you could not snorkel/SCUBA dive at this reef (from question #1 above), how many other Florida Keys reefs do you think can offer you a similar, but not quite as good, experience?

\_\_\_\_\_ number of other Florida Keys reefs

Don't Know

11. Please rate how similar you think the snorkeling/SCUBA diving experience is at your best similar reef compared to this reef (from question #1 above).

Not as good				Equivalent				Better
1	2	3	4	5	6	7		



12. There are many things that you might think about or consider when deciding to substitute one reef for another when snorkeling or SCUBA diving. Please indicate how important each of the following factors is in terms of deciding whether or not you would choose to snorkel/SCUBA dive at a substitute reef.

	Not at all important	Somewhat important	Moderately important	Very important	Extremely important
a) The quality of other reefs.....	1	2	3	4	5
b) The difficulty of the diving conditions on other reefs.....	1	2	3	4	5
c) The distance to other reefs.....	1	2	3	4	5
d) My familiarity with various dive shops.....	1	2	3	4	5
e) The adequacy of my boat to get to other reefs.....	1	2	3	4	5
f) The number of fish at other reefs.....	1	2	3	4	5
g) The cost of fuel to get to other reefs.....	1	2	3	4	5
h) The level of crowding at other reefs.....	1	2	3	4	5
i) The amount of live coral at other reefs.....	1	2	3	4	5
j) Area closures at desirable reef locations.....	1	2	3	4	5
k) The presence of other groups that I don't like.....	1	2	3	4	5
l) Other.....	1	2	3	4	5

13. If you could not go snorkeling/SCUBA diving, either in the Florida Keys or elsewhere, are there any other recreation activities in the Florida Keys that would provide you with the same satisfaction and enjoyment that you receive from going snorkeling/SCUBA diving?

Yes --- If yes, please go to question # 14 below

No --- If no, please go to question # 15 below

14. If you answered “yes” to question 13, please list up to three specific activities that you consider to be substitutes for snorkeling/SCUBA diving.

\_\_\_\_\_ activity

\_\_\_\_\_ activity

\_\_\_\_\_ activity

15. There are reasons why people cannot participate as often as they would like in an activity they enjoy doing. Please indicate the extent to which you agree or disagree with each of the following statements as they relate to your ability to snorkel/SCUBA dive in the Florida Keys as often as you would like.

	Completely disagree	Disagree	Neutral	Agree	Completely agree
a) I don't have enough leisure time.....	1	2	3	4	5
b) The equipment is too expensive.....	1	2	3	4	5
c) The cost of travel is too high.....	1	2	3	4	5
d) It is difficult to find snorkel/SCUBA diving partners.....	1	2	3	4	5
e) Fuel prices for my boat are too high.....	1	2	3	4	5
f) Snorkel/SCUBA diving areas are too crowded.....	1	2	3	4	5
g) Too many snorkel/SCUBA diving areas are off-limits.....	1	2	3	4	5
h) Dive boats are too expensive .....	1	2	3	4	5
i) Other.....	1	2	3	4	5

16. Below is a list of reasons why people snorkel/SCUBA dive in the Florida Keys. Please circle the number that indicates how important each item is to you as a reason for snorkel/SCUBA diving in the Florida Keys.

	Not at all important	Somewhat important	Moderately important	Very important	Extremely important
a) To develop my skills.....	1	2	3	4	5
b) To experience excitement.....	1	2	3	4	5
c) For family recreation.....	1	2	3	4	5
d) To be with friends.....	1	2	3	4	5
e) To be outdoors.....	1	2	3	4	5
f) To experience new and different things.....	1	2	3	4	5
g) For the experience of the dive.....	1	2	3	4	5
h) To get away from the demands of other people.....	1	2	3	4	5
i) To get away from the regular routine.....	1	2	3	4	5
j) To see diverse underwater life.....	1	2	3	4	5
k) To teach underwater skills to other people.....	1	2	3	4	5
l) To obtain additional dive ratings.....	1	2	3	4	5
m) To experience natural surroundings.....	1	2	3	4	5
n) For solitude.....	1	2	3	4	5
o) For relaxation.....	1	2	3	4	5
p) For the challenge of the dive.....	1	2	3	4	5

There are many places to engage in fishing. In the next several questions, we are attempting to understand the reason you may choose to fish in one location versus another, or if necessary, engage in an activity other than fishing in the Florida Keys.

**When answering the following questions, please think about a favorite or most common area that you fish in off the Florida Keys. If you do not have a favorite or most common area that you fish in off the Keys, please think about the last area that you fished in off the Florida Keys.**

**17. Please indicate which reef you are thinking of when responding to the following questions. (Please circle only one answer)**

- A My favorite reef to fish at
- B The most common area I fish at
- C The most recent area I fished in

**18. Is this area:**

- A A flat
- B A natural coral reef
- C Hawk Channel
- D An artificial reef
- E Other (please list) \_\_\_\_\_

**19. Are you able to recall the name of this area? If so, please list it below.**

\_\_\_\_\_ area

**20. Imagine that you discovered that you could not fish in this area (from question #17 above) during your next planned fishing trip. What would you do? (Please circle only one answer)**

- A I would still fish, but elsewhere in the Florida Keys
- B I would still fish, but at a location outside of the Florida Keys
- C I would temporarily participate in a different activity in the Florida Keys
- D I would temporarily participate in a different activity, but outside the Florida Keys

**21. Imagine that you discovered that you could not fish in this area (from question #17 above) for the next five years. What would you do?**

- A I would still fish, but elsewhere in the Florida Keys
- B I would still fish, but at a location outside of the Florida Keys
- C I would permanently participate in a different activity in the Florida Keys
- D I would permanently participate in a different activity, but outside the Florida Keys

**22. Imagine that you discovered during your next fishing trip that this area (from question #17 above) was more crowded than you normally find acceptable. What would you do?**

- A I would make an exception and still fish in this area
- B I would still fish, but elsewhere in the Florida Keys
- C I would temporarily participate in a different activity in the Florida Keys
- D I would temporarily participate in a different activity, but outside the Florida Keys

**23. Imagine that you discovered during your next fishing trip that this area (from question #17 above) was more ecologically damaged (e.g., there was no longer enough good fish habitat) than you normally find acceptable. What would you do?**

- A I would still fish in this area
- B I would still fish, but elsewhere in the Florida Keys
- C I would temporarily participate in a different activity in the Florida Keys
- D I would temporarily participate in a different activity, but outside the Florida Keys

**24. Imagine that you discovered during your next fishing trip that other user groups with whom you experience conflict are using this area (from question #17 above). What would you do?**

- A I would still fish in this area
- B I would still fish, but elsewhere in the Florida Keys
- C I would temporarily participate in a different activity in the Florida Keys
- D I would temporarily participate in a different activity, but outside the Florida Keys

**25. If you could not fish in this area (from question #17 above), how many other areas in the Florida Keys do you think can offer you an overall experience that is just as good?**

\_\_\_\_\_ number of other areas in the Florida Keys

Don't Know

**26. If you could not fish in this area (from question #17 above), how many other areas in the Florida Keys do you think can offer you a similar, but not quite as good, overall experience?**

\_\_\_\_\_ number of other areas Florida Keys

Don't Know

**27. Please rate how similar you think the fishing experience is at your best similar fishing area compared to this area.**

Not as good				Equivalent				Better
1	2	3	4	5	6	7		

**28. There are many things that you might think about or consider when deciding to substitute one fishing area for another. Please indicate how important each of the following factors is in terms of deciding whether or not you would choose to fish in a substitute area.**

	Not at all important	Somewhat important	Moderately important	Very important	Extremely important
a) The number of fish at other areas.....	1	2	3	4	5
b) The difficulty of boating conditions.....	1	2	3	4	5
c) The distance to other areas.....	1	2	3	4	5
d) The charter boats and captains at other areas.....	1	2	3	4	5
e) The adequacy of my boat to get to other areas.....	1	2	3	4	5
f) The cost of fuel to get to other areas.....	1	2	3	4	5
g) The level of crowding at other areas.....	1	2	3	4	5
h) Area closures at desirable locations.....	1	2	3	4	5
i) The presence of other groups that I don't like.....	1	2	3	4	5
j) Other.....	1	2	3	4	5

**29. If you could not go fishing, either in the Florida Keys or elsewhere, are there any other recreation activities in the Florida Keys that would provide you with the same satisfaction and enjoyment that you receive from going fishing?**

Yes --- If yes, please go to question # 30 below

No --- If no, please go to question # 31 below

30. If you answered “yes” to question D29, please list up to three specific activities that you consider to be substitutes for fishing in the Florida Keys.

\_\_\_\_\_ activity

\_\_\_\_\_ activity

\_\_\_\_\_ activity

31. There are reasons why people cannot participate as often as they would like in an activity they enjoy doing. Please indicate the extent to which you agree or disagree with each of the following statements as they relate to your ability to fish in the Florida Keys as often as you would like.

	Completely disagree	Disagree	Neutral	Agree	Completely agree
a) I don't have enough leisure time.....	1	2	3	4	5
b) The equipment is too expensive.....	1	2	3	4	5
c) The cost of travel is too high.....	1	2	3	4	5
d) It is difficult to find fishing partners.....	1	2	3	4	5
e) Fuel prices for my boat are too high.....	1	2	3	4	5
f) Fishing areas are too crowded.....	1	2	3	4	5
g) Too many fishing areas are off-limits.....	1	2	3	4	5
h) Fishing charters are too expensive.....	1	2	3	4	5
i) Other.....	1	2	3	4	5

32. Below is a list of reasons why people saltwater fish in the Florida Keys. Please circle the number that indicates how important each item is to you as a reason for saltwater fishing in the Florida Keys.

	Not at all important	Somewhat important	Moderately important	Very important	Extremely important
a) To develop my skills.....	1	2	3	4	5
b) To experience excitement.....	1	2	3	4	5
c) For family recreation.....	1	2	3	4	5
d) To be with friends.....	1	2	3	4	5
e) To be outdoors.....	1	2	3	4	5
f) To experience new and different things.....	1	2	3	4	5
g) For the experience of the catch.....	1	2	3	4	5
h) To get away from the demands of other people.....	1	2	3	4	5
i) To get away from the regular routine.....	1	2	3	4	5
j) To catch a trophy fish.....	1	2	3	4	5
k) For the sport of fishing, not to obtain food to eat.....	1	2	3	4	5
l) For the fun of catching fish.....	1	2	3	4	5
m) To experience natural surroundings.....	1	2	3	4	5
n) For solitude.....	1	2	3	4	5
o) For relaxation.....	1	2	3	4	5
p) For the challenge of the catch.....	1	2	3	4	5
q) To obtain fish for eating, not for sport.....	1	2	3	4	5



**Management Alternatives**

**Snorkeler / SCUBA diver**  
 If not a snorkeler / SCUBA diver in the Florida Keys, but do recreational fishing, GO to page 16.  
 If not a snorkeler / SCUBA diver or recreational fisher in the Florida Keys, GO to last page.

Please think about a recreational snorkeling / SCUBA diving experience on a reef in the Florida Keys when answering the questions on the following pages. You will be offered eight (8) choices of two diving trips. Each choice has different features for you to evaluate. Please read each choice carefully. Although they may look similar, trips in each question differ in at least one way.

There is an example to assist you. Please note the following definitions before reviewing the example.

- Number of Snorkelers / Divers - the number of snorkelers / divers on a reef at any one time
- Restrictions- percent area of reef open to use
- Enforcement- the number of law enforcement patrols you observe per trip
- Number of Fish Species- the amount of different kinds of fish species observed on the reef
- Site Settings- the amount of live coral and/or algae on the reef
- Number of Fish- the overall amount of fish observed on the reef
- Size of Fish- the size of fish observed on the reef
- Travel cost / day – Travel cost that a snorkeler / diver spends for a diving trip per day (including gas and other trip expenses)

**Example**

If you were planning a snorkel / SCUBA dive trip to the Florida Keys, which trip would you prefer: Trip A, Trip B, or neither?

<b>ATTRIBUTE</b>	<b>Trip A</b>	<b>Trip B</b>
<b>Number of Snorkelers / Divers</b>	<i>15% fewer snorkelers / divers</i>	<i>30% fewer snorkelers / divers</i>
<b>Site Settings</b>	<i>Mix of coral and algae cover</i>	<i>High live coral cover</i>
<b>Restrictions</b>	<i>25% of area closed</i>	<i>75 % of area closed</i>
<b>Number of Fish</b>	<i>40% more fish</i>	<i>No increase in numbers of fish</i>
<b>Size of Fish</b>	<i>40% more larger fish</i>	<i>20 % more larger fish</i>
<b>Species</b>	<i>No change in species numbers</i>	<i>Fewer species</i>
<b>Enforcement</b>	<i>Two additional patrols</i>	<i>No additional patrols</i>
<b>Travel Cost / Day</b>	<i>Your current total cost per day</i>	<i>10% more than your current total cost per day</i>

Which trip do you prefer? (check only one box below)

- Trip A     
  Trip B     
  I would not take either trip

33. If you were planning a snorkel / SCUBA dive trip to the Florida Keys, which trip would you prefer: Trip A, Trip B, or neither?

<b>ATTRIBUTE</b>	<b>Trip A</b>	<b>Trip B</b>
<b>Number of Snorkelers / Divers</b>	<i>15% fewer snorkelers / divers</i>	<i>30% fewer snorkelers / divers</i>
<b>Site Settings</b>	<i>High live coral cover</i>	<i>Mix of coral and algae cover</i>
<b>Restrictions</b>	<i>75% of area closed</i>	<i>75% of area closed</i>
<b>Number of Fish</b>	<i>No increase in numbers of fish</i>	<i>60% more fish</i>
<b>Size of Fish</b>	<i>20% more larger fish</i>	<i>20% more larger fish</i>
<b>Species</b>	<i>Fewer species</i>	<i>Many species</i>
<b>Enforcement</b>	<i>One additional patrol</i>	<i>Two additional patrols</i>
<b>Travel Cost / Day</b>	<i>Your current total cost per day</i>	<i>10% more than your current total cost per day</i>

Which trip do you prefer? (check only one box below)

Trip A     Trip B     I would not take either trip

34. If you were planning a snorkel / SCUBA dive trip to the Florida Keys, which trip would you prefer: Trip A, Trip B, or neither?

<b>ATTRIBUTE</b>	<b>Trip A</b>	<b>Trip B</b>
<b>Number of Snorkelers / Divers</b>	<i>30% fewer snorkelers / divers</i>	<i>15% fewer snorkelers / divers</i>
<b>Site Settings</b>	<i>High algae cover</i>	<i>Mix of coral and algae cover</i>
<b>Restrictions</b>	<i>50% of area closed</i>	<i>25% of area closed</i>
<b>Number of Fish</b>	<i>40% more fish</i>	<i>20% more fish</i>
<b>Size of Fish</b>	<i>40% more larger fish</i>	<i>No increase in larger fish</i>
<b>Species</b>	<i>No change in species numbers</i>	<i>No change in species numbers</i>
<b>Enforcement</b>	<i>One additional patrol</i>	<i>One additional patrol</i>
<b>Travel Cost / Day</b>	<i>Your current total cost per day</i>	<i>10% more than your current total cost per day</i>

Which trip do you prefer? (check only one box below)

Trip A     Trip B     I would not take either trip

35. If you were planning a snorkel / SCUBA dive trip to the Florida Keys, which trip would you prefer: Trip A, Trip B, or neither?

ATTRIBUTE	Trip A	Trip B
<b>Number of Snorkelers / Divers</b>	<i>15% fewer snorkelers / divers</i>	<i>15% fewer snorkelers / divers</i>
<b>Site Settings</b>	<i>High algae cover</i>	<i>Mix of coral and algae cover</i>
<b>Restrictions</b>	<i>25% of area closed</i>	<i>No area closed</i>
<b>Number of Fish</b>	<i>40% more fish</i>	<i>No increase in numbers of fish</i>
<b>Size of Fish</b>	<i>20% more larger fish</i>	<i>40% more larger fish</i>
<b>Species</b>	<i>Fewer species</i>	<i>Fewer species</i>
<b>Enforcement</b>	<i>Two additional patrols</i>	<i>No additional patrols</i>
<b>Travel Cost / Day</b>	<i>10% more than your current total cost per day</i>	<i>10% less than your current total cost per day</i>

Which trip do you prefer? (check only one box below)

- Trip A     Trip B     I would not take either trip

36. If you were planning a snorkel / SCUBA dive trip to the Florida Keys, which trip would you prefer: Trip A, Trip B, or neither?

ATTRIBUTE	Trip A	Trip B
<b>Number of Snorkelers / Divers</b>	<i>15% fewer snorkelers / divers</i>	<i>The usual number of other snorkelers / divers at the site</i>
<b>Site Settings</b>	<i>Mix of coral and algae cover</i>	<i>High algae cover</i>
<b>Restrictions</b>	<i>50% of area closed</i>	<i>25% of area closed</i>
<b>Number of Fish</b>	<i>No increase in numbers of fish</i>	<i>No increase in numbers of fish</i>
<b>Size of Fish</b>	<i>60% more larger fish</i>	<i>60% more larger fish</i>
<b>Species</b>	<i>No change in species numbers</i>	<i>Fewer species</i>
<b>Enforcement</b>	<i>No additional Patrols</i>	<i>Two additional patrols</i>
<b>Travel Cost / Day</b>	<i>10% more than your current total cost per day</i>	<i>10% more than your current total cost per day</i>

Which trip do you prefer? (check only one box below)

- Trip A     Trip B     I would not take either trip

37. If you were planning a snorkel / SCUBA dive trip to the Florida Keys, which trip would you prefer: Trip A, Trip B, or neither?

<b>ATTRIBUTE</b>	<b>Trip A</b>	<b>Trip B</b>
<b>Number of Snorkelers / Divers</b>	<i>15% fewer snorkelers / divers</i>	<i>30% fewer snorkelers / divers</i>
<b>Site Settings</b>	<i>High live coral cover</i>	<i>High algae cover</i>
<b>Restrictions</b>	<i>No area closed</i>	<i>50% of area closed</i>
<b>Number of Fish</b>	<i>20% more fish</i>	<i>40% more fish</i>
<b>Size of Fish</b>	<i>40% more larger fish</i>	<i>40% more larger fish</i>
<b>Species</b>	<i>No change in species numbers</i>	<i>Fewer species</i>
<b>Enforcement</b>	<i>No additional Patrols</i>	<i>No additional Patrols</i>
<b>Travel Cost / Day</b>	<i>Your current total cost per day</i>	<i>Your current total cost per day</i>

Which trip do you prefer? (check only one box below)

- Trip A     Trip B     I would not take either trip

38. If you were planning a snorkel / SCUBA dive trip to the Florida Keys, which trip would you prefer: Trip A, Trip B, or neither?

<b>ATTRIBUTE</b>	<b>Trip A</b>	<b>Trip B</b>
<b>Number of Snorkelers / Divers</b>	<i>The usual number of other snorkelers / divers at the site</i>	<i>The usual number of other snorkelers / divers at the site</i>
<b>Site Settings</b>	<i>High algae cover</i>	<i>High live coral cover</i>
<b>Restrictions</b>	<i>50% of area closed</i>	<i>75% of area closed</i>
<b>Number of Fish</b>	<i>20% more fish</i>	<i>40% more fish</i>
<b>Size of Fish</b>	<i>60% more larger fish</i>	<i>20% more larger fish</i>
<b>Species</b>	<i>Fewer species</i>	<i>No change in species numbers</i>
<b>Enforcement</b>	<i>One additional patrol</i>	<i>No additional Patrols</i>
<b>Travel Cost / Day</b>	<i>10% less than your current total cost per day</i>	<i>10% less than your current total cost per day</i>

Which trip do you prefer? (check only one box below)

- Trip A     Trip B     I would not take either trip

39. If you were planning a snorkel / SCUBA dive trip to the Florida Keys, which trip would you prefer: Trip A, Trip B, or neither?

ATTRIBUTE	Trip A	Trip B
<b>Number of Snorkelers / Divers</b>	<i>30% fewer snorkelers / divers</i>	<i>The usual number of other snorkelers / divers at the site</i>
<b>Site Settings</b>	<i>High live coral cover</i>	<i>High live coral cover</i>
<b>Restrictions</b>	<i>25% of area closed</i>	<i>25% of area closed</i>
<b>Number of Fish</b>	<i>60% more fish</i>	<i>60% more fish</i>
<b>Size of Fish</b>	<i>20% more larger fish</i>	<i>No increase in larger fish</i>
<b>Species</b>	<i>Many species</i>	<i>Fewer species</i>
<b>Enforcement</b>	<i>No additional patrols</i>	<i>One additional patrol</i>
<b>Travel Cost / Day</b>	<i>10% less than your current total cost per day</i>	<i>10% less than your current total cost per day</i>

Which trip do you prefer? (check only one box below)

Trip A     Trip B     I would not take either trip

40. If you were planning a snorkel / SCUBA dive trip to the Florida Keys, which trip would you prefer: Trip A, Trip B, or neither?

ATTRIBUTE	Trip A	Trip B
<b>Number of Snorkelers / Divers</b>	<i>The usual number of other snorkelers / divers at the site</i>	<i>30% fewer snorkelers / divers</i>
<b>Site Settings</b>	<i>Mix of coral and algae cover</i>	<i>Mix of coral and algae cover</i>
<b>Restrictions</b>	<i>75% of area closed</i>	<i>No area closed</i>
<b>Number of Fish</b>	<i>60% more fish</i>	<i>40% more fish</i>
<b>Size of Fish</b>	<i>No increase in larger fish</i>	<i>No increase in larger fish</i>
<b>Species</b>	<i>Many species</i>	<i>No change in species numbers</i>
<b>Enforcement</b>	<i>One additional patrol</i>	<i>Two additional patrols</i>
<b>Travel Cost / Day</b>	<i>10% more than your current total cost per day</i>	<i>10% less than your current total cost per day</i>

Which trip do you prefer? (check only one box below)

Trip A     Trip B     I would not take either trip

**Recreational Fisher**  
**If not a Recreational fisher in the Florida Keys, GO to last page.**

Please think about a recreational fishing experience in the Florida Keys when answering the questions on the following pages. You will be offered eight (8) choices of two fishing trips. Each choice has different features for you to evaluate. Please read each choice carefully. Although they may look similar, trips in each question differ in at least one way.

There is an example to assist you. Please note the following definitions before reviewing the example.

- Number of Recreational Fishing Boats- the number of recreational fishing boats near you at any one time
- Number of Non-fishing boats- the number of non-fishing boats near you at any one time
- Restrictions- the number of reefs closed to fishing per zone (upper Keys, middle Keys, lower Keys)
- Number of Fish Species- the amount of different kinds of fish species caught in a trip
- Number of Fish- the overall amount of fish caught on a trip
- Size of Fish- the number of legal sized fish caught on a trip
- Travel cost / day – Travel cost that an angler spends for a fishing trip per day (including gas and other trip expenses)

**Example**

Suppose that you could choose from the recreational fishing opportunities described below. Which of these fishing trips would you prefer?

<b>ATTRIBUTE</b>	<b>Trip A</b>	<b>Trip B</b>
<b>Number of Recreational Fishing Boats</b>	<i>30% fewer boats</i>	<i>The usual number of other boats near the location</i>
<b>Number of Non-fishing Boats</b>	<i>The usual number of other boats near the location</i>	<i>30% fewer boats</i>
<b>Restrictions</b>	<i>25% of area closed</i>	<i>25% of area closed</i>
<b>Number of Species</b>	<i>No change in species numbers</i>	<i>Fewer species fish caught</i>
<b>Number of fish</b>	<i>10% more fish caught</i>	<i>30% more fish caught</i>
<b>Size of Fish</b>	<i>60% more keepers</i>	<i>20% more keepers</i>
<b>Travel Cost / Day</b>	<i>10% more than your current total cost per day</i>	<i>10% less than your current total cost per day</i>

Which trip do you prefer? (check only one box below)

- Trip A     
  Trip B     
  I would not take either trip

41. Suppose that you could choose from the recreational fishing opportunities described below. Which of these fishing trips would you prefer?

