Block A



ADULT CONSENT TO PARTICIPATE IN A RESEARCH STUDY

Attitudes about Coral Reefs and Levels of Environmental Concern in Urban Southeastern Florida

PURPOSE OF THE STUDY

You are being asked to be in a research study. The purpose of this study is to investigate current concerns about the environment and coral reefs in southeastern Florida.

NUMBER OF STUDY PARTICIPANTS If you decide to be in this study, you will be one of 350 people in this research study.

DURATION OF THE STUDY

Your participation will require approximately 15 to 25 minutes.

PROCEDURES

If you agree to be in the study, you will be asked to do the following things: 1. Complete the online survey one time with honest answers.

RISKS AND/OR DISCOMFORTS

There are no known risks associated with your participation in this study.

BENEFITS

There are no known benefits may be associated with your participation in this study.

ALTERNATIVES

There are no known alternatives available to you other than not taking part in this study. However, any significant new findings developed during the course of the research that may relate to your willingness to continue participation will be provided.

CONFIDENTIALITY

The records of this study will be kept private and will be protected to the fullest extent provided by law. In any sort of report we might publish, we will not include any information that will make it possible to identify a subject. Research records will be stored securely and only the researcher team will have access to the records. However, your records may be reviewed for audit purposes by authorized University or other agents who will be bound by the same provisions of confidentiality.

COMPENSATION & COSTS

There is no payment for your participation. You will not be responsible for any costs to participate in this study.

RIGHT TO DECLINE OR WITHDRAW

Your participation in this study is voluntary. You are free to participate in the study or withdraw your consent at any time during the study. Your withdrawal or lack of participation will not affect any benefits to which you are otherwise entitled. The investigator reserves the right to remove you without your consent at such time that they feel it is in the best interest.

RESEARCHER CONTACT INFORMATION

If you have any questions about the purpose, procedures, or any other issues relating to this research study you may contact James Harper at Florida International University, 305-893-6214, jharp002@fiu.edu.

IRB CONTACT INFORMATION

If you would like to talk with someone about your rights of being a subject in this research study or about ethical issues with this research study, you may contact the FIU Office of Research Integrity by phone at 305-348-2494 or by email at ori@fiu.edu.

PARTICIPANT AGREEMENT

I have read the information in this consent form and agree to participate in this study. I have had a chance to ask any questions I have about this study, and they have been answered for me. I understand that I am entitled to a copy of this form after it has been read and signed.

Consent.

I have read, understood, and printed or copied the above consent form (if desired), and desire of my own free will to participate in this study.

- O Yes
- O No

Intro. \rightarrow **Directions**: Please answer each question as honestly as possible. If unsure, choose the first answer you think of. You will not be able to go backwards to change answers.

Your Opinions Matter

Tourism in South Florida drives the economy and affects every resident. To remain strong, tourism here depends on clean air, waterways, and beaches.

Today, South Florida faces many threats to its unique coastal areas, including its beaches, coral reefs, and other habitats in the ocean. The choices we face are not easy. You have an opportunity with this survey to make your voice heard and to influence the leaders and decision-makers who manage the vital coastal habitats in South Florida. Your opinions are important.

Section 1: Recreation and Ocean Resources

How often?

1.

Ι.

How often do you participate in the following ocean related activities? Select all that apply during the past 12 months.

			How often?		
	More than once a week	More than once a month	6-12 times a year	1-6 times a year	Never
Fishing					
Scuba diving					
Snorkeling					
Freediving					
Boating, by motor					
Surfing					
Paddling					
Distance swimming or other exercise					
Sailing					
Visiting the beach					

2. Do you eat seafood (fish, oysters, crabs, etc.)?

- Yes
- O No

3. Approximately what is your household's weekly seafood budget?

under \$10
\$10-\$19
\$20-\$29
\$30-\$39
\$40-\$49
\$50-\$59
\$60-\$69
\$70-\$79
\$80-\$89
\$90-\$99

4

A growing number of seafood consumers want to know if seafood is harvested in a sustainable way. Concerns about the consequences of fishing operations, such as overfishing, unmarketable bycatch, and habitat impacts are all considerations that can enter into the buying habits of consumers.

In answering the question below, please consider your household budget as if you are making actual seafood purchase decisions in a real payment situation.

When comparing conventional seafood products, would you be willing to pay an extra amount of \${e://Field/amount1} per week in your seafood budget if those purchases are certified by a credible agency as being harvested in a sustainable way?

- O Yes
- No
- O Don't know

5.



Seafood harvested in a sustainable way could come from distant sources; however, locally caught seafood ensures sustainability through compliance with U.S. laws and regulations, and it creates employment, boosts income, and fosters resilient local fishing communities.

In answering the question below, please consider your household budget as if you are making actual seafood purchase decisions in a real payment situation.

When comparing sustainable seafood products, would you be willing to pay an extra amount (above and beyond the amount listed in the previous question) of \${e://Field/amount2} per week in your seafood budget if it is certified by a credible agency that the seafood you are buying is locally harvested in compliance with U.S. laws and regulations and creates employment, boosts income, and fosters resilient local fishing communities?

O Yes

O No

6.

On a scale from 0 to 10, how certain are you of the answer you just gave in the previous question about your willingness to pay for seafood that is certified as both sustainable and local?

Completely										0
uncertain (0)	1	2	3	4	5	6	7	8	9	Completelly certain (10)
0	\circ	\odot	\odot	\circ	\circ	0	0	\odot	\odot	0

3 of 34



7 Do you think that seafood certification (shown on labels such as "Sustainably Harvested Seafood" and "Local Seafood") offers a credible signal about seafood products? Highly Not at all credible 7 credible (0) 1 2 3 4 5 6 8 9 (10) \bigcirc \bigcirc \bigcirc \bigcirc \bigcirc \bigcirc \odot \odot \bigcirc \bigcirc \odot 8. How many times have you visited a coral reef, at any location?

9.

From your perspective, what do you think is the present condition (or health) of coral reefs around the world?

Slide the tab under the face to change its expression.



11.

Section 2: Coral Reefs in Florida

Intro.

→ Directions: All questions that follow address coral reefs in naturally warm, shallow waters (not in aquariums or museums). The photograph shows an example of a coral reef in Florida.

Why are reefs important?

Coral reefs exist near human populations around the world and contain 25% of all species in the ocean. They rank as one of the earth's most valuable ecosystems, and they provide seafood, recreation, sand creation for beaches, and a buffer against severe storms. They have become one of the most threatened ecosystems on earth, with rapid declines documented worldwide during the past 30 years.

In South Florida, coral reefs are credited with creating 94,000 jobs and generating \$8 billion annually.



10. In the past 5 years, have you visited a coral reef in Florida? A visit could include fishing or other activities at the surface (such as snorkeling, surfing, or paddling) where you knew that reefs existed in that location.

Yes	No	Don't know
0	0	0

11. Rank the following threats to coral reefs in Florida. From your perspective, <u>how destructive</u> is each one?

	Extremely Destructive	Very Destructive	Moderately Destructive	Slightly Destructive	Minimally Destructive
Scuba Diving & Snorkeling	0	0	0	0	0
Hurricanes & Natural Disasters	0	0	\bigcirc	0	0
Dredging & Construction	0	0	0	0	0
Air Pollution	0	0	0	0	0
Shipping & Boating	0	0	0	0	0
Fishing	0	0	0	0	0
Sewage & Runoff	0	\odot	0	0	0
Invasive Species	0	0	\circ	0	0
High Water Temperatures	0	0	\bigcirc	\circ	\odot

12. Where are coral reefs in Florida located?

The state is divided into 9 general regions. Scroll over the map and click on a box to include that region. Select at least one box.



13.

How do you currently obtain information and learn more about coral reefs?

Rank the most important source as "1," the second most important as "2," and continue to rank all the sources that provide you with useful information about coral reefs.

	1	2	3	4	5	6	7	8
Newspapers (print or online)	\circ	\bigcirc						
Magazines and Newsletters	\circ	\bigcirc						
Television	\circ	\bigcirc						
Radio	\circ	\bigcirc						
Email	\circ	\bigcirc	\circ	\circ	\circ	\bigcirc	\bigcirc	\bigcirc
Social Media	\circ	\bigcirc						
Scientific literature	\circ	\bigcirc						
Personal experience	\odot	\bigcirc						

14.