ATTRIBUTE	Trip A	Trip B
<b>Number of Recreational Fishing Boats</b>	<i>The usual number of other boats near the location</i>	<i>The usual number of other boats near the location</i>
<b>Number of Non-fishing Boats</b>	<i>30% fewer boats</i>	<i>The usual number of other boats near the location</i>
<b>Restrictions</b>	<i>75% of area closed</i>	<i>25% of area closed</i>
<b>Number of Species</b>	<i>No change in species numbers</i>	<i>No change in species numbers</i>
<b>Number of fish</b>	<i>No increase in numbers of fish caught</i>	<i>20% more fish caught</i>
<b>Size of Fish</b>	<i>40% more keepers</i>	<i>No increase in the number of caught kept</i>
<b>Travel Cost / Day</b>	<i>10% more than your current total cost per day</i>	<i>10% less than your current total cost per day</i>

Which trip do you prefer? (check only one box below)

Trip A     Trip B     I would not take either trip

42. Suppose that you could choose from the recreational fishing opportunities described below. Which of these fishing trips would you prefer?

ATTRIBUTE	Trip A	Trip B
<b>Number of Recreational Fishing Boats</b>	<i>The usual number of other boats near the location</i>	<i>15% fewer boats</i>
<b>Number of Non-fishing Boats</b>	<i>15% fewer boats</i>	<i>The usual number of other boats near the location</i>
<b>Restrictions</b>	<i>No area closed</i>	<i>50% of area closed</i>
<b>Number of Species</b>	<i>More species fish caught</i>	<i>More species fish caught</i>
<b>Number of fish</b>	<i>30% more fish caught</i>	<i>10% more fish caught</i>
<b>Size of Fish</b>	<i>20% more keepers</i>	<i>60% more keepers</i>
<b>Travel Cost / Day</b>	<i>10% more than your current total cost per day</i>	<i>10% less than your current total cost per day</i>

Which trip do you prefer? (check only one box below)

Trip A     Trip B     I would not take either trip

43. Suppose that you could choose from the recreational fishing opportunities described below. Which of these fishing trips would you prefer?

ATTRIBUTE	Trip A	Trip B
<b>Number of Recreational Fishing Boats</b>	<i>15% fewer boats</i>	<i>30% fewer boats</i>
<b>Number of Non-fishing Boats</b>	<i>30% fewer boats</i>	<i>15% fewer boats</i>
<b>Restrictions</b>	<i>25% of area closed</i>	<i>No area closed</i>
<b>Number of Species</b>	<i>No change in species numbers</i>	<i>More species fish caught</i>
<b>Number of fish</b>	<i>20% more fish caught</i>	<i>20% more fish caught</i>
<b>Size of Fish</b>	<i>No increase in the number of caught kept</i>	<i>60% more keepers</i>
<b>Travel Cost / Day</b>	<i>10% less than your current total cost per day</i>	<i>Your current total cost per day</i>

Which trip do you prefer? (check only one box below)

Trip A     Trip B     I would not take either trip

44. Suppose that you could choose from the recreational fishing opportunities described below. Which of these fishing trips would you prefer?

ATTRIBUTE	Trip A	Trip B
<b>Number of Recreational Fishing Boats</b>	<i>30% fewer boats</i>	<i>15% fewer boats</i>
<b>Number of Non-fishing Boats</b>	<i>15% fewer boats</i>	<i>30% fewer boats</i>
<b>Restrictions</b>	<i>No area closed</i>	<i>No area closed</i>
<b>Number of Species</b>	<i>Fewer species fish caught fish caught</i>	<i>No change in species numbers</i>
<b>Number of fish</b>	<i>10% more fish caught</i>	<i>20% more fish caught</i>
<b>Size of Fish</b>	<i>40% more keepers</i>	<i>60% more keepers</i>
<b>Travel Cost / Day</b>	<i>10% less than your current total cost per day</i>	<i>10% more than your current total cost per day</i>

Which trip do you prefer? (check only one box below)

Trip A     Trip B     I would not take either trip



45. Suppose that you could choose from the recreational fishing opportunities described below. Which of these fishing trips would you prefer?

ATTRIBUTE	Trip A	Trip B
<b>Number of Recreational Fishing Boats</b>	<i>30% fewer boats</i>	<i>30% fewer boats</i>
<b>Number of Non-fishing Boats</b>	<i>30% fewer boats</i>	<i>The usual number of other boats near the location</i>
<b>Restrictions</b>	<i>50% of area closed</i>	<i>50% of area closed</i>
<b>Number of Species</b>	<i>More species fish caught</i>	<i>Fewer species fish caught</i>
<b>Number of fish</b>	<i>30% more fish caught</i>	<i>No increase in numbers of fish caught</i>
<b>Size of Fish</b>	<i>No increase in the number of caught kept</i>	<i>20% more keepers</i>
<b>Travel Cost / Day</b>	<i>10% less than your current total cost per day</i>	<i>10% more than your current total cost per day</i>

Which trip do you prefer? (check only one box below)

Trip A     Trip B     I would not take either trip

46. Suppose that you could choose from the recreational fishing opportunities described below. Which of these fishing trips would you prefer?

ATTRIBUTE	Trip A	Trip B
<b>Number of Recreational Fishing Boats</b>	<i>The usual number of other boats near the location</i>	<i>The usual number of other boats near the location</i>
<b>Number of Non-fishing Boats</b>	<i>15% fewer boats</i>	<i>30% fewer boats</i>
<b>Restrictions</b>	<i>25% of area closed</i>	<i>75% of area closed</i>
<b>Number of Species</b>	<i>Fewer species fish caught</i>	<i>Fewer species fish caught</i>
<b>Number of fish</b>	<i>20% more fish caught</i>	<i>No increase in numbers of fish caught</i>
<b>Size of Fish</b>	<i>No increase in the number of caught kept</i>	<i>40% more keepers</i>
<b>Travel Cost / Day</b>	<i>Your current total cost per day</i>	<i>10% less than your current total cost per day</i>

Which trip do you prefer? (check only one box below)

Trip A     Trip B     I would not take either trip

47. Suppose that you could choose from the recreational fishing opportunities described below. Which of these fishing trips would you prefer?

ATTRIBUTE	Trip A	Trip B
<b>Number of Recreational Fishing Boats</b>	<i>15% fewer boats</i>	<i>The usual number of other boats near the location</i>
<b>Number of Non-fishing Boats</b>	<i>The usual number of other boats near the location</i>	<i>15% fewer boats</i>
<b>Restrictions</b>	<i>50% of area closed</i>	<i>75% of area closed</i>
<b>Number of Species</b>	<i>Fewer species fish caught</i>	<i>No change in species numbers</i>
<b>Number of fish</b>	<i>10% more fish caught</i>	<i>10% more fish caught</i>
<b>Size of Fish</b>	<i>60% more keepers</i>	<i>No increase in the number of caught kept</i>
<b>Travel Cost / Day</b>	<i>Your current total cost per day</i>	<i>Your current total cost per day</i>

Which trip do you prefer? (check only one box below)

Trip A     Trip B     I would not take either trip

48. Suppose that you could choose from the recreational fishing opportunities described below. Which of these fishing trips would you prefer?

ATTRIBUTE	Trip A	Trip B
<b>Number of Recreational Fishing Boats</b>	<i>30% fewer boats</i>	<i>30% fewer boats</i>
<b>Number of Non-fishing Boats</b>	<i>15% fewer boats</i>	<i>15% fewer boats</i>
<b>Restrictions</b>	<i>25% of area closed</i>	<i>25% of area closed</i>
<b>Number of Species</b>	<i>More species fish caught</i>	<i>Fewer species fish caught</i>
<b>Number of fish</b>	<i>No increase in numbers of fish caught</i>	<i>30% more fish caught</i>
<b>Size of Fish</b>	<i>60% more keepers</i>	<i>40% more keepers</i>
<b>Travel Cost / Day</b>	<i>10% less than your current total cost per day</i>	<i>10% more than your current total cost per day</i>

Which trip do you prefer? (check only one box below)

Trip A     Trip B     I would not take either trip

That's All!! If you would like to be entered into a sweepstakes to win a free Vacation to the Florida Keys, fill out your name, address and phone number below. All prizes will be awarded in October of 2007.

Name: \_\_\_\_\_

Address: \_\_\_\_\_

City: \_\_\_\_\_

State: \_\_\_\_\_ Zip: \_\_\_\_\_ Phone: \_\_\_\_\_

Prizes to be awarded are:

GRAND PRIZE

- \* Airfare for two from anywhere in the continental United States to the Florida Keys
- \* Rental car with unlimited miles for one week (seven days)
- \* Accommodations for two for one week (six nights)
- \* Two complimentary "activities" for two (i.e., diving trip, fishing charter, sunset sail, etc.)
- \* Complimentary dinner for two at local restaurant

FIRST PRIZE

- \* Accommodations for two for five days (four nights)
- \* Two complimentary "activities" for two (i.e., diving trip, fishing charter, sunset sail, etc.)
- \* Complimentary dinner for two at local restaurant

SECOND PRIZE

- \* Accommodations for two for four days (three nights)
- \* One complimentary "activity" for two (i.e., diving trip, fishing charter, sunset sail, etc.)
- \* Complimentary dinner for two at local restaurant

SECOND PRIZE

- \* Accommodations for two for three days (two nights)
- \* One complimentary "activity" for two (i.e., diving trip, fishing charter, sunset sail, etc.)

This is a cooperative research project of the Monroe County Tourist Development Council and the National Oceanic and Atmospheric Administration. Public reporting burden for this collection of information is estimated to average 20 minutes including time for reviewing instructions, searching existing data sources, gathering and maintaining the data need, 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 this burden, to U.S. Department of Commerce, Clearance Officer, Office of Chief Information Officer, Rm. 6625, 14th and Constitution Avenue NW, Washington, DC 20230. Notwithstanding any other provisions of the law, no person is required to respond to, nor shall any person be subject to penalty for failure to comply with, a collection of information subject to requirements of the Paperwork Reduction Act, unless that collection of information displays a currently valid OMB Control Number.

## THANK YOU!

for  
participating in this  
Recreation Survey

Dear Visitor,

During your recent trip to the Florida Keys 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 answers are voluntary and confidential. Your name will never be released to anyone unless otherwise required by law. After the completion of the project all materials identifying you as an individual will be destroyed.

When you complete the questionnaire, please reverse-fold it so that our return address on the GREEN PAGE in the inside is folded to the outside. Please staple or tape to seal the questionnaire and mail it back to us. No postage is needed. Your cooperation in this effort is greatly appreciated.

Sincerely,

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

There are many places to engage in snorkeling/SCUBA diving activities. In the next several questions, we are attempting to understand the reason you may choose to snorkel/SCUBA dive on one reef versus another, or if necessary, choose to engage in activities other than snorkeling/SCUBA diving in the Florida Keys.

**When answering the following questions, please think about a favorite or most common reef that you dive on in the Florida Keys. If you do not have a favorite or most common reef that you dive on in the Keys, please think about the last reef that you dove on in the Florida Keys.**

**Read the choices and circle the letter that indicates your answer for that question.**

**1. Please circle which reef you are thinking of when responding to the following questions. (Please circle only one answer)**

- A Favorite reef to snorkel/dive on
- B Most common reef I snorkel/dive on
- C Most recent reef I snorkeled/dove on

**2. Is this reef a:**

- A Natural coral reef
- B Artificial reef

**3. Are you able to recall the name of this reef? If so, please list in below.**

\_\_\_\_\_ reef

**4. Imagine that you discovered that you could not snorkel/ SCUBA dive at this reef (from question #1 above) during your next planned snorkel/SCUBA dive trip. What would you do? (Please circle only one answer)**

- A I would still snorkel/ SCUBA dive, but elsewhere in the Florida Keys
- B I would still snorkel/ SCUBA dive, but at a location outside of the Florida Keys
- C I would temporarily participate in a different activity in the Florida Keys
- D I would temporarily participate in a different activity, but outside the Florida Keys

**5. Imagine that you discovered that you could not snorkel/ SCUBA dive at this reef (from question #1 above) for the next five years. What would you do?**

- A I would still snorkel/ SCUBA dive, but elsewhere in the Florida Keys
- B I would still snorkel/ SCUBA dive, but at a location outside of the Florida Keys
- C I would permanently participate in a different activity in the Florida Keys
- D I would permanently participate in a different activity, but outside the Florida Keys

**6. Imagine that you discovered during your next snorkel/ SCUBA dive trip that this reef (from question #1 above) was more crowded than you normally find acceptable. What would you do?**

- A I would make an exception and still snorkel/ SCUBA dive on this reef
- B I would still snorkel/ SCUBA dive, but elsewhere in the Florida Keys
- C I would temporarily participate in a different activity in the Florida Keys
- D I would temporarily participate in a different activity, but outside the Florida Keys

**7. Imagine that you discovered during your next snorkel/ SCUBA dive trip that this reef (from question #1 above) was more ecologically damaged (e.g., there wasn't enough healthy coral or fish) than normally find acceptable. What would you do?**

- A I would make an exception and still snorkel/ SCUBA dive on this reef
- B I would still snorkel/ SCUBA dive, but elsewhere in the Florida Keys
- C I would temporarily participate in a different activity in the Florida Keys
- D I would temporarily participate in a different activity, but outside the Florida Keys

**8. Imagine that you discovered during your next snorkel/ SCUBA dive trip that user groups with whom you experience conflict are using this reef (from question #1 above). What would you do?**

- A I would make an exception and still snorkel/ SCUBA dive on this reef
- B I would still snorkel/ SCUBA dive, but elsewhere in the Florida Keys
- C I would temporarily participate in a different activity in the Florida Keys
- D I would temporarily participate in a different activity, but outside the Florida Keys

**9. If you could not snorkel/SCUBA dive at this reef (from question #1 above), how many other Florida Keys reefs do you think can offer you just as good an experience as your favorite reefs?**

\_\_\_\_\_ number of other Florida Keys reefs

Don't Know

**10. If you could not snorkel/SCUBA dive at this reef (from question #1 above), how many other Florida Keys reefs do you think can offer you a similar, but not quite as good, experience?**

\_\_\_\_\_ number of other Florida Keys reefs

Don't Know

**11. Please rate how similar you think the snorkeling/SCUBA diving experience is at your best similar reef compared to this reef (from question #1 above).**

Not as good				Equivalent				Better
1	2	3	4	5	6	7		

12. There are many things that you might think about or consider when deciding to substitute one reef for another when snorkeling or SCUBA diving. Please indicate how important each of the following factors is in terms of deciding whether or not you would choose to snorkel/SCUBA dive at a substitute reef.

	Not at all important	Somewhat important	Moderately important	Very important	Extremely important
a) The quality of other reefs.....	1	2	3	4	5
b) The difficulty of the diving conditions on other reefs.....	1	2	3	4	5
c) The distance to other reefs.....	1	2	3	4	5
d) My familiarity with various dive shops.....	1	2	3	4	5
e) The adequacy of my boat to get to other reefs.....	1	2	3	4	5
f) The number of fish at other reefs.....	1	2	3	4	5
g) The cost of fuel to get to other reefs.....	1	2	3	4	5
h) The level of crowding at other reefs.....	1	2	3	4	5
i) The amount of live coral at other reefs.....	1	2	3	4	5
j) Area closures at desirable reef locations.....	1	2	3	4	5
k) The presence of other groups that I don't like.....	1	2	3	4	5
l) Other.....	1	2	3	4	5

13. If you could not go snorkeling/SCUBA diving, either in the Florida Keys or elsewhere, are there any other recreation activities in the Florida Keys that would provide you with the same satisfaction and enjoyment that you receive from going snorkeling/SCUBA diving?

Yes --- If yes, please go to question # 14 below

No --- If no, please go to question # 15 below

14. If you answered “yes” to question 13, please list up to three specific activities that you consider to be substitutes for snorkeling/SCUBA diving.

\_\_\_\_\_ activity

\_\_\_\_\_ activity

\_\_\_\_\_ activity

15. There are reasons why people cannot participate as often as they would like in an activity they enjoy doing. Please indicate the extent to which you agree or disagree with each of the following statements as they relate to your ability to snorkel/SCUBA dive in the Florida Keys as often as you would like.

	Completely disagree	Disagree	Neutral	Agree	Completely agree
a) I don't have enough leisure time.....	1	2	3	4	5
b) The equipment is too expensive.....	1	2	3	4	5
c) The cost of travel is too high.....	1	2	3	4	5
d) It is difficult to find snorkel/SCUBA diving partners.....	1	2	3	4	5
e) Fuel prices for my boat are too high.....	1	2	3	4	5
f) Snorkel/SCUBA diving areas are too crowded.....	1	2	3	4	5
g) Too many snorkel/SCUBA diving areas are off-limits.....	1	2	3	4	5
h) Dive boats are too expensive .....	1	2	3	4	5
i) Other.....	1	2	3	4	5



16. Below is a list of reasons why people snorkel/SCUBA dive in the Florida Keys. Please circle the number that indicates how important each item is to you as a reason for snorkel/SCUBA diving in the Florida Keys.

	Not at all important	Somewhat important	Moderately important	Very important	Extremely important
a) To develop my skills.....	1	2	3	4	5
b) To experience excitement.....	1	2	3	4	5
c) For family recreation.....	1	2	3	4	5
d) To be with friends.....	1	2	3	4	5
e) To be outdoors.....	1	2	3	4	5
f) To experience new and different things.....	1	2	3	4	5
g) For the experience of the dive.....	1	2	3	4	5
h) To get away from the demands of other people.....	1	2	3	4	5
i) To get away from the regular routine.....	1	2	3	4	5
j) To see diverse underwater life.....	1	2	3	4	5
k) To teach underwater skills to other people.....	1	2	3	4	5
l) To obtain additional dive ratings.....	1	2	3	4	5
m) To experience natural surroundings.....	1	2	3	4	5
n) For solitude.....	1	2	3	4	5
o) For relaxation.....	1	2	3	4	5
p) For the challenge of the dive.....	1	2	3	4	5

There are many places to engage in fishing. In the next several questions, we are attempting to understand the reason you may choose to fish in one location versus another, or if necessary, engage in an activity other than fishing in the Florida Keys.

**When answering the following questions, please think about a favorite or most common area that you fish in off the Florida Keys. If you do not have a favorite or most common area that you fish in off the Keys, please think about the last area that you fished in off the Florida Keys.**

**17. Please indicate which reef you are thinking of when responding to the following questions. (Please circle only one answer)**

- A My favorite reef to fish at
- B The most common area I fish at
- C The most recent area I fished in

**18. Is this area:**

- A A flat
- B A natural coral reef
- C Hawk Channel
- D An artificial reef
- E Other (please list) \_\_\_\_\_

**19. Are you able to recall the name of this area? If so, please list it below.**

\_\_\_\_\_ area

**20. Imagine that you discovered that you could not fish in this area (from question #17 above) during your next planned fishing trip. What would you do? (Please circle only one answer)**

- A I would still fish, but elsewhere in the Florida Keys
- B I would still fish, but at a location outside of the Florida Keys
- C I would temporarily participate in a different activity in the Florida Keys
- D I would temporarily participate in a different activity, but outside the Florida Keys

**21. Imagine that you discovered that you could not fish in this area (from question #17 above) for the next five years. What would you do?**

- A I would still fish, but elsewhere in the Florida Keys
- B I would still fish, but at a location outside of the Florida Keys
- C I would permanently participate in a different activity in the Florida Keys
- D I would permanently participate in a different activity, but outside the Florida Keys

**22. Imagine that you discovered during your next fishing trip that this area (from question #17 above) was more crowded than you normally find acceptable. What would you do?**

- A I would make an exception and still fish in this area
- B I would still fish, but elsewhere in the Florida Keys
- C I would temporarily participate in a different activity in the Florida Keys
- D I would temporarily participate in a different activity, but outside the Florida Keys

**23. Imagine that you discovered during your next fishing trip that this area (from question #17 above) was more ecologically damaged (e.g., there was no longer enough good fish habitat) than you normally find acceptable. What would you do?**

- A I would still fish in this area
- B I would still fish, but elsewhere in the Florida Keys
- C I would temporarily participate in a different activity in the Florida Keys
- D I would temporarily participate in a different activity, but outside the Florida Keys

**24. Imagine that you discovered during your next fishing trip that other user groups with whom you experience conflict are using this area (from question #17 above). What would you do?**

- A I would still fish in this area
- B I would still fish, but elsewhere in the Florida Keys
- C I would temporarily participate in a different activity in the Florida Keys
- D I would temporarily participate in a different activity, but outside the Florida Keys

**25. If you could not fish in this area (from question #17 above), how many other areas in the Florida Keys do you think can offer you an overall experience that is just as good?**

\_\_\_\_\_ number of other areas in the Florida Keys

Don't Know

**26. If you could not fish in this area (from question #17 above), how many other areas in the Florida Keys do you think can offer you a similar, but not quite as good, overall experience?**

\_\_\_\_\_ number of other areas Florida Keys

Don't Know

**27. Please rate how similar you think the fishing experience is at your best similar fishing area compared to this area.**

Not as good				Equivalent				Better
1	2	3	4	5	6	7		

**28. There are many things that you might think about or consider when deciding to substitute one fishing area for another. Please indicate how important each of the following factors is in terms of deciding whether or not you would choose to fish in a substitute area.**

	Not at all important	Somewhat important	Moderately important	Very important	Extremely important
a) The number of fish at other areas.....	1	2	3	4	5
b) The difficulty of boating conditions.....	1	2	3	4	5
c) The distance to other areas.....	1	2	3	4	5
d) The charter boats and captains at other areas.....	1	2	3	4	5
e) The adequacy of my boat to get to other areas.....	1	2	3	4	5
f) The cost of fuel to get to other areas.....	1	2	3	4	5
g) The level of crowding at other areas.....	1	2	3	4	5
h) Area closures at desirable locations.....	1	2	3	4	5
i) The presence of other groups that I don't like.....	1	2	3	4	5
j) Other.....	1	2	3	4	5

**29. If you could not go fishing, either in the Florida Keys or elsewhere, are there any other recreation activities in the Florida Keys that would provide you with the same satisfaction and enjoyment that you receive from going fishing?**

Yes --- If yes, please go to question # 30 below

No --- If no, please go to question # 31 below

30. If you answered “yes” to question D29, please list up to three specific activities that you consider to be substitutes for fishing in the Florida Keys.

\_\_\_\_\_ activity

\_\_\_\_\_ activity

\_\_\_\_\_ activity

31. There are reasons why people cannot participate as often as they would like in an activity they enjoy doing. Please indicate the extent to which you agree or disagree with each of the following statements as they relate to your ability to fish in the Florida Keys as often as you would like.

	Completely disagree	Disagree	Neutral	Agree	Completely agree
a) I don't have enough leisure time.....	1	2	3	4	5
b) The equipment is too expensive.....	1	2	3	4	5
c) The cost of travel is too high.....	1	2	3	4	5
d) It is difficult to find fishing partners.....	1	2	3	4	5
e) Fuel prices for my boat are too high.....	1	2	3	4	5
f) Fishing areas are too crowded.....	1	2	3	4	5
g) Too many fishing areas are off-limits.....	1	2	3	4	5
h) Fishing charters are too expensive.....	1	2	3	4	5
i) Other.....	1	2	3	4	5

32. Below is a list of reasons why people saltwater fish in the Florida Keys. Please circle the number that indicates how important each item is to you as a reason for saltwater fishing in the Florida Keys.

	Not at all important	Somewhat important	Moderately important	Very important	Extremely important
a) To develop my skills.....	1	2	3	4	5
b) To experience excitement.....	1	2	3	4	5
c) For family recreation.....	1	2	3	4	5
d) To be with friends.....	1	2	3	4	5
e) To be outdoors.....	1	2	3	4	5
f) To experience new and different things.....	1	2	3	4	5
g) For the experience of the catch.....	1	2	3	4	5
h) To get away from the demands of other people.....	1	2	3	4	5
i) To get away from the regular routine.....	1	2	3	4	5
j) To catch a trophy fish.....	1	2	3	4	5
k) For the sport of fishing, not to obtain food to eat.....	1	2	3	4	5
l) For the fun of catching fish.....	1	2	3	4	5
m) To experience natural surroundings.....	1	2	3	4	5
n) For solitude.....	1	2	3	4	5
o) For relaxation.....	1	2	3	4	5
p) For the challenge of the catch.....	1	2	3	4	5
q) To obtain fish for eating, not for sport.....	1	2	3	4	5

## Management Alternatives

**Snorkeler / SCUBA diver**  
 If not a snorkeler / SCUBA diver in the Florida Keys, but do recreational fishing, GO to page 16.  
 If not a snorkeler / SCUBA diver or recreational fisher in the Florida Keys, GO to last page.