Most of the nearly 6 million people in South Florida live in the region shown on this map. This region has extensive beaches and coral reefs near each other.

Rank the present condition of each listed resource, in the region on this map, as you understand it. You can respond based on the area where you live or that you know the best.



III.

Section 3: Coastal Management Choices

Intro.

→ Directions: This section allows you to express your preference for how coastal resources should be managed in the future. Pay close attention to this explanation, and do not move forward until you understand it.

The next 2 questions will show a <u>table with 3 plans</u> (under column A, B, C). Each plan is a complete package that has an associated monthly fee that you would be charged for 5 years. You will choose one combination that you prefer and that you are <u>willing to pay for</u>.

Here is an example:

	Plan A ↓	Plan B ↓	Plan C (no change) ↓
Beach size:	10% Smaller	Current	10% Smaller
Water quality:	Significant (30%) Improvement	Slight (10%) Improvement	Poor
Coral restoration:	Significant (30%) Improvement	Current Level	Current Level
Fee per month:	+\$15	+\$30	+\$0

Which plan do you prefer?

Plans A and B include improvements for at least one coastal resource. Plan C represents the *status quo* and what can be expected with "no change" to management. For Plan C, notice that beaches will become smaller, because natural erosion and loss of sand is expected to be faster than current rates of beach expansion projects.

"Water quality" refers to the clarity and cleanliness of seawater near the coastline, and "coral restoration" refers to direct action on reefs that supports their growth.

Before making your choice, consider the following: Clean, clear water is necessary for coral reefs to develop. Problems that foul the water include sewage pipes and construction projects, and managing them can be costly. One major new cost involves the state's decision to remove South Florida's six pipes that send partially-treated sewage into the ocean. Other new management solutions could include limitations on pumping sand onto beaches and / or expansion of coral restoration projects.

IIIa.

Management Choices 1

Block B: Choice Experiment part 1

	Plan A	Plan B	Plan C ↓ (no change)
	↓	↓	↓
Beach size:	10% Smaller	Current	10% Smaller
Water quality:	Significant (30%) Improvement	Slight (10%) Improvement	Poor
Coral restoration:	30% Improvement	30% Improvement	Current Level
Fee per month:	+\$10	+\$20	+\$0

15.

Which plan do you prefer?

А	В	С
\bigcirc	0	0

15.	Plan A ↓	Plan B ↓	Plan C (no change) ↓
Beach size:	10% Smaller	10% Smaller	10% Smaller
Water quality:	Significant (30%) Improvement	Slight (10%) Improvement	Poor
Coral restoration:	Slight (10%) Improvement	Significant (30%) Improvement	Current Level
Fee per month:	+\$5	+\$20	+\$0

	3
0)

А

0

	Plan A ↓	Plan B ↓	Plan C (no change) ↓
Beach size:	10% Smaller	Current	10% Smaller
Water quality:	Significant (30%) Improvement	Slight (10%) Improvement	Poor
Coral restoration:	Slight (10%) Improvement	Slight (10%) Improvement	Current Level
Fee per month:	+\$20	+\$10	+\$0

plan do you prefer?

А	
0	0

Which

С

0

15.	Plan A	Plan B	Plan C
	TianA	T lan D	(no change)
	↓	↓	L V
Beach size:	10% Smaller	Current	10% Smaller
Water quality:	Significant (30%) Improvement	Slight (10%) Improvement	Poor
Coral restoration:	Slight (10%)	Current	Current
	Improvement	Level	Level
Fee per month:	+\$10	+\$5	+\$0

В	
0	

А ()

5.	Plan A ↓	Plan B ↓	Plan C (no change) ↓
Beach size:	10% Smaller	10% Larger	10% Smaller
Water quality:	Significant (30%) Improvement	Slight (10%) Improvement	Poor
Coral restoration:	Current Level	Significant (30%) Improvement	Current Level
Fee per month:	+\$5	+\$15	+\$0

A	В
0	0

C O

15.		Dian D	Di- C
	Plan A	Plan B	Plan C (no change)
	₽	ţ	(no change) ↓
Beach size:	Current	10% Larger	10% Smaller
Water quality:	Significant (30%) Improvement	Slight (10%) Improvement	Poor
Coral restoration:	Significant (30%)	Significant (30%)	Current Level
	Improvement	Improvement	Level
Fee per month:	+\$15	+\$20	+\$0

А

0

В ()

15.	Plan A ↓	Plan B ↓	Plan C (no change) ↓
Beach size:	Current	10% Smaller	10% Smaller
Water quality:	Significant (30%) Improvement	Slight (10%) Improvement	Poor
Coral restoration:	Slight (10%) Improvement	Significant (30%) Improvement	Current Level
Fee per month:	+\$25	+\$15	+\$0

Α	В	
0	0	

C O

5.	Plan A ↓	Plan B ↓	Plan C (no change) ↓
Beach size:	Current	10% Smaller	10% Smaller
Water quality:	Significant (30%) Improvement	Slight (10%) Improvement	Poor
Coral restoration:	Current Level	Significant (30%) Improvement	Current Level
Fee per month:	+\$10	+\$15	+\$0

	В
0	0

C O

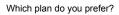
15.			
	Plan A	Plan B	Plan C (no change)
	₽	ţ	
Beach size:	10% Smaller	10% Larger	10% Smaller
Water quality:	Significant (30%) Improvement	Slight (10%) Improvement	Poor
Coral restoration:	Significant (30%) Improvement	Significant (30%) Improvement	Current Level
Fee per month:	+\$10	+\$5	+\$0

А

0

в 0

5.	Plan A ↓	Plan B ↓	Plan C (no change) ↓
Beach	¢	↓	10% Smaller
size:	Current	10% Larger	
Water	Significant (30%)	Slight (10%)	Poor
quality:	Improvement	Improvement	
Coral	Current	Current	Current
restoration:	Level	Level	Level
Fee per month:	+\$10	+\$10	+\$0



B

с 0

Block C: Divison between choice cards

А

0

IIIb.

Management Choices 2

Block D: Choice Experiment part 2

Plan B Plan C Plan A (no change) ₽ Ų ₽ Beach size: 10% Smaller Current 10% Smaller Water quality: Significant (30%) Slight (10%) Poor Improvement Improvement Coral restoration: Significant (30%) Current Current Level Improvement Level +\$30 +\$5 +\$0 Fee per month:

116. This card is different than the previous card. Consider it carefully.

Now which plan do you prefer?

А	
\bigcirc	

В () С 0

	Plan A ↓	Plan B ↓	Plan C (no change) ↓
Beach size:	Current	Current	10% Smaller
Water quality:	Significant (30%) Improvement	Slight (10%) Improvement	Poor
Coral restoration:	Current Level	Significant (30%) Improvement	Current Level
Fee per month:	+\$15	+\$30	+\$0

Now which plan do you prefer?

А	
\bigcirc	

В () С 0

	Plan A ↓	Plan B ↓	Plan C (no change) ↓
Beach size:	10% Smaller	10% Larger	10% Smaller
Water quality:	Significant (30%) Improvement	Slight (10%) Improvement	Poor
Coral restoration:	Slight (10%) Improvement	Current Level	Current Level
Fee per month:	+\$25	+\$25	+\$0

Now which plan do you prefer?

A 0 В () С 0

	Plan A ↓	Plan B ↓	Plan C (no change) ↓
Beach size:	10% Larger	10% Smaller	10% Smaller
Water quality:	Significant (30%) Improvement	Slight (10%) Improvement	Poor
Coral restoration:	Slight (10%) Improvement	Significant (30%) Improvement	Current Level
Fee per month:	+\$30	+\$20	+\$0

Now which plan do you prefer?

А	
\bigcirc	

B

	Plan A ↓	Plan B ↓	Plan C (no change) ↓
Beach size:	Current	10% Larger	10% Smaller
Water quality:	Significant (30%) Improvement	Slight (10%) Improvement	Poor
Coral restoration:	Current	Slight (10%)	Current
	Level	Improvement	Level
Fee per month:	+\$30	+\$15	+\$0

Now which plan do you prefer?