Please think about a recreational snorkeling / SCUBA diving experience on a reef in the Florida Keys when answering the questions on the following pages. You will be offered eight (8) choices of two diving trips. Each choice has different features for you to evaluate. Please read each choice carefully. Although they may look similar, trips in each question differ in at least one way.

There is an example to assist you. Please note the following definitions before reviewing the example.

- Number of Snorkelers / Divers - the number of snorkelers / divers on a reef at any one time
- Restrictions- percent area of reef open to use
- Enforcement- the number of law enforcement patrols you observe per trip
- Number of Fish Species- the amount of different kinds of fish species observed on the reef
- Site Settings- the amount of live coral and/or algae on the reef
- Number of Fish- the overall amount of fish observed on the reef
- Size of Fish- the size of fish observed on the reef
- Travel cost / day – Travel cost that a snorkeler / diver spends for a diving trip per day (including gas and other trip expenses)

### Example

If you were planning a snorkel / SCUBA dive trip to the Florida Keys, which trip would you prefer: Trip A, Trip B, or neither?

ATTRIBUTE	Trip A	Trip B
<b>Number of Snorkelers / Divers</b>	<i>15% fewer snorkelers / divers</i>	<i>30% fewer snorkelers / divers</i>
<b>Site Settings</b>	<i>Mix of coral and algae cover</i>	<i>High live coral cover</i>
<b>Restrictions</b>	<i>25% of area closed</i>	<i>75 % of area closed</i>
<b>Number of Fish</b>	<i>40% more fish</i>	<i>No increase in numbers of fish</i>
<b>Size of Fish</b>	<i>40% more larger fish</i>	<i>20 % more larger fish</i>
<b>Species</b>	<i>No change in species numbers</i>	<i>Fewer species</i>
<b>Enforcement</b>	<i>Two additional patrols</i>	<i>No additional patrols</i>
<b>Travel Cost / Day</b>	<i>Your current total cost per day</i>	<i>10% more than your current total cost per day</i>

Which trip do you prefer? (check only one box below)

- Trip A     
  Trip B     
  I would not take either trip

33. If you were planning a snorkel / SCUBA dive trip to the Florida Keys, which trip would you prefer: Trip A, Trip B, or neither?

<b>ATTRIBUTE</b>	<b>Trip A</b>	<b>Trip B</b>
<b>Number of Snorkelers / Divers</b>	<i>The usual number of other snorkelers / divers at the site</i>	<i>The usual number of other divers at the diver site</i>
<b>Site Settings</b>	<i>High live coral cover</i>	<i>High algae cover</i>
<b>Restrictions</b>	<i>75% of area closed</i>	<i>No area closed</i>
<b>Number of Fish</b>	<i>40% more fish</i>	<i>40% more fish</i>
<b>Size of Fish</b>	<i>60% more larger fish</i>	<i>20% more larger fish</i>
<b>Species</b>	<i>Many species</i>	<i>Fewer species</i>
<b>Enforcement</b>	<i>Two additional patrols</i>	<i>Two additional patrols</i>
<b>Travel Cost / Day</b>	<i>Your current total cost per day</i>	<i>Your current total cost per day</i>

Which trip do you prefer? (check only one box below)

Trip A     Trip B     I would not take either trip

34. If you were planning a snorkel / SCUBA dive trip to the Florida Keys, which trip would you prefer: Trip A, Trip B, or neither?

<b>ATTRIBUTE</b>	<b>Trip A</b>	<b>Trip B</b>
<b>Number of Snorkelers / Divers</b>	<i>30% fewer snorkelers / divers</i>	<i>30% fewer snorkelers / divers</i>
<b>Site Settings</b>	<i>High live coral cover</i>	<i>High algae cover</i>
<b>Restrictions</b>	<i>75% of area closed</i>	<i>50% of area closed</i>
<b>Number of Fish</b>	<i>20% more fish</i>	<i>No increase in numbers of fish</i>
<b>Size of Fish</b>	<i>40% more larger fish</i>	<i>No increase in larger fish</i>
<b>Species</b>	<i>Fewer species</i>	<i>No change in species numbers</i>
<b>Enforcement</b>	<i>Two additional patrols</i>	<i>One additional patrol</i>
<b>Travel Cost / Day</b>	<i>10% more than your current total cost per day</i>	<i>10% less than your current total cost per day</i>

Which trip do you prefer? (check only one box below)

Trip A     Trip B     I would not take either trip



35. If you were planning a snorkel / SCUBA dive trip to the Florida Keys, which trip would you prefer: Trip A, Trip B, or neither?

<b>ATTRIBUTE</b>	<b>Trip A</b>	<b>Trip B</b>
<b>Number of Snorkelers / Divers</b>	<i>30% fewer snorkelers / divers</i>	<i>30% fewer snorkelers / divers</i>
<b>Site Settings</b>	<i>Mix of coral and algae cover</i>	<i>High algae cover</i>
<b>Restrictions</b>	<i>50% of area closed</i>	<i>75% of area closed</i>
<b>Number of Fish</b>	<i>No increase in numbers of fish</i>	<i>40% more fish</i>
<b>Size of Fish</b>	<i>No increase in larger fish</i>	<i>No increase in larger fish</i>
<b>Species</b>	<i>No change in species numbers</i>	<i>Fewer species</i>
<b>Enforcement</b>	<i>One additional patrol</i>	<i>No additional patrols</i>
<b>Travel Cost / Day</b>	<i>10% more than your current total cost per day</i>	<i>Your current total cost per day</i>

Which trip do you prefer? (check only one box below)

Trip A     Trip B     I would not take either trip

36. If you were planning a snorkel / SCUBA dive trip to the Florida Keys, which trip would you prefer: Trip A, Trip B, or neither?

<b>ATTRIBUTE</b>	<b>Trip A</b>	<b>Trip B</b>
<b>Number of Snorkelers / Divers</b>	<i>15% fewer snorkelers / divers</i>	<i>The usual number of other snorkelers / divers at the site</i>
<b>Site Settings</b>	<i>Mix of coral and algae cover</i>	<i>Mix of coral and algae cover</i>
<b>Restrictions</b>	<i>25% of area closed</i>	<i>50% of area closed</i>
<b>Number of Fish</b>	<i>60% more fish</i>	<i>20% more fish</i>
<b>Size of Fish</b>	<i>No increase in larger fish</i>	<i>20% more larger fish</i>
<b>Species</b>	<i>No change in species numbers</i>	<i>Many species</i>
<b>Enforcement</b>	<i>Two additional patrols</i>	<i>No additional patrols</i>
<b>Travel Cost / Day</b>	<i>10% more than your current total cost per day</i>	<i>10% more than your current total cost per day</i>

Which trip do you prefer? (check only one box below)

Trip A     Trip B     I would not take either trip

37. If you were planning a snorkel / SCUBA dive trip to the Florida Keys, which trip would you prefer: Trip A, Trip B, or neither?

ATTRIBUTE	Trip A	Trip B
<b>Number of Snorkelers / Divers</b>	<i>30% fewer snorkelers / divers</i>	<i>30% fewer snorkelers / divers</i>
<b>Site Settings</b>	<i>Mix of coral and algae cover</i>	<i>Mix of coral and algae cover</i>
<b>Restrictions</b>	<i>25% of area closed</i>	<i>No area closed</i>
<b>Number of Fish</b>	<i>20% more fish</i>	<i>40% more fish</i>
<b>Size of Fish</b>	<i>60% more larger fish</i>	<i>40% more larger fish</i>
<b>Species</b>	<i>Many species</i>	<i>Many species</i>
<b>Enforcement</b>	<i>No additional patrols</i>	<i>One additional patrol</i>
<b>Travel Cost / Day</b>	<i>10% less than your current total cost per day</i>	<i>10% more than your current total cost per day</i>

Which trip do you prefer? (check only one box below)

- Trip A     Trip B     I would not take either trip

38. If you were planning a snorkel / SCUBA dive trip to the Florida Keys, which trip would you prefer: Trip A, Trip B, or neither?

ATTRIBUTE	Trip A	Trip B
<b>Number of Snorkelers / Divers</b>	<i>The usual number of other snorkelers / divers at the site</i>	<i>30% fewer snorkelers / divers</i>
<b>Site Settings</b>	<i>Mix of coral and algae cover</i>	<i>High live coral cover</i>
<b>Restrictions</b>	<i>50% of area closed</i>	<i>No area closed</i>
<b>Number of Fish</b>	<i>No increase in numbers of fish</i>	<i>No increase in numbers of fish</i>
<b>Size of Fish</b>	<i>20% more larger fish</i>	<i>No increase in larger fish</i>
<b>Species</b>	<i>Fewer species</i>	<i>Many species</i>
<b>Enforcement</b>	<i>One additional patrol</i>	<i>No additional patrols</i>
<b>Travel Cost / Day</b>	<i>Your current total cost per day</i>	<i>10% less than your current total cost per day</i>

Which trip do you prefer? (check only one box below)

- Trip A     Trip B     I would not take either trip

39. If you were planning a snorkel / SCUBA dive trip to the Florida Keys, which trip would you prefer: Trip A, Trip B, or neither?

ATTRIBUTE	Trip A	Trip B
<b>Number of Snorkelers / Divers</b>	<i>The usual number of other snorkelers / divers at the site</i>	<i>15% fewer snorkelers / divers</i>
<b>Site Settings</b>	<i>High algae cover</i>	<i>High algae cover</i>
<b>Restrictions</b>	<i>No area closed</i>	<i>75% of area closed</i>
<b>Number of Fish</b>	<i>60% more fish</i>	<i>20% more fish</i>
<b>Size of Fish</b>	<i>20% more larger fish</i>	<i>60% more larger fish</i>
<b>Species</b>	<i>Fewer species</i>	<i>No change in species numbers</i>
<b>Enforcement</b>	<i>No additional patrols</i>	<i>Two additional patrols</i>
<b>Travel Cost / Day</b>	<i>10% more than your current total cost per day</i>	<i>Your current total cost per day</i>

Which trip do you prefer? (check only one box below)

- Trip A     Trip B     I would not take either trip

40. If you were planning a snorkel / SCUBA dive trip to the Florida Keys, which trip would you prefer: Trip A, Trip B, or neither?

ATTRIBUTE	Trip A	Trip B
<b>Number of Snorkelers / Divers</b>	<i>15% fewer snorkelers / divers</i>	<i>30% fewer snorkelers / divers</i>
<b>Site Settings</b>	<i>High algae cover</i>	<i>Mix of coral and algae cover</i>
<b>Restrictions</b>	<i>No area closed</i>	<i>25% of area closed</i>
<b>Number of Fish</b>	<i>40% more fish</i>	<i>No increase in numbers of fish</i>
<b>Size of Fish</b>	<i>No increase in larger fish</i>	<i>60% more larger fish</i>
<b>Species</b>	<i>Many species</i>	<i>Fewer species</i>
<b>Enforcement</b>	<i>One additional patrol</i>	<i>Two additional patrols</i>
<b>Travel Cost / Day</b>	<i>10% less than your current total cost per day</i>	<i>10% less than your current total cost per day</i>

Which trip do you prefer? (check only one box below)

- Trip A     Trip B     I would not take either trip

**Recreational Fisher**  
**If not a Recreational fisher in the Florida Keys, GO to last page.**

Please think about a recreational fishing experience in the Florida Keys when answering the questions on the following pages. You will be offered eight (8) choices of two fishing trips. Each choice has different features for you to evaluate. Please read each choice carefully. Although they may look similar, trips in each question differ in at least one way.

There is an example to assist you. Please note the following definitions before reviewing the example.

- Number of Recreational Fishing Boats- the number of recreational fishing boats near you at any one time
- Number of Non-fishing boats- the number of non-fishing boats near you at any one time
- Restrictions- the number of reefs closed to fishing per zone (upper Keys, middle Keys, lower Keys)
- Number of Fish Species- the amount of different kinds of fish species caught in a trip
- Number of Fish- the overall amount of fish caught on a trip
- Size of Fish- the number of legal sized fish caught on a trip
- Travel cost / day – Travel cost that an angler spends for a fishing trip per day (including gas and other trip expenses)

**Example**

Suppose that you could choose from the recreational fishing opportunities described below. Which of these fishing trips would you prefer?

<b>ATTRIBUTE</b>	<b>Trip A</b>	<b>Trip B</b>
<b>Number of Recreational Fishing Boats</b>	<i>30% fewer boats</i>	<i>The usual number of other boats near the location</i>
<b>Number of Non-fishing Boats</b>	<i>The usual number of other boats near the location</i>	<i>30% fewer boats</i>
<b>Restrictions</b>	<i>25% of area closed</i>	<i>25% of area closed</i>
<b>Number of Species</b>	<i>No change in species numbers</i>	<i>Fewer species fish caught</i>
<b>Number of fish</b>	<i>10% more fish caught</i>	<i>30% more fish caught</i>
<b>Size of Fish</b>	<i>60% more keepers</i>	<i>20% more keepers</i>
<b>Travel Cost / Day</b>	<i>10% more than your current total cost per day</i>	<i>10% less than your current total cost per day</i>

Which trip do you prefer? (check only one box below)

- Trip A     
  Trip B     
  I would not take either trip

41. Suppose that you could choose from the recreational fishing opportunities described below. Which of these fishing trips would you prefer?

ATTRIBUTE	Trip A	Trip B
<b>Number of Recreational Fishing Boats</b>	<i>The usual number of other boats near the location</i>	<i>The usual number of other boats near the location</i>
<b>Number of Non-fishing Boats</b>	<i>The usual number of other boats near the location</i>	<i>30% fewer boats</i>
<b>Restrictions</b>	<i>50% of area closed</i>	<i>50% of area closed</i>
<b>Number of Species</b>	<i>More species fish caught</i>	<i>No change in species numbers</i>
<b>Number of fish</b>	<i>20% more fish caught</i>	<i>20% more fish caught</i>
<b>Size of Fish</b>	<i>40% more keepers</i>	<i>40% more keepers</i>
<b>Travel Cost / Day</b>	<i>10% less than your current total cost per day</i>	<i>Your current total cost per day</i>

Which trip do you prefer? (check only one box below)

Trip A     Trip B     I would not take either trip

42. Suppose that you could choose from the recreational fishing opportunities described below. Which of these fishing trips would you prefer?

ATTRIBUTE	Trip A	Trip B
<b>Number of Recreational Fishing Boats</b>	<i>15% fewer boats</i>	<i>30% fewer boats</i>
<b>Number of Non-fishing Boats</b>	<i>30% fewer boats</i>	<i>30% fewer boats</i>
<b>Restrictions</b>	<i>No area closed</i>	<i>75% of area closed</i>
<b>Number of Species</b>	<i>More species fish caught</i>	<i>More species fish caught</i>
<b>Number of fish</b>	<i>10% more fish caught</i>	<i>No increase in numbers of fish caught</i>
<b>Size of Fish</b>	<i>40% more keepers</i>	<i>40% more keepers</i>
<b>Travel Cost / Day</b>	<i>10% more than your current total cost per day</i>	<i>10% more than your current total cost per day</i>

Which trip do you prefer? (check only one box below)

Trip A     Trip B     I would not take either trip

43. Suppose that you could choose from the recreational fishing opportunities described below. Which of these fishing trips would you prefer?

ATTRIBUTE	Trip A	Trip B
<b>Number of Recreational Fishing Boats</b>	<i>30% fewer boats</i>	<i>The usual number of other boats near the location</i>
<b>Number of Non-fishing Boats</b>	<i>15% fewer boats</i>	<i>15% fewer boats</i>
<b>Restrictions</b>	<i>50% of area closed</i>	<i>No area closed</i>
<b>Number of Species</b>	<i>More species fish caught</i>	<i>Fewer species fish caught</i>
<b>Number of fish</b>	<i>No increase in numbers of fish caught</i>	<i>20% more fish caught</i>
<b>Size of Fish</b>	<i>20% more keepers</i>	<i>60% more keepers</i>
<b>Travel Cost / Day</b>	<i>Your current total cost per day</i>	<i>10% less than your current total cost per day</i>

Which trip do you prefer? (check only one box below)

Trip A     Trip B     I would not take either trip

44. Suppose that you could choose from the recreational fishing opportunities described below. Which of these fishing trips would you prefer?

ATTRIBUTE	Trip A	Trip B
<b>Number of Recreational Fishing Boats</b>	<i>The usual number of other boats near the location</i>	<i>15% fewer boats</i>
<b>Number of Non-fishing Boats</b>	<i>15% fewer boats</i>	<i>15% fewer boats</i>
<b>Restrictions</b>	<i>75% of area closed</i>	<i>75% of area closed</i>
<b>Number of Species</b>	<i>Fewer species fish caught</i>	<i>Fewer species fish caught</i>
<b>Number of fish</b>	<i>30% more fish caught</i>	<i>30% more fish caught</i>
<b>Size of Fish</b>	<i>60% more keepers</i>	<i>60% more keepers</i>
<b>Travel Cost / Day</b>	<i>10% less than your current total cost per day</i>	<i>10% more than your current total cost per day</i>

Which trip do you prefer? (check only one box below)

Trip A     Trip B     I would not take either trip

45. Suppose that you could choose from the recreational fishing opportunities described below. Which of these fishing trips would you prefer?

ATTRIBUTE	Trip A	Trip B
<b>Number of Recreational Fishing Boats</b>	<i>30% fewer boats</i>	<i>15% fewer boats</i>
<b>Number of Non-fishing Boats</b>	<i>The usual number of other boats near the location</i>	<i>The usual number of other boats near the location</i>
<b>Restrictions</b>	<i>75% of area closed</i>	<i>25% of area closed</i>
<b>Number of Species</b>	<i>Fewer species fish caught</i>	<i>More species fish caught</i>
<b>Number of fish</b>	<i>10% more fish caught</i>	<i>30% more fish caught</i>
<b>Size of Fish</b>	<i>No increase in the number of caught kept</i>	<i>40% more keepers</i>
<b>Travel Cost / Day</b>	<i>10% more than your current total cost per day</i>	<i>10% less than your current total cost per day</i>

Which trip do you prefer? (check only one box below)

Trip A     Trip B     I would not take either trip

46. Suppose that you could choose from the recreational fishing opportunities described below. Which of these fishing trips would you prefer?

ATTRIBUTE	Trip A	Trip B
<b>Number of Recreational Fishing Boats</b>	<i>15% fewer boats</i>	<i>15% fewer boats</i>
<b>Number of Non-fishing Boats</b>	<i>The usual number of other boats near the location</i>	<i>30% fewer boats</i>
<b>Restrictions</b>	<i>25% of area closed</i>	<i>50% of area closed</i>
<b>Number of Species</b>	<i>No change in species numbers</i>	<i>Fewer species fish caught</i>
<b>Number of fish</b>	<i>No increase in numbers of fish caught</i>	<i>10% more fish caught</i>
<b>Size of Fish</b>	<i>60% more keepers</i>	<i>60% more keepers</i>
<b>Travel Cost / Day</b>	<i>10% more than your current total cost per day</i>	<i>Your current total cost per day</i>

Which trip do you prefer? (check only one box below)

Trip A     Trip B     I would not take either trip

47. Suppose that you could choose from the recreational fishing opportunities described below. Which of these fishing trips would you prefer?

ATTRIBUTE	Trip A	Trip B
<b>Number of Recreational Fishing Boats</b>	<i>The usual number of other boats near the location</i>	<i>30% fewer boats</i>
<b>Number of Non-fishing Boats</b>	<i>15% fewer boats</i>	<i>The usual number of other boats near the location</i>
<b>Restrictions</b>	<i>25% of area closed</i>	<i>25% of area closed</i>
<b>Number of Species</b>	<i>No change in species numbers</i>	<i>No change in species numbers</i>
<b>Number of fish</b>	<i>10% more fish caught</i>	<i>10% more fish caught</i>
<b>Size of Fish</b>	<i>20% more keepers</i>	<i>20% more keepers</i>
<b>Travel Cost / Day</b>	<i>Your current total cost per day</i>	<i>10% more than your current total cost per day</i>

Which trip do you prefer? (check only one box below)

- Trip A     Trip B     I would not take either trip

48. Suppose that you could choose from the recreational fishing opportunities described below. Which of these fishing trips would you prefer?

ATTRIBUTE	Trip A	Trip B
<b>Number of Recreational Fishing Boats</b>	<i>The usual number of other boats near the location</i>	<i>30% fewer boats</i>
<b>Number of Non-fishing Boats</b>	<i>The usual number of other boats near the location</i>	<i>The usual number of other boats near the location</i>
<b>Restrictions</b>	<i>No area closed</i>	<i>No area closed</i>
<b>Number of Species</b>	<i>Fewer species fish caught</i>	<i>Fewer species fish caught</i>
<b>Number of fish</b>	<i>No increase in numbers of fish caught</i>	<i>No increase in numbers of fish caught</i>
<b>Size of Fish</b>	<i>No increase in the number of caught kept</i>	<i>No increase in the number of caught kept</i>
<b>Travel Cost / Day</b>	<i>10% less than your current total cost per day</i>	<i>Your current total cost per day</i>

Which trip do you prefer? (check only one box below)

- Trip A     Trip B     I would not take either trip



That's All!! If you would like to be entered into a sweepstakes to win a free Vacation to the Florida Keys, fill out your name, address and phone number below. All prizes will be awarded in October of 2007.

Name: \_\_\_\_\_

Address: \_\_\_\_\_

City: \_\_\_\_\_

State: \_\_\_\_\_ Zip: \_\_\_\_\_ Phone: \_\_\_\_\_

Prizes to be awarded are:

GRAND PRIZE

- \* Airfare for two from anywhere in the continental United States to the Florida Keys
- \* Rental car with unlimited miles for one week (seven days)
- \* Accommodations for two for one week (six nights)
- \* Two complimentary "activities" for two (i.e., diving trip, fishing charter, sunset sail, etc.)
- \* Complimentary dinner for two at local restaurant

FIRST PRIZE

- \* Accommodations for two for five days (four nights)
- \* Two complimentary "activities" for two (i.e., diving trip, fishing charter, sunset sail, etc.)
- \* Complimentary dinner for two at local restaurant

SECOND PRIZE

- \* Accommodations for two for four days (three nights)
- \* One complimentary "activity" for two (i.e., diving trip, fishing charter, sunset sail, etc.)
- \* Complimentary dinner for two at local restaurant

SECOND PRIZE

- \* Accommodations for two for three days (two nights)
- \* One complimentary "activity" for two (i.e., diving trip, fishing charter, sunset sail, etc.)

This is a cooperative research project of the Monroe County Tourist Development Council and the National Oceanic and Atmospheric Administration. Public reporting burden for this collection of information is estimated to average 20 minutes including time for reviewing instructions, searching existing data sources, gathering and maintaining the data need, 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 this burden, to U.S. Department of Commerce, Clearance Officer, Office of Chief Information Officer, Rm. 6625, 14th and Constitution Avenue NW, Washington, DC 20230. Notwithstanding any other provisions of the law, no person is required to respond to, nor shall any person be subject to penalty for failure to comply with, a collection of information subject to requirements of the Paperwork Reduction Act, unless that collection of information displays a currently valid OMB Control Number.

## THANK YOU!

for  
participating in this  
Recreation Survey

Dear Visitor,

During your recent trip to the Florida Keys 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 answers are voluntary and confidential. Your name will never be released to anyone unless otherwise required by law. After the completion of the project all materials identifying you as an individual will be destroyed.

When you complete the questionnaire, please reverse-fold it so that our return address on the GREEN PAGE in the inside is folded to the outside. Please staple or tape to seal the questionnaire and mail it back to us. No postage is needed. Your cooperation in this effort is greatly appreciated.

Sincerely,

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

There are many places to engage in snorkeling/SCUBA diving activities. In the next several questions, we are attempting to understand the reason you may choose to snorkel/SCUBA dive on one reef versus another, or if necessary, choose to engage in activities other than snorkeling/SCUBA diving in the Florida Keys.