А	
\bigcirc	

B

	Plan A ↓	Plan B ↓	Plan C (no change) ↓
Beach size:	10% Larger	10% Larger	10% Smaller
Water quality:	Significant (30%) Improvement	Slight (10%) Improvement	Poor
Coral restoration:		Slight (10%)	
	Current Level	Slight (10%) Improvement	Current Level
Fee per month:	+\$10	+\$5	+\$0

Now which plan do you prefer?

А	
\bigcirc	

B

	Plan A ↓	Plan B ↓	Plan C (no change) ↓
Beach size:	Current	10% Larger	10% Smaller
Water quality:	Significant (30%) Improvement	Slight (10%) Improvement	Poor
Coral restoration:	Slight (10%) Improvement	Current Level	Current Level
Fee per month:	+\$25	+\$25	+\$0

Now which plan do you prefer?

А		
\bigcirc		

B

	Plan A ↓	Plan B ↓	Plan C (no change) ↓
Beach size:	10% Larger	10% Smaller	10% Smaller
Water quality:	Significant (30%) Improvement	Slight (10%) Improvement	Poor
Coral restoration:	Current Level	Significant (30%) Improvement	Current Level
Fee per month:	+\$30	+\$25	+\$0

Now which plan do you prefer?

А	
\bigcirc	

B

5. This card is different than the previous card. Consider it carefully.								
	Plan A Il	Plan B Il	Plan C (no change) #					
Beach size:	10% Larger	Current	10% Smaller					
Water quality:	Significant (30%) Improvement	Slight (10%) Improvement	Poor					
Coral restoration:	Current Level	Significant (30%) Improvement	Current Level					
Fee per month:	+\$25	+\$5	+\$0					

А

0

which plan do you prefer?

B

Now

С

0

с 0

16. This card is different than the previous card. Consider it carefully.

	Plan A ↓	Plan B ↓	Plan C (no change) ↓
Beach size:	10% Larger	Current	10% Smaller
Water quality:	Significant (30%) Improvement	Slight (10%) Improvement	Poor
Coral restoration:	Current	Slight (10%)	Current
	Level	Improvement	Level
Fee per month:	+\$20	+\$15	+\$0

Now which plan do you prefer?

A	В
0	0

Block E: Rest of survey

17. For the plan you selected with the highest fee, how certain are you that you will pay that fee for the next 5 years? You can assume that your selected plan is being implemented by Florida management agencies, and the new monthly fee will appear on your next utility bill.

Move the tab under the dial to select a number between 0 to 10, with 0 meaning "not at all willing to pay" and 10 meaning "perfectly willing to pay."



18. In choosing Plan A, B or C, how important were the following items to you?

	Not important (1)	(2)	(3)	(4)	Very important (5)
Fee	0	\bigcirc	0	0	0
Coral restoration	0	\circ	0	\odot	\odot
Water quality	\odot	\bigcirc	\circ	\odot	\odot
Beach size	0	\bigcirc	\circ	\bigcirc	\odot

19.

Who should be primarily responsible to pay for the management and protection of Florida's coral reefs?

O All U.S. citizens

Residents of Florida

- Tourists in Florida
- People who use Florida's reefs

- O No one
- On't know

IV.

Section 4: Climate Change and Reef Values

20. Rank each statement by choosing the label that best reflects your perspective.

	None	Little	Moderate	Strong	Extreme
Your concern about climate change:	0	0	0	0	0
Human influence on climate change:	\odot	0	0	\odot	\odot
The effect of climate change on hurricanes:	0	\circ	0	\odot	\odot
The effect of climate change on coral reefs:	0	\circ	0	\odot	0
Your concern about sea level rise:	\odot	\odot	\odot	\odot	\odot

21. When do you think climate change will start to have an impact in Florida?



22.

A specialty Florida license plate called "Protect Our Reefs" costs an additional \$25 and supports only one nonprofit research center.