**When answering the following questions, please think about a favorite or most common reef that you dive on in the Florida Keys. If you do not have a favorite or most common reef that you dive on in the Keys, please think about the last reef that you dove on in the Florida Keys.**

**Read the choices and circle the letter that indicates your answer for that question.**

**1. Please circle which reef you are thinking of when responding to the following questions. (Please circle only one answer)**

- A Favorite reef to snorkel/dive on
- B Most common reef I snorkel/dive on
- C Most recent reef I snorkeled/dove on

**2. Is this reef a:**

- A Natural coral reef
- B Artificial reef

**3. Are you able to recall the name of this reef? If so, please list in below.**

\_\_\_\_\_ reef

**4. Imagine that you discovered that you could not snorkel/ SCUBA dive at this reef (from question #1 above) during your next planned snorkel/SCUBA dive trip. What would you do? (Please circle only one answer)**

- A I would still snorkel/ SCUBA dive, but elsewhere in the Florida Keys
- B I would still snorkel/ SCUBA dive, but at a location outside of the Florida Keys
- C I would temporarily participate in a different activity in the Florida Keys
- D I would temporarily participate in a different activity, but outside the Florida Keys

**5. Imagine that you discovered that you could not snorkel/ SCUBA dive at this reef (from question #1 above) for the next five years. What would you do?**

- A I would still snorkel/ SCUBA dive, but elsewhere in the Florida Keys
- B I would still snorkel/ SCUBA dive, but at a location outside of the Florida Keys
- C I would permanently participate in a different activity in the Florida Keys
- D I would permanently participate in a different activity, but outside the Florida Keys

6. Imagine that you discovered during your next snorkel/ SCUBA dive trip that this reef (from question #1 above) was more crowded than you normally find acceptable. What would you do?

- A I would make an exception and still snorkel/ SCUBA dive on this reef
- B I would still snorkel/ SCUBA dive, but elsewhere in the Florida Keys
- C I would temporarily participate in a different activity in the Florida Keys
- D I would temporarily participate in a different activity, but outside the Florida Keys

7. Imagine that you discovered during your next snorkel/ SCUBA dive trip that this reef (from question #1 above) was more ecologically damaged (e.g., there wasn't enough healthy coral or fish) than normally find acceptable. What would you do?

- A I would make an exception and still snorkel/ SCUBA dive on this reef
- B I would still snorkel/ SCUBA dive, but elsewhere in the Florida Keys
- C I would temporarily participate in a different activity in the Florida Keys
- D I would temporarily participate in a different activity, but outside the Florida Keys

8. Imagine that you discovered during your next snorkel/ SCUBA dive trip that user groups with whom you experience conflict are using this reef (from question #1 above). What would you do?

- A I would make an exception and still snorkel/ SCUBA dive on this reef
- B I would still snorkel/ SCUBA dive, but elsewhere in the Florida Keys
- C I would temporarily participate in a different activity in the Florida Keys
- D I would temporarily participate in a different activity, but outside the Florida Keys

9. If you could not snorkel/SCUBA dive at this reef (from question #1 above), how many other Florida Keys reefs do you think can offer you just as good an experience as your favorite reefs?

\_\_\_\_\_ number of other Florida Keys reefs

Don't Know

10. If you could not snorkel/SCUBA dive at this reef (from question #1 above), how many other Florida Keys reefs do you think can offer you a similar, but not quite as good, experience?

\_\_\_\_\_ number of other Florida Keys reefs

Don't Know

11. Please rate how similar you think the snorkeling/SCUBA diving experience is at your **best similar reef** compared to **this reef (from question #1 above)**.

Not as good				Equivalent				Better
1	2	3	4	5	6	7		

12. There are many things that you might think about or consider when deciding to substitute one reef for another when snorkeling or SCUBA diving. Please indicate how important each of the following factors is in terms of deciding whether or not you would choose to snorkel/SCUBA dive at a substitute reef.

	Not at all important	Somewhat important	Moderately important	Very important	Extremely important
a) The quality of other reefs.....	1	2	3	4	5
b) The difficulty of the diving conditions on other reefs.....	1	2	3	4	5
c) The distance to other reefs.....	1	2	3	4	5
d) My familiarity with various dive shops.....	1	2	3	4	5
e) The adequacy of my boat to get to other reefs.....	1	2	3	4	5
f) The number of fish at other reefs.....	1	2	3	4	5
g) The cost of fuel to get to other reefs.....	1	2	3	4	5
h) The level of crowding at other reefs.....	1	2	3	4	5
i) The amount of live coral at other reefs.....	1	2	3	4	5
j) Area closures at desirable reef locations.....	1	2	3	4	5
k) The presence of other groups that I don't like.....	1	2	3	4	5
l) Other.....	1	2	3	4	5

13. If you could not go snorkeling/SCUBA diving, either in the Florida Keys or elsewhere, are there any other recreation activities in the Florida Keys that would provide you with the same satisfaction and enjoyment that you receive from going snorkeling/SCUBA diving?

Yes --- If yes, please go to question # 14 below

No --- If no, please go to question # 15 below

14. If you answered “yes” to question 13, please list up to three specific activities that you consider to be substitutes for snorkeling/SCUBA diving.

\_\_\_\_\_ activity

\_\_\_\_\_ activity

\_\_\_\_\_ activity

15. There are reasons why people cannot participate as often as they would like in an activity they enjoy doing. Please indicate the extent to which you agree or disagree with each of the following statements as they relate to your ability to snorkel/SCUBA dive in the Florida Keys as often as you would like.

	Completely disagree	Disagree	Neutral	Agree	Completely agree
a) I don't have enough leisure time.....	1	2	3	4	5
b) The equipment is too expensive.....	1	2	3	4	5
c) The cost of travel is too high.....	1	2	3	4	5
d) It is difficult to find snorkel/SCUBA diving partners.....	1	2	3	4	5
e) Fuel prices for my boat are too high.....	1	2	3	4	5
f) Snorkel/SCUBA diving areas are too crowded.....	1	2	3	4	5
g) Too many snorkel/SCUBA diving areas are off-limits.....	1	2	3	4	5
h) Dive boats are too expensive .....	1	2	3	4	5
i) Other.....	1	2	3	4	5

16. Below is a list of reasons why people snorkel/SCUBA dive in the Florida Keys. Please circle the number that indicates how important each item is to you as a reason for snorkel/SCUBA diving in the Florida Keys.

	Not at all important	Somewhat important	Moderately important	Very important	Extremely important
a) To develop my skills.....	1	2	3	4	5
b) To experience excitement.....	1	2	3	4	5
c) For family recreation.....	1	2	3	4	5
d) To be with friends.....	1	2	3	4	5
e) To be outdoors.....	1	2	3	4	5
f) To experience new and different things.....	1	2	3	4	5
g) For the experience of the dive.....	1	2	3	4	5
h) To get away from the demands of other people.....	1	2	3	4	5
i) To get away from the regular routine.....	1	2	3	4	5
j) To see diverse underwater life.....	1	2	3	4	5
k) To teach underwater skills to other people.....	1	2	3	4	5
l) To obtain additional dive ratings.....	1	2	3	4	5
m) To experience natural surroundings.....	1	2	3	4	5
n) For solitude.....	1	2	3	4	5
o) For relaxation.....	1	2	3	4	5
p) For the challenge of the dive.....	1	2	3	4	5

There are many places to engage in fishing. In the next several questions, we are attempting to understand the reason you may choose to fish in one location versus another, or if necessary, engage in an activity other than fishing in the Florida Keys.

**When answering the following questions, please think about a favorite or most common area that you fish in off the Florida Keys. If you do not have a favorite or most common area that you fish in off the Keys, please think about the last area that you fished in off the Florida Keys.**

**17. Please indicate which reef you are thinking of when responding to the following questions. (Please circle only one answer)**

- A My favorite reef to fish at
- B The most common area I fish at
- C The most recent area I fished in

**18. Is this area:**

- A A flat
- B A natural coral reef
- C Hawk Channel
- D An artificial reef
- E Other (please list) \_\_\_\_\_

**19. Are you able to recall the name of this area? If so, please list it below.**

\_\_\_\_\_ area

**20. Imagine that you discovered that you could not fish in this area (from question #17 above) during your next planned fishing trip. What would you do? (Please circle only one answer)**

- A I would still fish, but elsewhere in the Florida Keys
- B I would still fish, but at a location outside of the Florida Keys
- C I would temporarily participate in a different activity in the Florida Keys
- D I would temporarily participate in a different activity, but outside the Florida Keys

**21. Imagine that you discovered that you could not fish in this area (from question #17 above) for the next five years. What would you do?**

- A I would still fish, but elsewhere in the Florida Keys
- B I would still fish, but at a location outside of the Florida Keys
- C I would permanently participate in a different activity in the Florida Keys
- D I would permanently participate in a different activity, but outside the Florida Keys

**22. Imagine that you discovered during your next fishing trip that this area (from question #17 above) was more crowded than you normally find acceptable. What would you do?**

- A I would make an exception and still fish in this area
- B I would still fish, but elsewhere in the Florida Keys
- C I would temporarily participate in a different activity in the Florida Keys
- D I would temporarily participate in a different activity, but outside the Florida Keys



**23. Imagine that you discovered during your next fishing trip that this area (from question #17 above) was more ecologically damaged (e.g., there was no longer enough good fish habitat) than you normally find acceptable. What would you do?**

- A I would still fish in this area
- B I would still fish, but elsewhere in the Florida Keys
- C I would temporarily participate in a different activity in the Florida Keys
- D I would temporarily participate in a different activity, but outside the Florida Keys

**24. Imagine that you discovered during your next fishing trip that other user groups with whom you experience conflict are using this area (from question #17 above). What would you do?**

- A I would still fish in this area
- B I would still fish, but elsewhere in the Florida Keys
- C I would temporarily participate in a different activity in the Florida Keys
- D I would temporarily participate in a different activity, but outside the Florida Keys

**25. If you could not fish in this area (from question #17 above), how many other areas in the Florida Keys do you think can offer you an overall experience that is just as good?**

\_\_\_\_\_ number of other areas in the Florida Keys

Don't Know

**26. If you could not fish in this area (from question #17 above), how many other areas in the Florida Keys do you think can offer you a similar, but not quite as good, overall experience?**

\_\_\_\_\_ number of other areas Florida Keys

Don't Know

**27. Please rate how similar you think the fishing experience is at your best similar fishing area compared to this area.**

Not as good				Equivalent				Better
1	2	3	4	5	6	7		

**28. There are many things that you might think about or consider when deciding to substitute one fishing area for another. Please indicate how important each of the following factors is in terms of deciding whether or not you would choose to fish in a substitute area.**

	Not at all important	Somewhat important	Moderately important	Very important	Extremely important
a) The number of fish at other areas.....	1	2	3	4	5
b) The difficulty of boating conditions.....	1	2	3	4	5
c) The distance to other areas.....	1	2	3	4	5
d) The charter boats and captains at other areas.....	1	2	3	4	5
e) The adequacy of my boat to get to other areas.....	1	2	3	4	5
f) The cost of fuel to get to other areas.....	1	2	3	4	5
g) The level of crowding at other areas.....	1	2	3	4	5
h) Area closures at desirable locations.....	1	2	3	4	5
i) The presence of other groups that I don't like.....	1	2	3	4	5
j) Other.....	1	2	3	4	5

**29. If you could not go fishing, either in the Florida Keys or elsewhere, are there any other recreation activities in the Florida Keys that would provide you with the same satisfaction and enjoyment that you receive from going fishing?**

Yes --- If yes, please go to question # 30 below

No --- If no, please go to question # 31 below

30. If you answered “yes” to question D29, please list up to three specific activities that you consider to be substitutes for fishing in the Florida Keys.

\_\_\_\_\_ activity

\_\_\_\_\_ activity

\_\_\_\_\_ activity

31. There are reasons why people cannot participate as often as they would like in an activity they enjoy doing. Please indicate the extent to which you agree or disagree with each of the following statements as they relate to your ability to fish in the Florida Keys as often as you would like.

	Completely disagree	Disagree	Neutral	Agree	Completely agree
a) I don't have enough leisure time.....	1	2	3	4	5
b) The equipment is too expensive.....	1	2	3	4	5
c) The cost of travel is too high.....	1	2	3	4	5
d) It is difficult to find fishing partners.....	1	2	3	4	5
e) Fuel prices for my boat are too high.....	1	2	3	4	5
f) Fishing areas are too crowded.....	1	2	3	4	5
g) Too many fishing areas are off-limits.....	1	2	3	4	5
h) Fishing charters are too expensive.....	1	2	3	4	5
i) Other.....	1	2	3	4	5

32. Below is a list of reasons why people saltwater fish in the Florida Keys. Please circle the number that indicates how important each item is to you as a reason for saltwater fishing in the Florida Keys.

	Not at all important	Somewhat important	Moderately important	Very important	Extremely important
a) To develop my skills.....	1	2	3	4	5
b) To experience excitement.....	1	2	3	4	5
c) For family recreation.....	1	2	3	4	5
d) To be with friends.....	1	2	3	4	5
e) To be outdoors.....	1	2	3	4	5
f) To experience new and different things.....	1	2	3	4	5
g) For the experience of the catch.....	1	2	3	4	5
h) To get away from the demands of other people.....	1	2	3	4	5
i) To get away from the regular routine.....	1	2	3	4	5
j) To catch a trophy fish.....	1	2	3	4	5
k) For the sport of fishing, not to obtain food to eat.....	1	2	3	4	5
l) For the fun of catching fish.....	1	2	3	4	5
m) To experience natural surroundings.....	1	2	3	4	5
n) For solitude.....	1	2	3	4	5
o) For relaxation.....	1	2	3	4	5
p) For the challenge of the catch.....	1	2	3	4	5
q) To obtain fish for eating, not for sport.....	1	2	3	4	5

**Management Alternatives**

**Snorkeler / SCUBA diver**  
 If not a snorkeler / SCUBA diver in the Florida Keys, but do recreational fishing, GO to page 16.  
 If not a snorkeler / SCUBA diver or recreational fisher in the Florida Keys, GO to last page.

Please think about a recreational snorkeling / SCUBA diving experience on a reef in the Florida Keys when answering the questions on the following pages. You will be offered eight (8) choices of two diving trips. Each choice has different features for you to evaluate. Please read each choice carefully. Although they may look similar, trips in each question differ in at least one way.

There is an example to assist you. Please note the following definitions before reviewing the example.

- Number of Snorkelers / Divers - the number of snorkelers / divers on a reef at any one time
- Restrictions- percent area of reef open to use
- Enforcement- the number of law enforcement patrols you observe per trip
- Number of Fish Species- the amount of different kinds of fish species observed on the reef
- Site Settings- the amount of live coral and/or algae on the reef
- Number of Fish- the overall amount of fish observed on the reef
- Size of Fish- the size of fish observed on the reef
- Travel cost / day – Travel cost that a snorkeler / diver spends for a diving trip per day (including gas and other trip expenses)

**Example**

If you were planning a snorkel / SCUBA dive trip to the Florida Keys, which trip would you prefer: Trip A, Trip B, or neither?

ATTRIBUTE	Trip A	Trip B
<b>Number of Snorkelers / Divers</b>	<i>15% fewer snorkelers / divers</i>	<i>30% fewer snorkelers/ divers</i>
<b>Site Settings</b>	<i>Mix of coral and algae cover</i>	<i>High live coral cover</i>
<b>Restrictions</b>	<i>25% of area closed</i>	<i>75 % of area closed</i>
<b>Number of Fish</b>	<i>40% more fish</i>	<i>No increase in numbers of fish</i>
<b>Size of Fish</b>	<i>40% more larger fish</i>	<i>20 % more larger fish</i>
<b>Species</b>	<i>No change in species numbers</i>	<i>Fewer species</i>
<b>Enforcement</b>	<i>Two additional patrols</i>	<i>No additional patrols</i>
<b>Travel Cost / Day</b>	<i>Your current total cost per day</i>	<i>10% more than your current total cost per day</i>

**Which trip do you prefer?** (check only one box below)

- Trip A     
  Trip B     
  I would not take either trip

33. If you were planning a snorkel / SCUBA dive trip to the Florida Keys, which trip would you prefer: Trip A, Trip B, or neither?

<b>ATTRIBUTE</b>	<b>Trip A</b>	<b>Trip B</b>
<b>Number of Snorkelers / Divers</b>	<i>30% fewer snorkelers / divers</i>	<i>The usual number of other snorkelers / divers at the site</i>
<b>Site Settings</b>	<i>High algae cover</i>	<i>High algae cover</i>
<b>Restrictions</b>	<i>75% of area closed</i>	<i>25% of area closed</i>
<b>Number of Fish</b>	<i>60% more fish</i>	<i>No increase in numbers of fish</i>
<b>Size of Fish</b>	<i>20% more larger fish</i>	<i>40% more larger fish</i>
<b>Species</b>	<i>No change in species numbers</i>	<i>Many species</i>
<b>Enforcement</b>	<i>One additional patrol</i>	<i>No additional patrols</i>
<b>Travel Cost / Day</b>	<i>10% less than your current total cost per day</i>	<i>Your current total cost per day</i>

Which trip do you prefer? (check only one box below)

Trip A     Trip B     I would not take either trip

34. If you were planning a snorkel / SCUBA dive trip to the Florida Keys, which trip would you prefer: Trip A, Trip B, or neither?

<b>ATTRIBUTE</b>	<b>Trip A</b>	<b>Trip B</b>
<b>Number of Snorkelers / Divers</b>	<i>The usual number of other snorkelers / divers at the site</i>	<i>30% fewer snorkelers / divers</i>
<b>Site Settings</b>	<i>High algae cover</i>	<i>High live coral cover</i>
<b>Restrictions</b>	<i>75% of area closed</i>	<i>No area closed</i>
<b>Number of Fish</b>	<i>60% more fish</i>	<i>60% more fish</i>
<b>Size of Fish</b>	<i>40% more larger fish</i>	<i>60% more larger fish</i>
<b>Species</b>	<i>Many species</i>	<i>Fewer species</i>
<b>Enforcement</b>	<i>No additional patrols</i>	<i>No additional patrols</i>
<b>Travel Cost / Day</b>	<i>Your current total cost per day</i>	<i>10% more than your current total cost per day</i>

Which trip do you prefer? (check only one box below)

Trip A     Trip B     I would not take either trip

35. If you were planning a snorkel / SCUBA dive trip to the Florida Keys, which trip would you prefer: Trip A, Trip B, or neither?

<b>ATTRIBUTE</b>	<b>Trip A</b>	<b>Trip B</b>
<b>Number of Snorkelers / Divers</b>	<i>30% fewer snorkelers / divers</i>	<i>The usual number of other snorkelers / divers at the site</i>
<b>Site Settings</b>	<i>High live coral cover</i>	<i>Mix of coral and algae cover</i>
<b>Restrictions</b>	<i>No area closed</i>	<i>75% of area closed</i>
<b>Number of Fish</b>	<i>40% more fish</i>	<i>60% more fish</i>
<b>Size of Fish</b>	<i>60% more larger fish</i>	<i>No increase in larger fish</i>
<b>Species</b>	<i>Fewer species</i>	<i>Many species</i>
<b>Enforcement</b>	<i>No additional patrols</i>	<i>No additional patrols</i>
<b>Travel Cost / Day</b>	<i>10% more than your current total cost per day</i>	<i>Your current total cost per day</i>

Which trip do you prefer? (check only one box below)

Trip A     Trip B     I would not take either trip

36. If you were planning a snorkel / SCUBA dive trip to the Florida Keys, which trip would you prefer: Trip A, Trip B, or neither?

<b>ATTRIBUTE</b>	<b>Trip A</b>	<b>Trip B</b>
<b>Number of Snorkelers / Divers</b>	<i>The usual number of other snorkelers / divers at the site</i>	<i>The usual number of other snorkelers / divers at the site</i>
<b>Site Settings</b>	<i>Mix of coral and algae cover</i>	<i>Mix of coral and algae cover</i>
<b>Restrictions</b>	<i>No area closed</i>	<i>50% of area closed</i>
<b>Number of Fish</b>	<i>20% more fish</i>	<i>20% more fish</i>
<b>Size of Fish</b>	<i>20% more larger fish</i>	<i>No increase in larger fish</i>
<b>Species</b>	<i>No change in species numbers</i>	<i>Fewer species</i>
<b>Enforcement</b>	<i>One additional patrol</i>	<i>Two additional patrols</i>
<b>Travel Cost / Day</b>	<i>Your current total cost per day</i>	<i>10% less than your current total cost per day</i>

Which trip do you prefer? (check only one box below)

Trip A     Trip B     I would not take either trip

37. If you were planning a snorkel / SCUBA dive trip to the Florida Keys, which trip would you prefer: Trip A, Trip B, or neither?

ATTRIBUTE	Trip A	Trip B
<b>Number of Snorkelers / Divers</b>	<i>15% fewer snorkelers / divers</i>	<i>15% fewer snorkelers / divers</i>
<b>Site Settings</b>	<i>High live coral cover</i>	<i>Mix of coral and algae cover</i>
<b>Restrictions</b>	<i>50% of area closed</i>	<i>75% of area closed</i>
<b>Number of Fish</b>	<i>60% more fish</i>	<i>40% more fish</i>
<b>Size of Fish</b>	<i>40% more larger fish</i>	<i>No increase in larger fish</i>
<b>Species</b>	<i>Many species</i>	<i>Fewer species</i>
<b>Enforcement</b>	<i>Two additional patrols</i>	<i>Two additional patrols</i>
<b>Travel Cost / Day</b>	<i>10% less than your current total cost per day</i>	<i>10% more than your current total cost per day</i>

Which trip do you prefer? (check only one box below)

Trip A     Trip B     I would not take either trip

38. If you were planning a snorkel / SCUBA dive trip to the Florida Keys, which trip would you prefer: Trip A, Trip B, or neither?

ATTRIBUTE	Trip A	Trip B
<b>Number of Snorkelers / Divers</b>	<i>15% fewer snorkelers / divers</i>	<i>15% fewer snorkelers / divers</i>
<b>Site Settings</b>	<i>High algae cover</i>	<i>High algae cover</i>
<b>Restrictions</b>	<i>No area closed</i>	<i>50% of area closed</i>
<b>Number of Fish</b>	<i>No increase in numbers of fish</i>	<i>60% more fish</i>
<b>Size of Fish</b>	<i>60% more larger fish</i>	<i>20% more larger fish</i>
<b>Species</b>	<i>Many species</i>	<i>Many species</i>
<b>Enforcement</b>	<i>One additional patrol</i>	<i>One additional patrol</i>
<b>Travel Cost / Day</b>	<i>10% more than your current total cost per day</i>	<i>10% less than your current total cost per day</i>

Which trip do you prefer? (check only one box below)

Trip A     Trip B     I would not take either trip



39. If you were planning a snorkel / SCUBA dive trip to the Florida Keys, which trip would you prefer: Trip A, Trip B, or neither?

ATTRIBUTE	Trip A	Trip B
<b>Number of Snorkelers / Divers</b>	<i>30% fewer snorkelers / divers</i>	<i>15% fewer snorkelers / divers</i>
<b>Site Settings</b>	<i>High live coral cover</i>	<i>High live coral cover</i>
<b>Restrictions</b>	<i>No area closed</i>	<i>No area closed</i>
<b>Number of Fish</b>	<i>No increase in numbers of fish</i>	<i>No increase in numbers of fish</i>
<b>Size of Fish</b>	<i>No increase in larger fish</i>	<i>20% more larger fish</i>
<b>Species</b>	<i>No change in species numbers</i>	<i>No change in species numbers</i>
<b>Enforcement</b>	<i>Two additional patrols</i>	<i>One additional patrol</i>
<b>Travel Cost / Day</b>	<i>10% less than your current total cost per day</i>	<i>Your current total cost per day</i>

Which trip do you prefer? (check only one box below)

Trip A     Trip B     I would not take either trip

40. If you were planning a snorkel / SCUBA dive trip to the Florida Keys, which trip would you prefer: Trip A, Trip B, or neither?

ATTRIBUTE	Trip A	Trip B
<b>Number of Snorkelers / Divers</b>	<i>The usual number of other snorkelers / divers at the site</i>	<i>30% fewer snorkelers / divers</i>
<b>Site Settings</b>	<i>High live coral cover</i>	<i>High algae cover</i>
<b>Restrictions</b>	<i>25% of area closed</i>	<i>25% of area closed</i>
<b>Number of Fish</b>	<i>No increase in numbers of fish</i>	<i>20% more fish</i>
<b>Size of Fish</b>	<i>60% more larger fish</i>	<i>40% more larger fish</i>
<b>Species</b>	<i>Fewer species</i>	<i>No change in species numbers</i>
<b>Enforcement</b>	<i>No additional patrols</i>	<i>Two additional patrols</i>
<b>Travel Cost / Day</b>	<i>Your current total cost per day</i>	<i>10% more than your current total cost per day</i>

Which trip do you prefer? (check only one box below)

Trip A     Trip B     I would not take either trip

**Recreational Fisher**

If not a Recreational fisher in the Florida Keys, GO to last page.

Please think about a recreational fishing experience in the Florida Keys when answering the questions on the following pages. You will be offered eight (8) choices of two fishing trips. Each choice has different features for you to evaluate. Please read each choice carefully. Although they may look similar, trips in each question differ in at least one way.

There is an example to assist you. Please note the following definitions before reviewing the example.

- Number of Recreational Fishing Boats- the number of recreational fishing boats near you at any one time
- Number of Non-fishing boats- the number of non-fishing boats near you at any one time
- Restrictions- the number of reefs closed to fishing per zone (upper Keys, middle Keys, lower Keys)
- Number of Fish Species- the amount of different kinds of fish species caught in a trip
- Number of Fish- the overall amount of fish caught on a trip
- Size of Fish- the number of legal sized fish caught on a trip
- Travel cost / day – Travel cost that an angler spends for a fishing trip per day (including gas and other trip expenses)

**Example**

Suppose that you could choose from the recreational fishing opportunities described below. Which of these fishing trips would you prefer?

ATTRIBUTE	Trip A	Trip B
<b>Number of Recreational Fishing Boats</b>	<i>30% fewer boats</i>	<i>The usual number of other boats near the location</i>
<b>Number of Non-fishing Boats</b>	<i>The usual number of other boats near the location</i>	<i>30% fewer boats</i>
<b>Restrictions</b>	<i>25% of area closed</i>	<i>25% of area closed</i>
<b>Number of Species</b>	<i>No change in species numbers</i>	<i>Fewer species fish caught</i>
<b>Number of fish</b>	<i>10% more fish caught</i>	<i>30% more fish caught</i>
<b>Size of Fish</b>	<i>60% more keepers</i>	<i>20% more keepers</i>
<b>Travel Cost / Day</b>	<i>10% more than your current total cost per day</i>	<i>10% less than your current total cost per day</i>

Which trip do you prefer? (check only one box below)

- Trip A
  Trip B
  I would not take either trip

41. Suppose that you could choose from the recreational fishing opportunities described below. Which of these fishing trips would you prefer?

ATTRIBUTE	Trip A	Trip B
<b>Number of Recreational Fishing Boats</b>	<i>15% fewer boats</i>	<i>30% fewer boats</i>
<b>Number of Non-fishing Boats</b>	<i>15% fewer boats</i>	<i>15% fewer boats</i>
<b>Restrictions</b>	<i>75% of area closed</i>	<i>50% of area closed</i>
<b>Number of Species</b>	<i>Fewer species fish caught</i>	<i>More species fish caught</i>
<b>Number of fish</b>	<i>No increase in numbers of fish caught</i>	<i>No increase in numbers of fish caught</i>
<b>Size of Fish</b>	<i>40% more keepers</i>	<i>20% more keepers</i>
<b>Travel Cost / Day</b>	<i>10% more than your current total cost per day</i>	<i>Your current total cost per day</i>

Which trip do you prefer? (check only one box below)

- Trip A     Trip B     I would not take either trip

42. Suppose that you could choose from the recreational fishing opportunities described below. Which of these fishing trips would you prefer?

ATTRIBUTE	Trip A	Trip B
<b>Number of Recreational Fishing Boats</b>	<i>The usual number of other boats near the location</i>	<i>The usual number of other boats near the location</i>
<b>Number of Non-fishing Boats</b>	<i>The usual number of other boats near the location</i>	<i>15% fewer boats</i>
<b>Restrictions</b>	<i>25% of area closed</i>	<i>50% of area closed</i>
<b>Number of Species</b>	<i>Fewer species fish caught</i>	<i>More species fish caught</i>
<b>Number of fish</b>	<i>10% more fish caught</i>	<i>20% more fish caught</i>
<b>Size of Fish</b>	<i>20% more keepers</i>	<i>40% more keepers</i>
<b>Travel Cost / Day</b>	<i>10% less than your current total cost per day</i>	<i>10% more than your current total cost per day</i>

Which trip do you prefer? (check only one box below)

- Trip A     Trip B     I would not take either trip

43. Suppose that you could choose from the recreational fishing opportunities described below. Which of these fishing trips would you prefer?

ATTRIBUTE	Trip A	Trip B
<b>Number of Recreational Fishing Boats</b>	<i>30% fewer boats</i>	<i>30% fewer boats</i>
<b>Number of Non-fishing Boats</b>	<i>15% fewer boats</i>	<i>The usual number of other boats near the location</i>
<b>Restrictions</b>	<i>No area closed</i>	<i>25% of area closed</i>
<b>Number of Species</b>	<i>Fewer species fish caught</i>	<i>Fewer species fish caught</i>
<b>Number of fish</b>	<i>20% more fish caught</i>	<i>20% more fish caught</i>
<b>Size of Fish</b>	<i>60% more keepers</i>	<i>No increase in the number of caught kept</i>
<b>Travel Cost / Day</b>	<i>10% more than your current total cost per day</i>	<i>Your current total cost per day</i>

Which trip do you prefer? (check only one box below)

Trip A     Trip B     I would not take either trip

44. Suppose that you could choose from the recreational fishing opportunities described below. Which of these fishing trips would you prefer?

ATTRIBUTE	Trip A	Trip B
<b>Number of Recreational Fishing Boats</b>	<i>15% fewer boats</i>	<i>15% fewer boats</i>
<b>Number of Non-fishing Boats</b>	<i>The usual number of other boats near the location</i>	<i>The usual number of other boats near the location</i>
<b>Restrictions</b>	<i>75% of area closed</i>	<i>Your current total cost per day</i>
<b>Number of Species</b>	<i>More species fish caught</i>	<i>Fewer species fish caught</i>
<b>Number of fish</b>	<i>No increase in numbers of fish caught</i>	<i>10% more fish caught</i>
<b>Size of Fish</b>	<i>40% more keepers</i>	<i>40% more keepers</i>
<b>Travel Cost / Day</b>	<i>Your current total cost per day</i>	<i>10% more than your current total cost per day</i>

Which trip do you prefer? (check only one box below)

Trip A     Trip B     I would not take either trip

45. Suppose that you could choose from the recreational fishing opportunities described below. Which of these fishing trips would you prefer?

ATTRIBUTE	Trip A	Trip B
<b>Number of Recreational Fishing Boats</b>	<i>The usual number of other boats near the location</i>	<i>The usual number of other boats near the location</i>
<b>Number of Non-fishing Boats</b>	<i>30% fewer boats</i>	<i>15% fewer boats</i>
<b>Restrictions</b>	<i>No area closed</i>	<i>75% of area closed</i>
<b>Number of Species</b>	<i>More species fish caught</i>	<i>No change in species numbers</i>
<b>Number of fish</b>	<i>No increase in numbers of fish caught</i>	<i>30% more fish caught</i>
<b>Size of Fish</b>	<i>No increase in the number of caught kept</i>	<i>60% more keepers</i>
<b>Travel Cost / Day</b>	<i>10% more than your current total cost per day</i>	<i>10% more than your current total cost per day</i>

Which trip do you prefer? (check only one box below)

Trip A     Trip B     I would not take either trip

46. Suppose that you could choose from the recreational fishing opportunities described below. Which of these fishing trips would you prefer?

ATTRIBUTE	Trip A	Trip B
<b>Number of Recreational Fishing Boats</b>	<i>30% fewer boats</i>	<i>30% fewer boats</i>
<b>Number of Non-fishing Boats</b>	<i>30% fewer boats</i>	<i>30% fewer boats</i>
<b>Restrictions</b>	<i>25% of area closed</i>	<i>75% of area closed</i>
<b>Number of Species</b>	<i>No change in species numbers</i>	<i>No change in species numbers</i>
<b>Number of fish</b>	<i>30% more fish caught</i>	<i>10% more fish caught</i>
<b>Size of Fish</b>	<i>40% more keepers</i>	<i>No increase in the number of caught kept</i>
<b>Travel Cost / Day</b>	<i>10% less than your current total cost per day</i>	<i>10% less than your current total cost per day</i>

Which trip do you prefer? (check only one box below)

Trip A     Trip B     I would not take either trip

47. Suppose that you could choose from the recreational fishing opportunities described below. Which of these fishing trips would you prefer?

ATTRIBUTE	Trip A	Trip B
<b>Number of Recreational Fishing Boats</b>	<i>15% fewer boats</i>	<i>15% fewer boats</i>
<b>Number of Non-fishing Boats</b>	<i>The usual number of other boats near the location</i>	<i>15% fewer boats</i>
<b>Restrictions</b>	<i>50% of area closed</i>	<i>25% of area closed</i>
<b>Number of Species</b>	<i>No change in species numbers</i>	<i>More species fish caught</i>
<b>Number of fish</b>	<i>30% more fish caught</i>	<i>20% more fish caught</i>
<b>Size of Fish</b>	<i>No increase in the number of caught kept</i>	<i>No increase in the number of caught kept</i>
<b>Travel Cost / Day</b>	<i>Your current total cost per day</i>	<i>10% more than your current total cost per day</i>

Which trip do you prefer? (check only one box below)

Trip A     Trip B     I would not take either trip

48. Suppose that you could choose from the recreational fishing opportunities described below. Which of these fishing trips would you prefer?

ATTRIBUTE	Trip A	Trip B
<b>Number of Recreational Fishing Boats</b>	<i>15% fewer boats</i>	<i>The usual number of other boats near the location</i>
<b>Number of Non-fishing Boats</b>	<i>30% fewer boats</i>	<i>30% fewer boats</i>
<b>Restrictions</b>	<i>75% of area closed</i>	<i>No area closed</i>
<b>Number of Species</b>	<i>Fewer species fish caught</i>	<i>No change in species numbers</i>
<b>Number of fish</b>	<i>20% more fish caught</i>	<i>30% more fish caught</i>
<b>Size of Fish</b>	<i>20% more keepers</i>	<i>20% more keepers</i>
<b>Travel Cost / Day</b>	<i>10% less than your current total cost per day</i>	<i>Your current total cost per day</i>

Which trip do you prefer? (check only one box below)

Trip A     Trip B     I would not take either trip

That's All!! If you would like to be entered into a sweepstakes to win a free Vacation to the Florida Keys, fill out your name, address and phone number below. All prizes will be awarded in October of 2007.

Name: \_\_\_\_\_

Address: \_\_\_\_\_

City: \_\_\_\_\_

State: \_\_\_\_\_ Zip: \_\_\_\_\_ Phone: \_\_\_\_\_

Prizes to be awarded are:

GRAND PRIZE

- \* Airfare for two from anywhere in the continental United States to the Florida Keys
- \* Rental car with unlimited miles for one week (seven days)
- \* Accommodations for two for one week (six nights)
- \* Two complimentary "activities" for two (i.e., diving trip, fishing charter, sunset sail, etc.)
- \* Complimentary dinner for two at local restaurant

FIRST PRIZE

- \* Accommodations for two for five days (four nights)
- \* Two complimentary "activities" for two (i.e., diving trip, fishing charter, sunset sail, etc.)
- \* Complimentary dinner for two at local restaurant

SECOND PRIZE

- \* Accommodations for two for four days (three nights)
- \* One complimentary "activity" for two (i.e., diving trip, fishing charter, sunset sail, etc.)
- \* Complimentary dinner for two at local restaurant

SECOND PRIZE

- \* Accommodations for two for three days (two nights)
- \* One complimentary "activity" for two (i.e., diving trip, fishing charter, sunset sail, etc.)

This is a cooperative research project of the Monroe County Tourist Development Council and the National Oceanic and Atmospheric Administration. Public reporting burden for this collection of information is estimated to average 20 minutes including time for reviewing instructions, searching existing data sources, gathering and maintaining the data need, 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 this burden, to U.S. Department of Commerce, Clearance Officer, Office of Chief Information Officer, Rm. 6625, 14th and Constitution Avenue NW, Washington, DC 20230. Notwithstanding any other provisions of the law, no person is required to respond to, nor shall any person be subject to penalty for failure to comply with, a collection of information subject to requirements of the Paperwork Reduction Act, unless that collection of information displays a currently valid OMB Control Number.

## THANK YOU!

for  
participating in this  
Recreation Survey

Dear Visitor,

During your recent trip to the Florida Keys 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 answers are voluntary and confidential. Your name will never be released to anyone unless otherwise required by law. After the completion of the project all materials identifying you as an individual will be destroyed.

When you complete the questionnaire, please reverse-fold it so that our return address on the GREEN PAGE in the inside is folded to the outside. Please staple or tape to seal the questionnaire and mail it back to us. No postage is needed. Your cooperation in this effort is greatly appreciated.

Sincerely,

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



There are many places to engage in snorkeling/SCUBA diving activities. In the next several questions, we are attempting to understand the reason you may choose to snorkel/SCUBA dive on one reef versus another, or if necessary, choose to engage in activities other than snorkeling/SCUBA diving in the Florida Keys.

When answering the following questions, please think about a favorite or most common reef that you dive on in the Florida Keys. If you do not have a favorite or most common reef that you dive on in the Keys, please think about the last reef that you dove on in the Florida Keys.

Read the choices and circle the letter that indicates your answer for that question.

1. Please circle which reef you are thinking of when responding to the following questions. (Please circle only one answer)

- A Favorite reef to snorkel/dive on
- B Most common reef I snorkel/dive on
- C Most recent reef I snorkeled/dove on

2. Is this reef a:

- A Natural coral reef
- B Artificial reef

3. Are you able to recall the name of this reef? If so, please list in below.

\_\_\_\_\_ reef

4. Imagine that you discovered that you could not snorkel/ SCUBA dive at this reef (from question #1 above) during your next planned snorkel/SCUBA dive trip. What would you do? (Please circle only one answer)

- A I would still snorkel/ SCUBA dive, but elsewhere in the Florida Keys
- B I would still snorkel/ SCUBA dive, but at a location outside of the Florida Keys
- C I would temporarily participate in a different activity in the Florida Keys
- D I would temporarily participate in a different activity, but outside the Florida Keys

5. Imagine that you discovered that you could not snorkel/ SCUBA dive at this reef (from question #1 above) for the next five years. What would you do?

- A I would still snorkel/ SCUBA dive, but elsewhere in the Florida Keys
- B I would still snorkel/ SCUBA dive, but at a location outside of the Florida Keys
- C I would permanently participate in a different activity in the Florida Keys
- D I would permanently participate in a different activity, but outside the Florida Keys

**6. Imagine that you discovered during your next snorkel/ SCUBA dive trip that this reef (from question #1 above) was more crowded than you normally find acceptable. What would you do?**

- A I would make an exception and still snorkel/ SCUBA dive on this reef
- B I would still snorkel/ SCUBA dive, but elsewhere in the Florida Keys
- C I would temporarily participate in a different activity in the Florida Keys
- D I would temporarily participate in a different activity, but outside the Florida Keys

**7. Imagine that you discovered during your next snorkel/ SCUBA dive trip that this reef (from question #1 above) was more ecologically damaged (e.g., there wasn't enough healthy coral or fish) than normally find acceptable. What would you do?**

- A I would make an exception and still snorkel/ SCUBA dive on this reef
- B I would still snorkel/ SCUBA dive, but elsewhere in the Florida Keys
- C I would temporarily participate in a different activity in the Florida Keys
- D I would temporarily participate in a different activity, but outside the Florida Keys

**8. Imagine that you discovered during your next snorkel/ SCUBA dive trip that user groups with whom you experience conflict are using this reef (from question #1 above). What would you do?**

- A I would make an exception and still snorkel/ SCUBA dive on this reef
- B I would still snorkel/ SCUBA dive, but elsewhere in the Florida Keys
- C I would temporarily participate in a different activity in the Florida Keys
- D I would temporarily participate in a different activity, but outside the Florida Keys

**9. If you could not snorkel/SCUBA dive at this reef (from question #1 above), how many other Florida Keys reefs do you think can offer you just as good an experience as your favorite reefs?**

\_\_\_\_\_ number of other Florida Keys reefs

Don't Know

**10. If you could not snorkel/SCUBA dive at this reef (from question #1 above), how many other Florida Keys reefs do you think can offer you a similar, but not quite as good, experience?**

\_\_\_\_\_ number of other Florida Keys reefs

Don't Know

**11. Please rate how similar you think the snorkeling/SCUBA diving experience is at your best similar reef compared to this reef (from question #1 above).**

Not as good				Equivalent				Better
1	2	3	4	5	6	7		

12. There are many things that you might think about or consider when deciding to substitute one reef for another when snorkeling or SCUBA diving. Please indicate how important each of the following factors is in terms of deciding whether or not you would choose to snorkel/SCUBA dive at a substitute reef.

	Not at all important	Somewhat important	Moderately important	Very important	Extremely important
a) The quality of other reefs.....	1	2	3	4	5
b) The difficulty of the diving conditions on other reefs.....	1	2	3	4	5
c) The distance to other reefs.....	1	2	3	4	5
d) My familiarity with various dive shops.....	1	2	3	4	5
e) The adequacy of my boat to get to other reefs.....	1	2	3	4	5
f) The number of fish at other reefs.....	1	2	3	4	5
g) The cost of fuel to get to other reefs.....	1	2	3	4	5
h) The level of crowding at other reefs.....	1	2	3	4	5
i) The amount of live coral at other reefs.....	1	2	3	4	5
j) Area closures at desirable reef locations.....	1	2	3	4	5
k) The presence of other groups that I don't like.....	1	2	3	4	5
l) Other.....	1	2	3	4	5

13. If you could not go snorkeling/SCUBA diving, either in the Florida Keys or elsewhere, are there any other recreation activities in the Florida Keys that would provide you with the same satisfaction and enjoyment that you receive from going snorkeling/SCUBA diving?

Yes --- If yes, please go to question # 14 below

No --- If no, please go to question # 15 below

14. If you answered “yes” to question 13, please list up to three specific activities that you consider to be substitutes for snorkeling/SCUBA diving.

\_\_\_\_\_ activity

\_\_\_\_\_ activity

\_\_\_\_\_ activity

15. There are reasons why people cannot participate as often as they would like in an activity they enjoy doing. Please indicate the extent to which you agree or disagree with each of the following statements as they relate to your ability to snorkel/SCUBA dive in the Florida Keys as often as you would like.

	Completely disagree	Disagree	Neutral	Agree	Completely agree
a) I don't have enough leisure time.....	1	2	3	4	5
b) The equipment is too expensive.....	1	2	3	4	5
c) The cost of travel is too high.....	1	2	3	4	5
d) It is difficult to find snorkel/SCUBA diving partners.....	1	2	3	4	5
e) Fuel prices for my boat are too high.....	1	2	3	4	5
f) Snorkel/SCUBA diving areas are too crowded.....	1	2	3	4	5
g) Too many snorkel/SCUBA diving areas are off-limits.....	1	2	3	4	5
h) Dive boats are too expensive .....	1	2	3	4	5
i) Other.....	1	2	3	4	5

16. Below is a list of reasons why people snorkel/SCUBA dive in the Florida Keys. Please circle the number that indicates how important each item is to you as a reason for snorkel/SCUBA diving in the Florida Keys.

	Not at all important	Somewhat important	Moderately important	Very important	Extremely important
a) To develop my skills.....	1	2	3	4	5
b) To experience excitement.....	1	2	3	4	5
c) For family recreation.....	1	2	3	4	5
d) To be with friends.....	1	2	3	4	5
e) To be outdoors.....	1	2	3	4	5
f) To experience new and different things.....	1	2	3	4	5
g) For the experience of the dive.....	1	2	3	4	5
h) To get away from the demands of other people.....	1	2	3	4	5
i) To get away from the regular routine.....	1	2	3	4	5
j) To see diverse underwater life.....	1	2	3	4	5
k) To teach underwater skills to other people.....	1	2	3	4	5
l) To obtain additional dive ratings.....	1	2	3	4	5
m) To experience natural surroundings.....	1	2	3	4	5
n) For solitude.....	1	2	3	4	5
o) For relaxation.....	1	2	3	4	5
p) For the challenge of the dive.....	1	2	3	4	5

There are many places to engage in fishing. In the next several questions, we are attempting to understand the reason you may choose to fish in one location versus another, or if necessary, engage in an activity other than fishing in the Florida Keys.

**When answering the following questions, please think about a favorite or most common area that you fish in off the Florida Keys. If you do not have a favorite or most common area that you fish in off the Keys, please think about the last area that you fished in off the Florida Keys.**

**17. Please indicate which reef you are thinking of when responding to the following questions. (Please circle only one answer)**

- A My favorite reef to fish at
- B The most common area I fish at
- C The most recent area I fished in

**18. Is this area:**

- A A flat
- B A natural coral reef
- C Hawk Channel
- D An artificial reef
- E Other (please list) \_\_\_\_\_

**19. Are you able to recall the name of this area? If so, please list it below.**

\_\_\_\_\_ area

**20. Imagine that you discovered that you could not fish in this area (from question #17 above) during your next planned fishing trip. What would you do? (Please circle only one answer)**

- A I would still fish, but elsewhere in the Florida Keys
- B I would still fish, but at a location outside of the Florida Keys
- C I would temporarily participate in a different activity in the Florida Keys
- D I would temporarily participate in a different activity, but outside the Florida Keys

**21. Imagine that you discovered that you could not fish in this area (from question #17 above) for the next five years. What would you do?**

- A I would still fish, but elsewhere in the Florida Keys
- B I would still fish, but at a location outside of the Florida Keys
- C I would permanently participate in a different activity in the Florida Keys
- D I would permanently participate in a different activity, but outside the Florida Keys

**22. Imagine that you discovered during your next fishing trip that this area (from question #17 above) was more crowded than you normally find acceptable. What would you do?**

- A I would make an exception and still fish in this area
- B I would still fish, but elsewhere in the Florida Keys
- C I would temporarily participate in a different activity in the Florida Keys
- D I would temporarily participate in a different activity, but outside the Florida Keys

**23. Imagine that you discovered during your next fishing trip that this area (from question #17 above) was more ecologically damaged (e.g., there was no longer enough good fish habitat) than you normally find acceptable. What would you do?**

- A I would still fish in this area
- B I would still fish, but elsewhere in the Florida Keys
- C I would temporarily participate in a different activity in the Florida Keys
- D I would temporarily participate in a different activity, but outside the Florida Keys

**24. Imagine that you discovered during your next fishing trip that other user groups with whom you experience conflict are using this area (from question #17 above). What would you do?**

- A I would still fish in this area
- B I would still fish, but elsewhere in the Florida Keys
- C I would temporarily participate in a different activity in the Florida Keys
- D I would temporarily participate in a different activity, but outside the Florida Keys

**25. If you could not fish in this area (from question #17 above), how many other areas in the Florida Keys do you think can offer you an overall experience that is just as good?**

\_\_\_\_\_ number of other areas in the Florida Keys

Don't Know

**26. If you could not fish in this area (from question #17 above), how many other areas in the Florida Keys do you think can offer you a similar, but not quite as good, overall experience?**

\_\_\_\_\_ number of other areas Florida Keys

Don't Know

**27. Please rate how similar you think the fishing experience is at your best similar fishing area compared to this area.**

Not as good				Equivalent				Better
1	2	3	4	5	6	7		

28. There are many things that you might think about or consider when deciding to substitute one fishing area for another. Please indicate how important each of the following factors is in terms of deciding whether or not you would choose to fish in a substitute area.

	Not at all important	Somewhat important	Moderately important	Very important	Extremely important
a) The number of fish at other areas.....	1	2	3	4	5
b) The difficulty of boating conditions.....	1	2	3	4	5
c) The distance to other areas.....	1	2	3	4	5
d) The charter boats and captains at other areas.....	1	2	3	4	5
e) The adequacy of my boat to get to other areas.....	1	2	3	4	5
f) The cost of fuel to get to other areas.....	1	2	3	4	5
g) The level of crowding at other areas.....	1	2	3	4	5
h) Area closures at desirable locations.....	1	2	3	4	5
i) The presence of other groups that I don't like.....	1	2	3	4	5
j) Other.....	1	2	3	4	5

29. If you could not go fishing, either in the Florida Keys or elsewhere, are there any other recreation activities in the Florida Keys that would provide you with the same satisfaction and enjoyment that you receive from going fishing?

Yes --- If yes, please go to question # 30 below

No --- If no, please go to question # 31 below



30. If you answered “yes” to question D29, please list up to three specific activities that you consider to be substitutes for fishing in the Florida Keys.

\_\_\_\_\_ activity

\_\_\_\_\_ activity

\_\_\_\_\_ activity

31. There are reasons why people cannot participate as often as they would like in an activity they enjoy doing. Please indicate the extent to which you agree or disagree with each of the following statements as they relate to your ability to fish in the Florida Keys as often as you would like.

	Completely disagree	Disagree	Neutral	Agree	Completely agree
a) I don't have enough leisure time.....	1	2	3	4	5
b) The equipment is too expensive.....	1	2	3	4	5
c) The cost of travel is too high.....	1	2	3	4	5
d) It is difficult to find fishing partners.....	1	2	3	4	5
e) Fuel prices for my boat are too high.....	1	2	3	4	5
f) Fishing areas are too crowded.....	1	2	3	4	5
g) Too many fishing areas are off-limits.....	1	2	3	4	5
h) Fishing charters are too expensive.....	1	2	3	4	5
i) Other.....	1	2	3	4	5

32. Below is a list of reasons why people saltwater fish in the Florida Keys. Please circle the number that indicates how important each item is to you as a reason for saltwater fishing in the Florida Keys.

	Not at all important	Somewhat important	Moderately important	Very important	Extremely important
a) To develop my skills.....	1	2	3	4	5
b) To experience excitement.....	1	2	3	4	5
c) For family recreation.....	1	2	3	4	5
d) To be with friends.....	1	2	3	4	5
e) To be outdoors.....	1	2	3	4	5
f) To experience new and different things.....	1	2	3	4	5
g) For the experience of the catch.....	1	2	3	4	5
h) To get away from the demands of other people.....	1	2	3	4	5
i) To get away from the regular routine.....	1	2	3	4	5
j) To catch a trophy fish.....	1	2	3	4	5
k) For the sport of fishing, not to obtain food to eat.....	1	2	3	4	5
l) For the fun of catching fish.....	1	2	3	4	5
m) To experience natural surroundings.....	1	2	3	4	5
n) For solitude.....	1	2	3	4	5
o) For relaxation.....	1	2	3	4	5
p) For the challenge of the catch.....	1	2	3	4	5
q) To obtain fish for eating, not for sport.....	1	2	3	4	5

**Management Alternatives**

**Snorkeler / SCUBA diver**  
 If not a snorkeler / SCUBA diver in the Florida Keys, but do recreational fishing, GO to page 16.  
 If not a snorkeler / SCUBA diver or recreational fisher in the Florida Keys, GO to last page.

Please think about a recreational snorkeling / SCUBA diving experience on a reef in the Florida Keys when answering the questions on the following pages. You will be offered eight (8) choices of two diving trips. Each choice has different features for you to evaluate. Please read each choice carefully. Although they may look similar, trips in each question differ in at least one way.

There is an example to assist you. Please note the following definitions before reviewing the example.

- Number of Snorkelers / Divers - the number of snorkelers / divers on a reef at any one time
- Restrictions- percent area of reef open to use
- Enforcement- the number of law enforcement patrols you observe per trip
- Number of Fish Species- the amount of different kinds of fish species observed on the reef
- Site Settings- the amount of live coral and/or algae on the reef
- Number of Fish- the overall amount of fish observed on the reef
- Size of Fish- the size of fish observed on the reef
- Travel cost / day – Travel cost that a snorkeler / diver spends for a diving trip per day (including gas and other trip expenses)

**Example**

If you were planning a snorkel / SCUBA dive trip to the Florida Keys, which trip would you prefer: Trip A, Trip B, or neither?

ATTRIBUTE	Trip A	Trip B
<b>Number of Snorkelers / Divers</b>	<i>15% fewer snorkelers / divers</i>	<i>30% fewer snorkelers/ divers</i>
<b>Site Settings</b>	<i>Mix of coral and algae cover</i>	<i>High live coral cover</i>
<b>Restrictions</b>	<i>25% of area closed</i>	<i>75 % of area closed</i>
<b>Number of Fish</b>	<i>40% more fish</i>	<i>No increase in numbers of fish</i>
<b>Size of Fish</b>	<i>40% more larger fish</i>	<i>20 % more larger fish</i>
<b>Species</b>	<i>No change in species numbers</i>	<i>Fewer species</i>
<b>Enforcement</b>	<i>Two additional patrols</i>	<i>No additional patrols</i>
<b>Travel Cost / Day</b>	<i>Your current total cost per day</i>	<i>10% more than your current total cost per day</i>

**Which trip do you prefer?** (check only one box below)

- Trip A     
  Trip B     
  I would not take either trip

33. If you were planning a snorkel / SCUBA dive trip to the Florida Keys, which trip would you prefer: Trip A, Trip B, or neither?

<b>ATTRIBUTE</b>	<b>Trip A</b>	<b>Trip B</b>
<b>Number of Snorkelers / Divers</b>	<i>The usual number of other snorkelers / divers at the site</i>	<i>15% fewer snorkelers / divers</i>
<b>Site Settings</b>	<i>Mix of coral and algae cover</i>	<i>High algae cover</i>
<b>Restrictions</b>	<i>75% of area closed</i>	<i>50% of area closed</i>
<b>Number of Fish</b>	<i>40% more fish</i>	<i>60% more fish</i>
<b>Size of Fish</b>	<i>No increase in larger fish</i>	<i>40% more larger fish</i>
<b>Species</b>	<i>Fewer species</i>	<i>Fewer species</i>
<b>Enforcement</b>	<i>One additional patrol</i>	<i>One additional patrol</i>
<b>Travel Cost / Day</b>	<i>10% less than your current total cost per day</i>	<i>10% more than your current total cost per day</i>

Which trip do you prefer? (check only one box below)

Trip A     Trip B     I would not take either trip

34. If you were planning a snorkel / SCUBA dive trip to the Florida Keys, which trip would you prefer: Trip A, Trip B, or neither?

<b>ATTRIBUTE</b>	<b>Trip A</b>	<b>Trip B</b>
<b>Number of Snorkelers / Divers</b>	<i>15% fewer snorkelers / divers</i>	<i>30% fewer snorkelers / divers</i>
<b>Site Settings</b>	<i>High algae cover</i>	<i>High live coral cover</i>
<b>Restrictions</b>	<i>25% of area closed</i>	<i>50% of area closed</i>
<b>Number of Fish</b>	<i>60% more fish</i>	<i>60% more fish</i>
<b>Size of Fish</b>	<i>60% more larger fish</i>	<i>No increase in larger fish</i>
<b>Species</b>	<i>No change in species numbers</i>	<i>No change in species numbers</i>
<b>Enforcement</b>	<i>Two additional patrols</i>	<i>Two additional patrols</i>
<b>Travel Cost / Day</b>	<i>10% less than your current total cost per day</i>	<i>Your current total cost per day</i>

Which trip do you prefer? (check only one box below)

Trip A     Trip B     I would not take either trip

35. If you were planning a snorkel / SCUBA dive trip to the Florida Keys, which trip would you prefer: Trip A, Trip B, or neither?

ATTRIBUTE	Trip A	Trip B
<b>Number of Snorkelers / Divers</b>	<i>30% fewer snorkelers / divers</i>	<i>15% fewer snorkelers / divers</i>
<b>Site Settings</b>	<i>Mix of coral and algae cover</i>	<i>High live coral cover</i>
<b>Restrictions</b>	<i>No area closed</i>	<i>25% of area closed</i>
<b>Number of Fish</b>	<i>60% more fish</i>	<i>40% more fish</i>
<b>Size of Fish</b>	<i>40% more larger fish</i>	<i>60% more larger fish</i>
<b>Species</b>	<i>Fewer species</i>	<i>Many species</i>
<b>Enforcement</b>	<i>Two additional patrols</i>	<i>Two additional patrols</i>
<b>Travel Cost / Day</b>	<i>Your current total cost per day</i>	<i>10% less than your current total cost per day</i>

Which trip do you prefer? (check only one box below)

- Trip A     Trip B     I would not take either trip

36. If you were planning a snorkel / SCUBA dive trip to the Florida Keys, which trip would you prefer: Trip A, Trip B, or neither?

ATTRIBUTE	Trip A	Trip B
<b>Number of Snorkelers / Divers</b>	<i>The usual number of other snorkelers / divers at the site</i>	<i>The usual number of other snorkelers / divers at the site</i>
<b>Site Settings</b>	<i>High algae cover</i>	<i>Mix of coral and algae cover</i>
<b>Restrictions</b>	<i>25% of area closed</i>	<i>25% of area closed</i>
<b>Number of Fish</b>	<i>No increase in numbers of fish</i>	<i>40% more fish</i>
<b>Size of Fish</b>	<i>40% more larger fish</i>	<i>20% more larger fish</i>
<b>Species</b>	<i>Fewer species</i>	<i>Fewer species</i>
<b>Enforcement</b>	<i>No additional patrols</i>	<i>One additional patrol</i>
<b>Travel Cost / Day</b>	<i>10% more than your current total cost per day</i>	<i>Your current total cost per day</i>

Which trip do you prefer? (check only one box below)

- Trip A     Trip B     I would not take either trip

37. If you were planning a snorkel / SCUBA dive trip to the Florida Keys, which trip would you prefer: Trip A, Trip B, or neither?

ATTRIBUTE	Trip A	Trip B
<b>Number of Snorkelers / Divers</b>	<i>30% fewer snorkelers / divers</i>	<i>15% fewer snorkelers / divers</i>
<b>Site Settings</b>	<i>Mix of coral and algae cover</i>	<i>Mix of coral and algae cover</i>
<b>Restrictions</b>	<i>50% of area closed</i>	<i>50% of area closed</i>
<b>Number of Fish</b>	<i>60% more fish</i>	<i>No increase in numbers of fish</i>
<b>Size of Fish</b>	<i>60% more larger fish</i>	<i>20% more larger fish</i>
<b>Species</b>	<i>Many species</i>	<i>No change in species numbers</i>
<b>Enforcement</b>	<i>No additional patrols</i>	<i>No additional patrols</i>
<b>Travel Cost / Day</b>	<i>Your current total cost per day</i>	<i>Your current total cost per day</i>

Which trip do you prefer? (check only one box below)

- Trip A     Trip B     I would not take either trip

38. If you were planning a snorkel / SCUBA dive trip to the Florida Keys, which trip would you prefer: Trip A, Trip B, or neither?

ATTRIBUTE	Trip A	Trip B
<b>Number of Snorkelers / Divers</b>	<i>15% fewer snorkelers / divers</i>	<i>The usual number of other snorkelers / divers at the site</i>
<b>Site Settings</b>	<i>Mix of coral and algae cover</i>	<i>High live coral cover</i>
<b>Restrictions</b>	<i>75% of area closed</i>	<i>No area closed</i>
<b>Number of Fish</b>	<i>40% more fish</i>	<i>20% more fish</i>
<b>Size of Fish</b>	<i>40% more larger fish</i>	<i>40% more larger fish</i>
<b>Species</b>	<i>No change in species numbers</i>	<i>No change in species numbers</i>
<b>Enforcement</b>	<i>No additional patrols</i>	<i>Two additional patrols</i>
<b>Travel Cost / Day</b>	<i>10% more than your current total cost per day</i>	<i>10% less than your current total cost per day</i>

Which trip do you prefer? (check only one box below)

- Trip A     Trip B     I would not take either trip

39. If you were planning a snorkel / SCUBA dive trip to the Florida Keys, which trip would you prefer: Trip A, Trip B, or neither?

ATTRIBUTE	Trip A	Trip B
<b>Number of Snorkelers / Divers</b>	<i>30% fewer snorkelers / divers</i>	<i>The usual number of other snorkelers / divers at the site</i>
<b>Site Settings</b>	<i>High live coral cover</i>	<i>High algae cover</i>
<b>Restrictions</b>	<i>25% of area closed</i>	<i>75% of area closed</i>
<b>Number of Fish</b>	<i>20% more fish</i>	<i>No increase in numbers of fish</i>
<b>Size of Fish</b>	<i>No increase in larger fish</i>	<i>60% more larger fish</i>
<b>Species</b>	<i>Many species</i>	<i>No change in species numbers</i>
<b>Enforcement</b>	<i>One additional patrol</i>	<i>No additional patrols</i>
<b>Travel Cost / Day</b>	<i>Your current total cost per day</i>	<i>10% more than your current total cost per day</i>

Which trip do you prefer? (check only one box below)

Trip A     Trip B     I would not take either trip

40. If you were planning a snorkel / SCUBA dive trip to the Florida Keys, which trip would you prefer: Trip A, Trip B, or neither?

ATTRIBUTE	Trip A	Trip B
<b>Number of Snorkelers / Divers</b>	<i>The usual number of other snorkelers / divers at the site</i>	<i>30% fewer snorkelers / divers</i>
<b>Site Settings</b>	<i>High live coral cover</i>	<i>High live coral cover</i>
<b>Restrictions</b>	<i>50% of area closed</i>	<i>50% of area closed</i>
<b>Number of Fish</b>	<i>40% more fish</i>	<i>20% more fish</i>
<b>Size of Fish</b>	<i>20% more larger fish</i>	<i>60% more larger fish</i>
<b>Species</b>	<i>Many species</i>	<i>Many species</i>
<b>Enforcement</b>	<i>Two additional patrols</i>	<i>One additional patrol</i>
<b>Travel Cost / Day</b>	<i>10% more than your current total cost per day</i>	<i>Your current total cost per day</i>

Which trip do you prefer? (check only one box below)

Trip A     Trip B     I would not take either trip

**Recreational Fisher**

If not a Recreational fisher in the Florida Keys, GO to last page.

Please think about a recreational fishing experience in the Florida Keys when answering the questions on the following pages. You will be offered eight (8) choices of two fishing trips. Each choice has different features for you to evaluate. Please read each choice carefully. Although they may look similar, trips in each question differ in at least one way.

There is an example to assist you. Please note the following definitions before reviewing the example.

- Number of Recreational Fishing Boats- the number of recreational fishing boats near you at any one time
- Number of Non-fishing boats- the number of non-fishing boats near you at any one time
- Restrictions- the number of reefs closed to fishing per zone (upper Keys, middle Keys, lower Keys)
- Number of Fish Species- the amount of different kinds of fish species caught in a trip
- Number of Fish- the overall amount of fish caught on a trip
- Size of Fish- the number of legal sized fish caught on a trip
- Travel cost / day – Travel cost that an angler spends for a fishing trip per day (including gas and other trip expenses)

**Example**

Suppose that you could choose from the recreational fishing opportunities described below. Which of these fishing trips would you prefer?

<b>ATTRIBUTE</b>	<b>Trip A</b>	<b>Trip B</b>
<b>Number of Recreational Fishing Boats</b>	<i>30% fewer boats</i>	<i>The usual number of other boats near the location</i>
<b>Number of Non-fishing Boats</b>	<i>The usual number of other boats near the location</i>	<i>30% fewer boats</i>
<b>Restrictions</b>	<i>25% of area closed</i>	<i>25% of area closed</i>
<b>Number of Species</b>	<i>No change in species numbers</i>	<i>Fewer species fish caught</i>
<b>Number of fish</b>	<i>10% more fish caught</i>	<i>30% more fish caught</i>
<b>Size of Fish</b>	<i>60% more keepers</i>	<i>20% more keepers</i>
<b>Travel Cost / Day</b>	<i>10% more than your current total cost per day</i>	<i>10% less than your current total cost per day</i>

Which trip do you prefer? (check only one box below)

- Trip A
  Trip B
  I would not take either trip



41. Suppose that you could choose from the recreational fishing opportunities described below. Which of these fishing trips would you prefer?

ATTRIBUTE	Trip A	Trip B
<b>Number of Recreational Fishing Boats</b>	<i>15% fewer boats</i>	<i>The usual number of other boats near the location</i>
<b>Number of Non-fishing Boats</b>	<i>The usual number of other boats near the location</i>	<i>The usual number of other boats near the location</i>
<b>Restrictions</b>	<i>No area closed</i>	<i>75% of area closed</i>
<b>Number of Species</b>	<i>No change in species numbers</i>	<i>Fewer species fish caught</i>
<b>Number of fish</b>	<i>30% more fish caught</i>	<i>20% more fish caught</i>
<b>Size of Fish</b>	<i>20% more keepers</i>	<i>20% more keepers</i>
<b>Travel Cost / Day</b>	<i>10% more than your current total cost per day</i>	<i>10% more than your current total cost per day</i>

Which trip do you prefer? (check only one box below)

Trip A     Trip B     I would not take either trip

42. Suppose that you could choose from the recreational fishing opportunities described below. Which of these fishing trips would you prefer?

ATTRIBUTE	Trip A	Trip B
<b>Number of Recreational Fishing Boats</b>	<i>30% fewer boats</i>	<i>15% fewer boats</i>
<b>Number of Non-fishing Boats</b>	<i>The usual number of other boats near the location</i>	<i>15% fewer boats</i>
<b>Restrictions</b>	<i>No area closed</i>	<i>50% of area closed</i>
<b>Number of Species</b>	<i>No change in species numbers</i>	<i>No change in species numbers</i>
<b>Number of fish</b>	<i>20% more fish caught</i>	<i>No increase in numbers of fish caught</i>
<b>Size of Fish</b>	<i>60% more keepers</i>	<i>20% more keepers</i>
<b>Travel Cost / Day</b>	<i>Your current total cost per day</i>	<i>10% less than your current total cost per day</i>

Which trip do you prefer? (check only one box below)

Trip A     Trip B     I would not take either trip

43. Suppose that you could choose from the recreational fishing opportunities described below. Which of these fishing trips would you prefer?

ATTRIBUTE	Trip A	Trip B
<b>Number of Recreational Fishing Boats</b>	<i>The usual number of other boats near the location</i>	<i>The usual number of other boats near the location</i>
<b>Number of Non-fishing Boats</b>	<i>15% fewer boats</i>	<i>30% fewer boats</i>
<b>Restrictions</b>	<i>No area closed</i>	<i>25% of area closed</i>
<b>Number of Species</b>	<i>More species fish caught</i>	<i>More species fish caught</i>
<b>Number of fish</b>	<i>No increase in numbers of fish caught</i>	<i>10% more fish caught</i>
<b>Size of Fish</b>	<i>No increase in the number of caught kept</i>	<i>20% more keepers</i>
<b>Travel Cost / Day</b>	<i>10% less than your current total cost per day</i>	<i>Your current total cost per day</i>

Which trip do you prefer? (check only one box below)

Trip A     Trip B     I would not take either trip

44. Suppose that you could choose from the recreational fishing opportunities described below. Which of these fishing trips would you prefer?

ATTRIBUTE	Trip A	Trip B
<b>Number of Recreational Fishing Boats</b>	<i>The usual number of other boats near the location</i>	<i>15% fewer boats</i>
<b>Number of Non-fishing Boats</b>	<i>30% fewer boats</i>	<i>15% fewer boats</i>
<b>Restrictions</b>	<i>25% of area closed</i>	<i>No area closed</i>
<b>Number of Species</b>	<i>More species fish caught</i>	<i>Fewer species fish caught</i>
<b>Number of fish</b>	<i>10% more fish caught</i>	<i>No increase in numbers of fish caught</i>
<b>Size of Fish</b>	<i>20% more keepers</i>	<i>No increase in the number of caught kept</i>
<b>Travel Cost / Day</b>	<i>10% more than your current total cost per day</i>	<i>Your current total cost per day</i>

Which trip do you prefer? (check only one box below)

Trip A     Trip B     I would not take either trip

45. Suppose that you could choose from the recreational fishing opportunities described below. Which of these fishing trips would you prefer?

ATTRIBUTE	Trip A	Trip B
<b>Number of Recreational Fishing Boats</b>	<i>15% fewer boats</i>	<i>The usual number of other boats near the location</i>
<b>Number of Non-fishing Boats</b>	<i>30% fewer boats</i>	<i>The usual number of other boats near the location</i>
<b>Restrictions</b>	<i>50% of area closed</i>	<i>25% of area closed</i>
<b>Number of Species</b>	<i>More species fish caught</i>	<i>More species fish caught</i>
<b>Number of fish</b>	<i>10% more fish caught</i>	<i>No increase in numbers of fish caught</i>
<b>Size of Fish</b>	<i>60% more keepers</i>	<i>60% more keepers</i>
<b>Travel Cost / Day</b>	<i>10% less than your current total cost per day</i>	<i>10% less than your current total cost per day</i>

Which trip do you prefer? (check only one box below)

Trip A     Trip B     I would not take either trip

46. Suppose that you could choose from the recreational fishing opportunities described below. Which of these fishing trips would you prefer?

ATTRIBUTE	Trip A	Trip B
<b>Number of Recreational Fishing Boats</b>	<i>The usual number of other boats near the location</i>	<i>30% fewer boats</i>
<b>Number of Non-fishing Boats</b>	<i>15% fewer boats</i>	<i>The usual number of other boats near the location</i>
<b>Restrictions</b>	<i>50% of area closed</i>	<i>75% of area closed</i>
<b>Number of Species</b>	<i>No change in species numbers</i>	<i>More species fish caught</i>
<b>Number of fish</b>	<i>20% more fish caught</i>	<i>30% more fish caught</i>
<b>Size of Fish</b>	<i>40% more keepers</i>	<i>60% more keepers</i>
<b>Travel Cost / Day</b>	<i>Your current total cost per day</i>	<i>Your current total cost per day</i>

Which trip do you prefer? (check only one box below)

Trip A     Trip B     I would not take either trip

47. Suppose that you could choose from the recreational fishing opportunities described below. Which of these fishing trips would you prefer?

ATTRIBUTE	Trip A	Trip B
<b>Number of Recreational Fishing Boats</b>	<i>30% fewer boats</i>	<i>30% fewer boats</i>
<b>Number of Non-fishing Boats</b>	<i>30% fewer boats</i>	<i>30% fewer boats</i>
<b>Restrictions</b>	<i>50% of area closed</i>	<i>50% of area closed</i>
<b>Number of Species</b>	<i>Fewer species fish caught</i>	<i>More species fish caught</i>
<b>Number of fish</b>	<i>No increase in numbers of fish caught</i>	<i>30% more fish caught</i>
<b>Size of Fish</b>	<i>20% more keepers</i>	<i>No increase in the number of caught kept</i>
<b>Travel Cost / Day</b>	<i>Your current total cost per day</i>	<i>10% more than your current total cost per day</i>

Which trip do you prefer? (check only one box below)

Trip A     Trip B     I would not take either trip

48. Suppose that you could choose from the recreational fishing opportunities described below. Which of these fishing trips would you prefer?

ATTRIBUTE	Trip A	Trip B
<b>Number of Recreational Fishing Boats</b>	<i>15% fewer boats</i>	<i>30% fewer boats</i>
<b>Number of Non-fishing Boats</b>	<i>15% fewer boats</i>	<i>15% fewer boats</i>
<b>Restrictions</b>	<i>50% of area closed</i>	<i>No area closed</i>
<b>Number of Species</b>	<i>Fewer species fish caught</i>	<i>No change in species numbers</i>
<b>Number of fish</b>	<i>30% more fish caught</i>	<i>10% more fish caught</i>
<b>Size of Fish</b>	<i>No increase in the number of keeps caught</i>	<i>40% more keepers</i>
<b>Travel Cost / Day</b>	<i>10% more than your current total cost per day</i>	<i>10% less than your current total cost per day</i>

Which trip do you prefer? (check only one box below)

Trip A     Trip B     I would not take either trip

That's All!! If you would like to be entered into a sweepstakes to win a free Vacation to the Florida Keys, fill out your name, address and phone number below. All prizes will be awarded in October of 2007.

Name: \_\_\_\_\_

Address: \_\_\_\_\_

City: \_\_\_\_\_

State: \_\_\_\_\_ Zip: \_\_\_\_\_ Phone: \_\_\_\_\_

Prizes to be awarded are:

GRAND PRIZE

- \* Airfare for two from anywhere in the continental United States to the Florida Keys
- \* Rental car with unlimited miles for one week (seven days)
- \* Accommodations for two for one week (six nights)
- \* Two complimentary "activities" for two (i.e., diving trip, fishing charter, sunset sail, etc.)
- \* Complimentary dinner for two at local restaurant

FIRST PRIZE

- \* Accommodations for two for five days (four nights)
- \* Two complimentary "activities" for two (i.e., diving trip, fishing charter, sunset sail, etc.)
- \* Complimentary dinner for two at local restaurant

SECOND PRIZE

- \* Accommodations for two for four days (three nights)
- \* One complimentary "activity" for two (i.e., diving trip, fishing charter, sunset sail, etc.)
- \* Complimentary dinner for two at local restaurant

SECOND PRIZE

- \* Accommodations for two for three days (two nights)
- \* One complimentary "activity" for two (i.e., diving trip, fishing charter, sunset sail, etc.)

This is a cooperative research project of the Monroe County Tourist Development Council and the National Oceanic and Atmospheric Administration. Public reporting burden for this collection of information is estimated to average 20 minutes including time for reviewing instructions, searching existing data sources, gathering and maintaining the data need, 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 this burden, to U.S. Department of Commerce, Clearance Officer, Office of Chief Information Officer, Rm. 6625, 14th and Constitution Avenue NW, Washington, DC 20230. Notwithstanding any other provisions of the law, no person is required to respond to, nor shall any person be subject to penalty for failure to comply with, a collection of information subject to requirements of the Paperwork Reduction Act, unless that collection of information displays a currently valid OMB Control Number.

## THANK YOU!

for  
participating in this  
Recreation Survey

Dear Visitor,

During your recent trip to the Florida Keys 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 answers are voluntary and confidential. Your name will never be released to anyone unless otherwise required by law. After the completion of the project all materials identifying you as an individual will be destroyed.

When you complete the questionnaire, please reverse-fold it so that our return address on the GREEN PAGE in the inside is folded to the outside. Please staple or tape to seal the questionnaire and mail it back to us. No postage is needed. Your cooperation in this effort is greatly appreciated.

Sincerely,

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

There are many places to engage in snorkeling/SCUBA diving activities. In the next several questions, we are attempting to understand the reason you may choose to snorkel/SCUBA dive on one reef versus another, or if necessary, choose to engage in activities other than snorkeling/SCUBA diving in the Florida Keys.

**When answering the following questions, please think about a favorite or most common reef that you dive on in the Florida Keys. If you do not have a favorite or most common reef that you dive on in the Keys, please think about the last reef that you dove on in the Florida Keys.**

**Read the choices and circle the letter that indicates your answer for that question.**

**1. Please circle which reef you are thinking of when responding to the following questions. (Please circle only one answer)**

- A Favorite reef to snorkel/dive on
- B Most common reef I snorkel/dive on
- C Most recent reef I snorkeled/dove on

**2. Is this reef a:**

- A Natural coral reef
- B Artificial reef

**3. Are you able to recall the name of this reef? If so, please list in below.**

\_\_\_\_\_ reef

**4. Imagine that you discovered that you could not snorkel/ SCUBA dive at this reef (from question #1 above) during your next planned snorkel/SCUBA dive trip. What would you do? (Please circle only one answer)**

- A I would still snorkel/ SCUBA dive, but elsewhere in the Florida Keys
- B I would still snorkel/ SCUBA dive, but at a location outside of the Florida Keys
- C I would temporarily participate in a different activity in the Florida Keys
- D I would temporarily participate in a different activity, but outside the Florida Keys

**5. Imagine that you discovered that you could not snorkel/ SCUBA dive at this reef (from question #1 above) for the next five years. What would you do?**

- A I would still snorkel/ SCUBA dive, but elsewhere in the Florida Keys
- B I would still snorkel/ SCUBA dive, but at a location outside of the Florida Keys
- C I would permanently participate in a different activity in the Florida Keys
- D I would permanently participate in a different activity, but outside the Florida Keys

**6. Imagine that you discovered during your next snorkel/ SCUBA dive trip that this reef (from question #1 above) was more crowded than you normally find acceptable. What would you do?**

- A I would make an exception and still snorkel/ SCUBA dive on this reef
- B I would still snorkel/ SCUBA dive, but elsewhere in the Florida Keys
- C I would temporarily participate in a different activity in the Florida Keys
- D I would temporarily participate in a different activity, but outside the Florida Keys

**7. Imagine that you discovered during your next snorkel/ SCUBA dive trip that this reef (from question #1 above) was more ecologically damaged (e.g., there wasn't enough healthy coral or fish) than normally find acceptable. What would you do?**

- A I would make an exception and still snorkel/ SCUBA dive on this reef
- B I would still snorkel/ SCUBA dive, but elsewhere in the Florida Keys
- C I would temporarily participate in a different activity in the Florida Keys
- D I would temporarily participate in a different activity, but outside the Florida Keys

**8. Imagine that you discovered during your next snorkel/ SCUBA dive trip that user groups with whom you experience conflict are using this reef (from question #1 above). What would you do?**

- A I would make an exception and still snorkel/ SCUBA dive on this reef
- B I would still snorkel/ SCUBA dive, but elsewhere in the Florida Keys
- C I would temporarily participate in a different activity in the Florida Keys
- D I would temporarily participate in a different activity, but outside the Florida Keys

**9. If you could not snorkel/SCUBA dive at this reef (from question #1 above), how many other Florida Keys reefs do you think can offer you just as good an experience as your favorite reefs?**

\_\_\_\_\_ number of other Florida Keys reefs

Don't Know

**10. If you could not snorkel/SCUBA dive at this reef (from question #1 above), how many other Florida Keys reefs do you think can offer you a similar, but not quite as good, experience?**

\_\_\_\_\_ number of other Florida Keys reefs

Don't Know

**11. Please rate how similar you think the snorkeling/SCUBA diving experience is at your best similar reef compared to this reef (from question #1 above).**

Not as good				Equivalent				Better
1	2	3	4	5	6	7		



12. There are many things that you might think about or consider when deciding to substitute one reef for another when snorkeling or SCUBA diving. Please indicate how important each of the following factors is in terms of deciding whether or not you would choose to snorkel/SCUBA dive at a substitute reef.

	Not at all important	Somewhat important	Moderately important	Very important	Extremely important
a) The quality of other reefs.....	1	2	3	4	5
b) The difficulty of the diving conditions on other reefs.....	1	2	3	4	5
c) The distance to other reefs.....	1	2	3	4	5
d) My familiarity with various dive shops.....	1	2	3	4	5
e) The adequacy of my boat to get to other reefs.....	1	2	3	4	5
f) The number of fish at other reefs.....	1	2	3	4	5
g) The cost of fuel to get to other reefs.....	1	2	3	4	5
h) The level of crowding at other reefs.....	1	2	3	4	5
i) The amount of live coral at other reefs.....	1	2	3	4	5
j) Area closures at desirable reef locations.....	1	2	3	4	5
k) The presence of other groups that I don't like.....	1	2	3	4	5
l) Other.....	1	2	3	4	5

13. If you could not go snorkeling/SCUBA diving, either in the Florida Keys or elsewhere, are there any other recreation activities in the Florida Keys that would provide you with the same satisfaction and enjoyment that you receive from going snorkeling/SCUBA diving?

Yes --- If yes, please go to question # 14 below

No --- If no, please go to question # 15 below

14. If you answered “yes” to question 13, please list up to three specific activities that you consider to be substitutes for snorkeling/SCUBA diving.

\_\_\_\_\_ activity

\_\_\_\_\_ activity

\_\_\_\_\_ activity

15. There are reasons why people cannot participate as often as they would like in an activity they enjoy doing. Please indicate the extent to which you agree or disagree with each of the following statements as they relate to your ability to snorkel/SCUBA dive in the Florida Keys as often as you would like.

	Completely disagree	Disagree	Neutral	Agree	Completely agree
a) I don't have enough leisure time.....	1	2	3	4	5
b) The equipment is too expensive.....	1	2	3	4	5
c) The cost of travel is too high.....	1	2	3	4	5
d) It is difficult to find snorkel/SCUBA diving partners.....	1	2	3	4	5
e) Fuel prices for my boat are too high.....	1	2	3	4	5
f) Snorkel/SCUBA diving areas are too crowded.....	1	2	3	4	5
g) Too many snorkel/SCUBA diving areas are off-limits.....	1	2	3	4	5
h) Dive boats are too expensive .....	1	2	3	4	5
i) Other.....	1	2	3	4	5

16. Below is a list of reasons why people snorkel/SCUBA dive in the Florida Keys. Please circle the number that indicates how important each item is to you as a reason for snorkel/SCUBA diving in the Florida Keys.

	Not at all important	Somewhat important	Moderately important	Very important	Extremely important
a) To develop my skills.....	1	2	3	4	5
b) To experience excitement.....	1	2	3	4	5
c) For family recreation.....	1	2	3	4	5
d) To be with friends.....	1	2	3	4	5
e) To be outdoors.....	1	2	3	4	5
f) To experience new and different things.....	1	2	3	4	5
g) For the experience of the dive.....	1	2	3	4	5
h) To get away from the demands of other people.....	1	2	3	4	5
i) To get away from the regular routine.....	1	2	3	4	5
j) To see diverse underwater life.....	1	2	3	4	5
k) To teach underwater skills to other people.....	1	2	3	4	5
l) To obtain additional dive ratings.....	1	2	3	4	5
m) To experience natural surroundings.....	1	2	3	4	5
n) For solitude.....	1	2	3	4	5
o) For relaxation.....	1	2	3	4	5
p) For the challenge of the dive.....	1	2	3	4	5

There are many places to engage in fishing. In the next several questions, we are attempting to understand the reason you may choose to fish in one location versus another, or if necessary, engage in an activity other than fishing in the Florida Keys.

**When answering the following questions, please think about a favorite or most common area that you fish in off the Florida Keys. If you do not have a favorite or most common area that you fish in off the Keys, please think about the last area that you fished in off the Florida Keys.**

**17. Please indicate which reef you are thinking of when responding to the following questions. (Please circle only one answer)**

- A My favorite reef to fish at
- B The most common area I fish at
- C The most recent area I fished in

**18. Is this area:**

- A A flat
- B A natural coral reef
- C Hawk Channel
- D An artificial reef
- E Other (please list) \_\_\_\_\_

**19. Are you able to recall the name of this area? If so, please list it below.**

\_\_\_\_\_ area

**20. Imagine that you discovered that you could not fish in this area (from question #17 above) during your next planned fishing trip. What would you do? (Please circle only one answer)**

- A I would still fish, but elsewhere in the Florida Keys
- B I would still fish, but at a location outside of the Florida Keys
- C I would temporarily participate in a different activity in the Florida Keys
- D I would temporarily participate in a different activity, but outside the Florida Keys

**21. Imagine that you discovered that you could not fish in this area (from question #17 above) for the next five years. What would you do?**

- A I would still fish, but elsewhere in the Florida Keys
- B I would still fish, but at a location outside of the Florida Keys
- C I would permanently participate in a different activity in the Florida Keys
- D I would permanently participate in a different activity, but outside the Florida Keys

**22. Imagine that you discovered during your next fishing trip that this area (from question #17 above) was more crowded than you normally find acceptable. What would you do?**

- A I would make an exception and still fish in this area
- B I would still fish, but elsewhere in the Florida Keys
- C I would temporarily participate in a different activity in the Florida Keys
- D I would temporarily participate in a different activity, but outside the Florida Keys

**23. Imagine that you discovered during your next fishing trip that this area (from question #17 above) was more ecologically damaged (e.g., there was no longer enough good fish habitat) than you normally find acceptable. What would you do?**

- A I would still fish in this area
- B I would still fish, but elsewhere in the Florida Keys
- C I would temporarily participate in a different activity in the Florida Keys
- D I would temporarily participate in a different activity, but outside the Florida Keys

**24. Imagine that you discovered during your next fishing trip that other user groups with whom you experience conflict are using this area (from question #17 above). What would you do?**

- A I would still fish in this area
- B I would still fish, but elsewhere in the Florida Keys
- C I would temporarily participate in a different activity in the Florida Keys
- D I would temporarily participate in a different activity, but outside the Florida Keys

**25. If you could not fish in this area (from question #17 above), how many other areas in the Florida Keys do you think can offer you an overall experience that is just as good?**

\_\_\_\_\_ number of other areas in the Florida Keys

Don't Know

**26. If you could not fish in this area (from question #17 above), how many other areas in the Florida Keys do you think can offer you a similar, but not quite as good, overall experience?**

\_\_\_\_\_ number of other areas Florida Keys

Don't Know

**27. Please rate how similar you think the fishing experience is at your best similar fishing area compared to this area.**

Not as good				Equivalent				Better
1	2	3	4	5	6	7		

**28. There are many things that you might think about or consider when deciding to substitute one fishing area for another. Please indicate how important each of the following factors is in terms of deciding whether or not you would choose to fish in a substitute area.**

	Not at all important	Somewhat important	Moderately important	Very important	Extremely important
a) The number of fish at other areas.....	1	2	3	4	5
b) The difficulty of boating conditions.....	1	2	3	4	5
c) The distance to other areas.....	1	2	3	4	5
d) The charter boats and captains at other areas.....	1	2	3	4	5
e) The adequacy of my boat to get to other areas.....	1	2	3	4	5
f) The cost of fuel to get to other areas.....	1	2	3	4	5
g) The level of crowding at other areas.....	1	2	3	4	5
h) Area closures at desirable locations.....	1	2	3	4	5
i) The presence of other groups that I don't like.....	1	2	3	4	5
j) Other.....	1	2	3	4	5

**29. If you could not go fishing, either in the Florida Keys or elsewhere, are there any other recreation activities in the Florida Keys that would provide you with the same satisfaction and enjoyment that you receive from going fishing?**

Yes --- If yes, please go to question # 30 below

No --- If no, please go to question # 31 below

30. If you answered “yes” to question D29, please list up to three specific activities that you consider to be substitutes for fishing in the Florida Keys.

\_\_\_\_\_ activity

\_\_\_\_\_ activity

\_\_\_\_\_ activity

31. There are reasons why people cannot participate as often as they would like in an activity they enjoy doing. Please indicate the extent to which you agree or disagree with each of the following statements as they relate to your ability to fish in the Florida Keys as often as you would like.

	Completely disagree	Disagree	Neutral	Agree	Completely agree
a) I don't have enough leisure time.....	1	2	3	4	5
b) The equipment is too expensive.....	1	2	3	4	5
c) The cost of travel is too high.....	1	2	3	4	5
d) It is difficult to find fishing partners.....	1	2	3	4	5
e) Fuel prices for my boat are too high.....	1	2	3	4	5
f) Fishing areas are too crowded.....	1	2	3	4	5
g) Too many fishing areas are off-limits.....	1	2	3	4	5
h) Fishing charters are too expensive.....	1	2	3	4	5
i) Other.....	1	2	3	4	5

32. Below is a list of reasons why people saltwater fish in the Florida Keys. Please circle the number that indicates how important each item is to you as a reason for saltwater fishing in the Florida Keys.

	Not at all important	Somewhat important	Moderately important	Very important	Extremely important
a) To develop my skills.....	1	2	3	4	5
b) To experience excitement.....	1	2	3	4	5
c) For family recreation.....	1	2	3	4	5
d) To be with friends.....	1	2	3	4	5
e) To be outdoors.....	1	2	3	4	5
f) To experience new and different things.....	1	2	3	4	5
g) For the experience of the catch.....	1	2	3	4	5
h) To get away from the demands of other people.....	1	2	3	4	5
i) To get away from the regular routine.....	1	2	3	4	5
j) To catch a trophy fish.....	1	2	3	4	5
k) For the sport of fishing, not to obtain food to eat.....	1	2	3	4	5
l) For the fun of catching fish.....	1	2	3	4	5
m) To experience natural surroundings.....	1	2	3	4	5
n) For solitude.....	1	2	3	4	5
o) For relaxation.....	1	2	3	4	5
p) For the challenge of the catch.....	1	2	3	4	5
q) To obtain fish for eating, not for sport.....	1	2	3	4	5



**Management Alternatives**

**Snorkeler / SCUBA diver**  
 If not a snorkeler / SCUBA diver in the Florida Keys, but do recreational fishing, GO to page 16.  
 If not a snorkeler / SCUBA diver or recreational fisher in the Florida Keys, GO to last page.

Please think about a recreational snorkeling / SCUBA diving experience on a reef in the Florida Keys when answering the questions on the following pages. You will be offered eight (8) choices of two diving trips. Each choice has different features for you to evaluate. Please read each choice carefully. Although they may look similar, trips in each question differ in at least one way.

There is an example to assist you. Please note the following definitions before reviewing the example.

- Number of Snorkelers / Divers - the number of snorkelers / divers on a reef at any one time
- Restrictions- percent area of reef open to use
- Enforcement- the number of law enforcement patrols you observe per trip
- Number of Fish Species- the amount of different kinds of fish species observed on the reef
- Site Settings- the amount of live coral and/or algae on the reef
- Number of Fish- the overall amount of fish observed on the reef
- Size of Fish- the size of fish observed on the reef
- Travel cost / day – Travel cost that a snorkeler / diver spends for a diving trip per day (including gas and other trip expenses)

**Example**

If you were planning a snorkel / SCUBA dive trip to the Florida Keys, which trip would you prefer: Trip A, Trip B, or neither?

<b>ATTRIBUTE</b>	<b>Trip A</b>	<b>Trip B</b>
<b>Number of Snorkelers / Divers</b>	<i>15% fewer snorkelers / divers</i>	<i>30% fewer snorkelers/ divers</i>
<b>Site Settings</b>	<i>Mix of coral and algae cover</i>	<i>High live coral cover</i>
<b>Restrictions</b>	<i>25% of area closed</i>	<i>75 % of area closed</i>
<b>Number of Fish</b>	<i>40% more fish</i>	<i>No increase in numbers of fish</i>
<b>Size of Fish</b>	<i>40% more larger fish</i>	<i>20 % more larger fish</i>
<b>Species</b>	<i>No change in species numbers</i>	<i>Fewer species</i>
<b>Enforcement</b>	<i>Two additional patrols</i>	<i>No additional patrols</i>
<b>Travel Cost / Day</b>	<i>Your current total cost per day</i>	<i>10% more than your current total cost per day</i>

**Which trip do you prefer?** (check only one box below)

- Trip A     
  Trip B     
  I would not take either trip

33. If you were planning a snorkel / SCUBA dive trip to the Florida Keys, which trip would you prefer: Trip A, Trip B, or neither?

<b>ATTRIBUTE</b>	<b>Trip A</b>	<b>Trip B</b>
<b>Number of Snorkelers / Divers</b>	<i>The usual number of other snorkelers / divers at the site</i>	<i>15% fewer snorkelers / divers</i>
<b>Site Settings</b>	<i>High live coral cover</i>	<i>Mix of coral and algae cover</i>
<b>Restrictions</b>	<i>50% of area closed</i>	<i>25% of area closed</i>
<b>Number of Fish</b>	<i>20% more fish</i>	<i>60% more fish</i>
<b>Size of Fish</b>	<i>No increase in larger fish</i>	<i>40% more larger fish</i>
<b>Species</b>	<i>No change in species numbers</i>	<i>Many species</i>
<b>Enforcement</b>	<i>Two additional patrols</i>	<i>No additional patrols</i>
<b>Travel Cost / Day</b>	<i>10% more than your current total cost per day</i>	<i>10% less than your current total cost per day</i>

Which trip do you prefer? (check only one box below)

Trip A     Trip B     I would not take either trip

34. If you were planning a snorkel / SCUBA dive trip to the Florida Keys, which trip would you prefer: Trip A, Trip B, or neither?

<b>ATTRIBUTE</b>	<b>Trip A</b>	<b>Trip B</b>
<b>Number of Snorkelers / Divers</b>	<i>15% fewer snorkelers / divers</i>	<i>30% fewer snorkelers / divers</i>
<b>Site Settings</b>	<i>High live coral cover</i>	<i>High algae cover</i>
<b>Restrictions</b>	<i>50% of area closed</i>	<i>No area closed</i>
<b>Number of Fish</b>	<i>60% more fish</i>	<i>20% more fish</i>
<b>Size of Fish</b>	<i>No increase in larger fish</i>	<i>20% more larger fish</i>
<b>Species</b>	<i>Fewer species</i>	<i>Fewer species</i>
<b>Enforcement</b>	<i>No additional patrols</i>	<i>One additional patrol</i>
<b>Travel Cost / Day</b>	<i>10% less than your current total cost per day</i>	<i>10% less than your current total cost per day</i>

Which trip do you prefer? (check only one box below)

Trip A     Trip B     I would not take either trip

35. If you were planning a snorkel / SCUBA dive trip to the Florida Keys, which trip would you prefer: Trip A, Trip B, or neither?

<b>ATTRIBUTE</b>	<b>Trip A</b>	<b>Trip B</b>
<b>Number of Snorkelers / Divers</b>	<i>15% fewer snorkelers / divers</i>	<i>The usual number of other snorkelers / divers at the site</i>
<b>Site Settings</b>	<i>Mix of coral and algae cover</i>	<i>Mix of coral and algae cover</i>
<b>Restrictions</b>	<i>50% of area closed</i>	<i>No area closed</i>
<b>Number of Fish</b>	<i>20% more fish</i>	<i>60% more fish</i>
<b>Size of Fish</b>	<i>40% more larger fish</i>	<i>60% more larger fish</i>
<b>Species</b>	<i>Fewer species</i>	<i>No change in species numbers</i>
<b>Enforcement</b>	<i>One additional patrol</i>	<i>One additional patrol</i>
<b>Travel Cost / Day</b>	<i>10% less than your current total cost per day</i>	<i>Your current total cost per day</i>

Which trip do you prefer? (check only one box below)

Trip A     Trip B     I would not take either trip

36. If you were planning a snorkel / SCUBA dive trip to the Florida Keys, which trip would you prefer: Trip A, Trip B, or neither?

<b>ATTRIBUTE</b>	<b>Trip A</b>	<b>Trip B</b>
<b>Number of Snorkelers / Divers</b>	<i>30% fewer snorkelers / divers</i>	<i>30% fewer snorkelers / divers</i>
<b>Site Settings</b>	<i>High algae cover</i>	<i>Mix of coral and algae cover</i>
<b>Restrictions</b>	<i>75% of area closed</i>	<i>75% of area closed</i>
<b>Number of Fish</b>	<i>No increase in numbers of fish</i>	<i>20% more fish</i>
<b>Size of Fish</b>	<i>60% more larger fish</i>	<i>60% more larger fish</i>
<b>Species</b>	<i>No change in species numbers</i>	<i>Fewer species</i>
<b>Enforcement</b>	<i>Two additional patrols</i>	<i>One additional patrol</i>
<b>Travel Cost / Day</b>	<i>Your current total cost per day</i>	<i>10% less than your current total cost per day</i>

Which trip do you prefer? (check only one box below)

Trip A     Trip B     I would not take either trip

37. If you were planning a snorkel / SCUBA dive trip to the Florida Keys, which trip would you prefer: Trip A, Trip B, or neither?

ATTRIBUTE	Trip A	Trip B
<b>Number of Snorkelers / Divers</b>	<i>15% fewer snorkelers / divers</i>	<i>30% fewer snorkelers / divers</i>
<b>Site Settings</b>	<i>Mix of coral and algae cover</i>	<i>High live coral cover</i>
<b>Restrictions</b>	<i>No area closed</i>	<i>25% of area closed</i>
<b>Number of Fish</b>	<i>40% more fish</i>	<i>40% more fish</i>
<b>Size of Fish</b>	<i>20% more larger fish</i>	<i>20% more larger fish</i>
<b>Species</b>	<i>Many species</i>	<i>No change in species numbers</i>
<b>Enforcement</b>	<i>Two additional patrols</i>	<i>No additional patrols</i>
<b>Travel Cost / Day</b>	<i>10% more than your current total cost per day</i>	<i>10% more than your current total cost per day</i>

Which trip do you prefer? (check only one box below)

Trip A     Trip B     I would not take either trip

38. If you were planning a snorkel / SCUBA dive trip to the Florida Keys, which trip would you prefer: Trip A, Trip B, or neither?

ATTRIBUTE	Trip A	Trip B
<b>Number of Snorkelers / Divers</b>	<i>30% fewer snorkelers / divers</i>	<i>15% fewer snorkelers / divers</i>
<b>Site Settings</b>	<i>High live coral cover</i>	<i>High live coral cover</i>
<b>Restrictions</b>	<i>25% of area closed</i>	<i>50% of area closed</i>
<b>Number of Fish</b>	<i>No increase in numbers of fish</i>	<i>20% more fish</i>
<b>Size of Fish</b>	<i>40% more larger fish</i>	<i>40% more larger fish</i>
<b>Species</b>	<i>Many species</i>	<i>Fewer species</i>
<b>Enforcement</b>	<i>One additional patrol</i>	<i>Two additional patrols</i>
<b>Travel Cost / Day</b>	<i>10% more than your current total cost per day</i>	<i>Your current total cost per day</i>

Which trip do you prefer? (check only one box below)

Trip A     Trip B     I would not take either trip

39. If you were planning a snorkel / SCUBA dive trip to the Florida Keys, which trip would you prefer: Trip A, Trip B, or neither?

ATTRIBUTE	Trip A	Trip B
<b>Number of Snorkelers / Divers</b>	<i>The usual number of other snorkelers / divers at the site</i>	<i>The usual number of other snorkelers / divers at the site</i>
<b>Site Settings</b>	<i>High algae cover</i>	<i>High algae cover</i>
<b>Restrictions</b>	<i>No area closed</i>	<i>No area closed</i>
<b>Number of Fish</b>	<i>No increase in numbers of fish</i>	<i>20% more fish</i>
<b>Size of Fish</b>	<i>40% more larger fish</i>	<i>No increase in larger fish</i>
<b>Species</b>	<i>Many species</i>	<i>Many species</i>
<b>Enforcement</b>	<i>Two additional patrols</i>	<i>No additional patrols</i>
<b>Travel Cost / Day</b>	<i>10% less than your current total cost per day</i>	<i>10% more than your current total cost per day</i>

Which trip do you prefer? (check only one box below)

Trip A     Trip B     I would not take either trip

40. If you were planning a snorkel / SCUBA dive trip to the Florida Keys, which trip would you prefer: Trip A, Trip B, or neither?

ATTRIBUTE	Trip A	Trip B
<b>Number of Snorkelers / Divers</b>	<i>15% fewer snorkelers / divers</i>	<i>15% fewer snorkelers / divers</i>
<b>Site Settings</b>	<i>High algae cover</i>	<i>High live coral cover</i>
<b>Restrictions</b>	<i>75% of area closed</i>	<i>75% of area closed</i>
<b>Number of Fish</b>	<i>20% more fish</i>	<i>No increase in numbers of fish</i>
<b>Size of Fish</b>	<i>No increase in larger fish</i>	<i>No increase in larger fish</i>
<b>Species</b>	<i>Many species</i>	<i>Many species</i>
<b>Enforcement</b>	<i>No additional patrols</i>	<i>One additional patrol</i>
<b>Travel Cost / Day</b>	<i>Your current total cost per day</i>	<i>Your current total cost per day</i>

Which trip do you prefer? (check only one box below)

Trip A     Trip B     I would not take either trip

**Recreational Fisher**

If not a Recreational fisher in the Florida Keys, GO to last page.

Please think about a recreational fishing experience in the Florida Keys when answering the questions on the following pages. You will be offered eight (8) choices of two fishing trips. Each choice has different features for you to evaluate. Please read each choice carefully. Although they may look similar, trips in each question differ in at least one way.

There is an example to assist you. Please note the following definitions before reviewing the example.

- Number of Recreational Fishing Boats- the number of recreational fishing boats near you at any one time
- Number of Non-fishing boats- the number of non-fishing boats near you at any one time
- Restrictions- the number of reefs closed to fishing per zone (upper Keys, middle Keys, lower Keys)
- Number of Fish Species- the amount of different kinds of fish species caught in a trip
- Number of Fish- the overall amount of fish caught on a trip
- Size of Fish- the number of legal sized fish caught on a trip
- Travel cost / day – Travel cost that an angler spends for a fishing trip per day (including gas and other trip expenses)

**Example**

Suppose that you could choose from the recreational fishing opportunities described below. Which of these fishing trips would you prefer?

ATTRIBUTE	Trip A	Trip B
<b>Number of Recreational Fishing Boats</b>	<i>30% fewer boats</i>	<i>The usual number of other boats near the location</i>
<b>Number of Non-fishing Boats</b>	<i>The usual number of other boats near the location</i>	<i>30% fewer boats</i>
<b>Restrictions</b>	<i>25% of area closed</i>	<i>25% of area closed</i>
<b>Number of Species</b>	<i>No change in species numbers</i>	<i>Fewer species fish caught</i>
<b>Number of fish</b>	<i>10% more fish caught</i>	<i>30% more fish caught</i>
<b>Size of Fish</b>	<i>60% more keepers</i>	<i>20% more keepers</i>
<b>Travel Cost / Day</b>	<i>10% more than your current total cost per day</i>	<i>10% less than your current total cost per day</i>

Which trip do you prefer? (check only one box below)

- Trip A
  Trip B
  I would not take either trip

41. Suppose that you could choose from the recreational fishing opportunities described below. Which of these fishing trips would you prefer?

ATTRIBUTE	Trip A	Trip B
<b>Number of Recreational Fishing Boats</b>	<i>15% fewer boats</i>	<i>30% fewer boats</i>
<b>Number of Non-fishing Boats</b>	<i>The usual number of other boats near the location</i>	<i>30% fewer boats</i>
<b>Restrictions</b>	<i>75% of area closed</i>	<i>25% of area closed</i>
<b>Number of Species</b>	<i>More species fish caught</i>	<i>No change in species numbers</i>
<b>Number of fish</b>	<i>20% more fish caught</i>	<i>No increase in numbers of fish caught</i>
<b>Size of Fish</b>	<i>20% more keepers</i>	<i>60% more keepers</i>
<b>Travel Cost / Day</b>	<i>Your current total cost per day</i>	<i>10% more than your current total cost per day</i>

Which trip do you prefer? (check only one box below)

- Trip A     Trip B     I would not take either trip

42. Suppose that you could choose from the recreational fishing opportunities described below. Which of these fishing trips would you prefer?

ATTRIBUTE	Trip A	Trip B
<b>Number of Recreational Fishing Boats</b>	<i>The usual number of other boats near the location</i>	<i>30% fewer boats</i>
<b>Number of Non-fishing Boats</b>	<i>30% fewer boats</i>	<i>15% fewer boats</i>
<b>Restrictions</b>	<i>75% of area closed</i>	<i>50% of area closed</i>
<b>Number of Species</b>	<i>More species fish caught</i>	<i>No change in species numbers</i>
<b>Number of fish</b>	<i>30% more fish caught</i>	<i>20% more fish caught</i>
<b>Size of Fish</b>	<i>60% more keepers</i>	<i>40% more keepers</i>
<b>Travel Cost / Day</b>	<i>Your current total cost per day</i>	<i>Your current total cost per day</i>

Which trip do you prefer? (check only one box below)

- Trip A     Trip B     I would not take either trip

43. Suppose that you could choose from the recreational fishing opportunities described below. Which of these fishing trips would you prefer?

ATTRIBUTE	Trip A	Trip B
<b>Number of Recreational Fishing Boats</b>	<i>15% fewer boats</i>	<i>The usual number of other boats near the location</i>
<b>Number of Non-fishing Boats</b>	<i>15% fewer boats</i>	<i>15% fewer boats</i>
<b>Restrictions</b>	<i>No area closed</i>	<i>50% of area closed</i>
<b>Number of Species</b>	<i>No change in species numbers</i>	<i>Fewer species fish caught</i>
<b>Number of fish</b>	<i>10% more fish caught</i>	<i>30% more fish caught</i>
<b>Size of Fish</b>	<i>40% more keepers</i>	<i>No increase in the number of caught kept</i>
<b>Travel Cost / Day</b>	<i>10% less than your current total cost per day</i>	<i>10% less than your current total cost per day</i>

Which trip do you prefer? (check only one box below)

Trip A     Trip B     I would not take either trip

44. Suppose that you could choose from the recreational fishing opportunities described below. Which of these fishing trips would you prefer?

ATTRIBUTE	Trip A	Trip B
<b>Number of Recreational Fishing Boats</b>	<i>30% fewer boats</i>	<i>The usual number of other boats near the location</i>
<b>Number of Non-fishing Boats</b>	<i>30% fewer boats</i>	<i>15% fewer boats</i>
<b>Restrictions</b>	<i>No area closed</i>	<i>No area closed</i>
<b>Number of Species</b>	<i>No change in species numbers</i>	<i>More species fish caught</i>
<b>Number of fish</b>	<i>20% more fish caught</i>	<i>10% more fish caught</i>
<b>Size of Fish</b>	<i>60% more keepers</i>	<i>40% more keepers</i>
<b>Travel Cost / Day</b>	<i>10% more than your current total cost per day</i>	<i>10% more than your current total cost per day</i>

Which trip do you prefer? (check only one box below)

Trip A     Trip B     I would not take either trip



45. Suppose that you could choose from the recreational fishing opportunities described below. Which of these fishing trips would you prefer?

<b>ATTRIBUTE</b>	<b>Trip A</b>	<b>Trip B</b>
<b>Number of Recreational Fishing Boats</b>	<i>30% fewer boats</i>	<i>15% fewer boats</i>
<b>Number of Non-fishing Boats</b>	<i>15% fewer boats</i>	<i>The usual number of other boats near the location</i>
<b>Restrictions</b>	<i>50% of area closed</i>	<i>75% of area closed</i>
<b>Number of Species</b>	<i>No change in species numbers</i>	<i>No change in species numbers</i>
<b>Number of fish</b>	<i>No increase in numbers of fish caught</i>	<i>No increase in numbers of fish caught</i>
<b>Size of Fish</b>	<i>20% more keepers</i>	<i>40% more keepers</i>
<b>Travel Cost / Day</b>	<i>10% less than your current total cost per day</i>	<i>Your current total cost per day</i>

Which trip do you prefer? (check only one box below)

Trip A     Trip B     I would not take either trip

46. Suppose that you could choose from the recreational fishing opportunities described below. Which of these fishing trips would you prefer?

<b>ATTRIBUTE</b>	<b>Trip A</b>	<b>Trip B</b>
<b>Number of Recreational Fishing Boats</b>	<i>30% fewer boats</i>	<i>The usual number of other boats near the location</i>
<b>Number of Non-fishing Boats</b>	<i>The usual number of other boats near the location</i>	<i>The usual number of other boats near the location</i>
<b>Restrictions</b>	<i>25% of area closed</i>	<i>No area closed</i>
<b>Number of Species</b>	<i>More species fish caught</i>	<i>More species fish caught</i>
<b>Number of fish</b>	<i>30% more fish caught</i>	<i>30% more fish caught</i>
<b>Size of Fish</b>	<i>40% more keepers</i>	<i>20% more keepers</i>
<b>Travel Cost / Day</b>	<i>Your current total cost per day</i>	<i>Your current total cost per day</i>

Which trip do you prefer? (check only one box below)

Trip A     Trip B     I would not take either trip

47. Suppose that you could choose from the recreational fishing opportunities described below. Which of these fishing trips would you prefer?

ATTRIBUTE	Trip A	Trip B
<b>Number of Recreational Fishing Boats</b>	<i>The usual number of other boats near the location</i>	<i>15% fewer boats</i>
<b>Number of Non-fishing Boats</b>	<i>30% fewer boats</i>	<i>15% fewer boats</i>
<b>Restrictions</b>	<i>50% of area closed</i>	<i>25% of area closed</i>
<b>Number of Species</b>	<i>Fewer species fish caught</i>	<i>Fewer species fish caught</i>
<b>Number of fish</b>	<i>20% more fish caught</i>	<i>10% more fish caught</i>
<b>Size of Fish</b>	<i>40% more keepers</i>	<i>20% more keepers</i>
<b>Travel Cost / Day</b>	<i>10% more than your current total cost per day</i>	<i>10% more than your current total cost per day</i>

Which trip do you prefer? (check only one box below)

Trip A     Trip B     I would not take either trip

48. Suppose that you could choose from the recreational fishing opportunities described below. Which of these fishing trips would you prefer?

ATTRIBUTE	Trip A	Trip B
<b>Number of Recreational Fishing Boats</b>	<i>30% fewer boats</i>	<i>15% fewer boats</i>
<b>Number of Non-fishing Boats</b>	<i>15% fewer boats</i>	<i>30% fewer boats</i>
<b>Restrictions</b>	<i>75% of area closed</i>	<i>75% of area closed</i>
<b>Number of Species</b>	<i>More species fish caught</i>	<i>Fewer species fish caught</i>
<b>Number of fish</b>	<i>10% more fish caught</i>	<i>20% more fish caught</i>
<b>Size of Fish</b>	<i>No increase in the number of caught kept</i>	<i>20% more keepers</i>
<b>Travel Cost / Day</b>	<i>10% more than your current total cost per day</i>	<i>Your current total cost per day</i>

Which trip do you prefer? (check only one box below)

Trip A     Trip B     I would not take either trip

That's All!! If you would like to be entered into a sweepstakes to win a free Vacation to the Florida Keys, fill out your name, address and phone number below. All prizes will be awarded in October of 2007.

Name: \_\_\_\_\_

Address: \_\_\_\_\_

City: \_\_\_\_\_

State: \_\_\_\_\_ Zip: \_\_\_\_\_ Phone: \_\_\_\_\_

Prizes to be awarded are:

GRAND PRIZE

- \* Airfare for two from anywhere in the continental United States to the Florida Keys
- \* Rental car with unlimited miles for one week (seven days)
- \* Accommodations for two for one week (six nights)
- \* Two complimentary "activities" for two (i.e., diving trip, fishing charter, sunset sail, etc.)
- \* Complimentary dinner for two at local restaurant

FIRST PRIZE

- \* Accommodations for two for five days (four nights)
- \* Two complimentary "activities" for two (i.e., diving trip, fishing charter, sunset sail, etc.)
- \* Complimentary dinner for two at local restaurant

SECOND PRIZE

- \* Accommodations for two for four days (three nights)
- \* One complimentary "activity" for two (i.e., diving trip, fishing charter, sunset sail, etc.)
- \* Complimentary dinner for two at local restaurant

SECOND PRIZE

- \* Accommodations for two for three days (two nights)
- \* One complimentary "activity" for two (i.e., diving trip, fishing charter, sunset sail, etc.)

This is a cooperative research project of the Monroe County Tourist Development Council and the National Oceanic and Atmospheric Administration. Public reporting burden for this collection of information is estimated to average 20 minutes 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 this burden, to U.S. Department of Commerce, Clearance Officer, Office of Chief Information Officer, Rm. 6625, 14th and Constitution Avenue NW, Washington, DC 20230. Notwithstanding any other provisions of the law, no person is required to respond to, nor shall any person be subject to penalty for failure to comply with, a collection of information subject to requirements of the Paperwork Reduction Act, unless that collection of information displays a currently valid OMB Control Number.

## Dive Shop Owners/Operators: Post Card Survey

Name of Dive Shop: \_\_\_\_\_ Number of Dive/snorkel boats: \_\_\_\_\_

1 In promoting your business, do you promote the scuba diving and/or snorkeling experience as being special because all the waters surrounding the Florida Keys/Key West are in a National Marine Sanctuary?

YES (Go to Q3)  NO (Go to Q2)

2 Why not? \_\_\_\_\_

3 In any of your business promotions, do you promote the experience as being special because of the no-take areas?  YES  NO (Go to Q4)

4 Why not? \_\_\_\_\_

-----Thank You, Please return card by mail-----

OMB Control No. 0648-xxxx

Expires:

This is a cooperative research project of the Monroe County Tourist Development Council and the National Oceanic and Atmospheric Administration. Public reporting burden for this collection of information is estimated to average 5 minutes including time for reviewing instructions, searching existing data sources, gathering and maintaining the data need, 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 this burden, to U.S. Department of Commerce, Clearance Officer, Office of Chief Information Officer, Rm. 6625, 14<sup>th</sup> and Constitution Avenue NW, Washington, DC 20230. Notwithstanding any other provisions of the law, no person is required to respond to, nor shall any person be subject to penalty for failure to comply with, a collection of information subject to requirements of the Paperwork Reduction Act, unless that collection of information displays a currently valid OMB Control Number.

**Cruise Ship Owners/Operators: Post Card Survey**

Name of Ship: \_\_\_\_\_ Business Name: \_\_\_\_\_

1 Do you offer pre-arranged recreation activities to your passengers while they are in Key West? \_\_\_  
YES (Go to Q2) \_\_\_ NO (Thank You, Please return card by mail).

2 In your promotion for pre-arranged recreation activities, do you promote the experience as being  
special because all the waters surrounding the Florida Keys/Key West are in a National Marine Sanctuary?  
\_\_\_ YES \_\_\_NO (Go to Q3)

3 Why not? \_\_\_\_\_

-----Thank You, Please return card by mail-----

OMB Control No. 0648-xxxx  
Expires:

This is a cooperative research project of the Monroe County Tourist Development Council and the National Oceanic and Atmospheric Administration. Public reporting burden for this collection of information is estimated to average 5 minutes including time for reviewing instructions, searching existing data sources, gathering and maintaining the data need, 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 this burden, to U.S. Department of Commerce, Clearance Officer, Office of Chief Information Officer, Rm. 6625, 14<sup>th</sup> and Constitution Avenue NW, Washington, DC 20230. Notwithstanding any other provisions of the law, no person is required to respond to, nor shall any person be subject to penalty for failure to comply with, a collection of information subject to requirements of the Paperwork Reduction Act, unless that collection of information displays a currently valid OMB Control Number.

Dated: July 6, 2006.

**Vanessa M. Bachman,**

*Acting Director, Export Trading Company Affairs.*

[FR Doc. E6-10929 Filed 7-11-06; 8:45 am]

**BILLING CODE 3510-DR-P**

## DEPARTMENT OF COMMERCE

### National Oceanic and Atmospheric Administration

#### Proposed Information Collection; Comment Request; Recreation/Tourism Study, Socioeconomic Monitoring Program for the Florida Keys National Marine Sanctuary

**AGENCY:** National Oceanic and Atmospheric Administration (NOAA).

**ACTION:** Notice.

**SUMMARY:** The Department of Commerce, as part of its continuing effort to reduce paperwork and respondent burden, invites the general public and other Federal agencies to take this opportunity to comment on proposed and/or continuing information collections, as required by the Paperwork Reduction Act of 1995.

**DATES:** Written comments must be submitted on or before September 11, 2006.

**ADDRESSES:** Direct all written comments to Diana Hynek, Departmental Paperwork Clearance Officer, Department of Commerce, Room 6625, 14th and Constitution Avenue, NW., Washington, DC 20230 (or via the Internet at [dHynek@doc.gov](mailto:dHynek@doc.gov)).

**FOR FURTHER INFORMATION CONTACT:** Requests for additional information or copies of the information collection instrument and instructions should be Dr. Vernon Leeworthy, 301-713-3000, extension 138, or [Bob.Leeworthy@noaa.gov](mailto:Bob.Leeworthy@noaa.gov).

#### SUPPLEMENTARY INFORMATION:

##### I. Abstract

The purpose of this information collection is to obtain socioeconomic monitoring information in the Florida Keys National Marine Sanctuary (FKNMS). This is an approximately 10-year replication of a study done in 1995-96 entitled "Linking the Economy and Environment of the Florida Keys/Florida Bay" that provided baseline measures for recreation/tourism in the Florida Keys. The study also replicates measures on recreation/tourist uses of the reefs that were estimated for the baseline in 2000-2001 in a study entitled "Socioeconomic Study of Reefs in Southeast Florida".

The study involves surveys on both visitors and residents of the Florida Keys/Monroe County. The visitors are different by season (summer versus winter) so separate estimates are made by season, while for residents annual estimates are made.

Information is collected on socioeconomic profiles, detailed recreation activity profiles, expenditures, non market economic use values, importance/satisfaction ratings on 25 natural resources attributes, facilities and services, and knowledge attitudes and perceptions of Sanctuary management strategies and regulations.

In addition, surveys of several businesses are to be conducted. A survey of for-hire recreational fishing guides is planned to gather information on knowledge, attitudes and perceptions of Sanctuary management strategies and regulations, especially the various zoning strategies. Short post card surveys are planned for Dive Shop Owners/Operators and Cruise Ship Operations to assess whether these businesses market customers based on the protected status of waters surrounding the Florida Keys.

##### II. Method of Collection

Interviews will generally be used. Visitors will be surveyed face-to-face while in the Florida Keys and will also be given mail-back questionnaires. Residents will be surveyed using mail-back questionnaires. For-hire recreational fishing guides will be surveyed at their homes or businesses by an interview team. Dive Shop Owners/Operators and Cruise Ship Operations will be sent post card mail surveys.

##### III. Data

*OMB Number:* None.

*Form Number:* None.

*Type of Review:* Regular submission.

*Affected Public:* Individuals or households; business or other for-profit organizations.

*Estimated Number of Respondents:* 16,020.

*Estimated Time Per Response:*

Visitors: auto, air and cruise ship on-site surveys, 4 minutes; customer on-site surveys, 15 minutes; mail-back questionnaires, 20 minutes; resident surveys, 1 hour; business interviews; 2 hours; and business post card surveys, 5 minutes.

*Estimated Total Annual Burden Hours:* 10,469.

*Estimated Total Annual Cost to Public:* \$0.

##### IV. Request for Comments

Comments are invited on: (a) Whether the proposed collection of information

is necessary for the proper performance of the functions of the agency, including whether the information shall have practical utility; (b) the accuracy of the agency's estimate of the burden (including hours and cost) of the proposed collection of information; (c) ways to enhance the quality, utility, and clarity of the information to be collected; and (d) ways to minimize the burden of the collection of information on respondents, including through the use of automated collection techniques or other forms of information technology.

Comments submitted in response to this notice will be summarized and/or included in the request for OMB approval of this information collection; they also will become a matter of public record.

Dated: July 6, 2006.

**Gwellnar Banks,**

*Management Analyst, Office of the Chief Information Officer.*

[FR Doc. E6-10896 Filed 7-11-06; 8:45 am]

**BILLING CODE 3510-NK-P**

## DEPARTMENT OF COMMERCE

### Patent and Trademark Office

#### Submission for OMB Review; Comment Request

The United States Patent and Trademark Office (USPTO) has submitted to the Office of Management and Budget (OMB) for clearance the following proposal for collection of information under the provisions of the Paperwork Reduction Act (44 U.S.C. Chapter 35).

*Agency:* United States Patent and Trademark Office (USPTO).

*Title:* Patent Processing (Updating).

*Form Number(s):* PTO/SB/08/08a/08b, PTO/SB/17i, PTO/SB/17P, PTO/SB/21-27, PTO/SB/24B, PTO/SB/30-32, PTO/SB/35-39, PTO/SB/42-43, PTO/SB/61-64, PTO/SB/64a, PTO/SB/67-68, PTO/SB/91-92, PTO/SB/96-97, PTO-2053-A/B, PTO-2054-A/B, PTO-2055-A/B, PTOL/413A.

*Agency Approval Number:* 0651-0031.

*Type of Request:* Revision of a currently approved collection.

*Burden:* 3,527,991 hours.

*Number of Respondents:* 2,508,239 responses.

*Avg. Hours Per Response:* 1 minute 48 seconds to 12 hours. The USPTO estimates that it will take 2 hours to complete the information disclosure statements (IDS) that do not require any additional disclosure requirement, 4 hours to complete the IDS submitted