Suppose that a referendum were held for financing a Florida Coral Reef Research Fund using additional local sales tax to support all coral reef research centers in Florida. The referendum would need a majority vote (more than 50%) to pass.

How would you vote if this referendum proposes \${e://Field/blank1} additional local sales tax \${e://Field/blank2} for the Florida Coral Reef Research Fund?

- Yes, in favor of Florida Coral Reef Research Fund
- No, against the Florida Coral Reef Research Fund

23. On a scale from 0 to 10, how certain are you of the answer you just gave about raising local sales tax for the Florida Coral Reef Research Fund?

Completely										Completely
uncertain	1	2	3	4	5	6	7	8	9	certain
0	0	0	0	0	0	0	0	0	0	0

24.

Now suppose that an <u>alternative referendum</u> were held in which the Florida Coral Reef Research Fund Program (as described above) was cosponsored. In this case, the program costs are shared by the National Oceanic and Atmospheric Administration (NOAA) on a dollar to dollar match (for each dollar raised locally, NOAA provides an additional dollar on top of what it spends now on coral reef research in Florida). Again, the referendum would need a majority vote (more than 50%) to pass.

Now how would you vote if this alternative referendum proposes \${e://Field/blank1} additional local sales tax \${e://Field/blank2} for the Florida Coral Reef Research Fund?

See Yes, in favor of Florida Coral Reef Research Fund, cosponsored by the Federal Agency

No, against the Florida Coral Reef Research Fund, cosponsored by the Federal Agency

25. On a scale from 0 to 10, how certain are you of the answer you just gave about raising local sales tax for the Florida Coral Reef Research Fund?

Completely					_		_			Completely
uncertain	1	2	3	4	5	6	7	8	9	certain
0	0	0	\odot	0	0	0	0	0	0	0

26.

To what extent do you agree or disagree with each of the following statements?

	Strongly Agree	Agree	Neither Agree nor Disagree	Disagree	Strongly Disagree
The primary value of coral reef areas is to provide the needs of humans.	0	0	0	0	0
Human use of coral reef areas should not be allowed if it damages these areas.	0	0	0	0	0
All coral reefs in Florida should be protected.	0	\odot	0	0	\odot
Increasing carbon dioxide is a threat to corals.	0	0	0	0	0
The increasing acidification of sea water threatens corals.	0	0	0	0	\odot
Water temperatures are rising too quickly for corals to adapt.	0	0	0	0	\circ
Coral reefs are more endangered than rainforests.	0	0	0	\circ	\odot

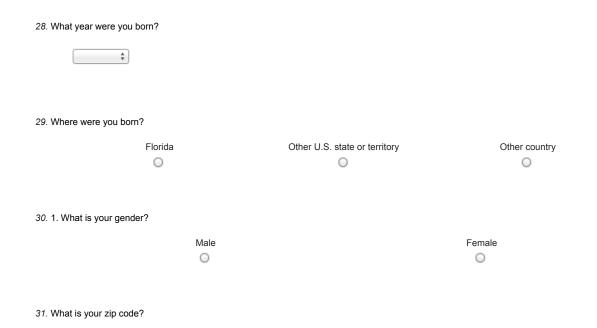
27.

Consider the two items below. Which is more important? While both are important, choose the one that seems more important than the other.

- O The Economy, even if it leads to environmental problems
- O The Environment, even if it costs jobs or economic growth

V.

Section 5: About You



32. Does anyone in your household own a boat? Yes, with a motor Yes, but without a motor O No 33. 6. What is your approxmiate combined household income, annually and before taxes? Ŧ 34. What percent (%) of your household income comes from beach or ocean-related 1) tourism, 2) hospitality, 3) resources (such as fishing and boating), and 4) other environmental science and management jobs? Drag the tabs to the right to select a percentage for each of the 4 categories that applies to your household. Percent (%) 0 10 20 40 50 70 90 100 30 60 80 0 Tourism

Hospitality						0
Ocean resources						0
Environmental Fields						0

35. In terms of politics, how do you identify yourself?

	1	ndependent, leans			Other:	
Re	publican	Republican	Independent	Independent, leans Democrat	Democrat	
	0	0	\odot	\circ	\circ	0
36. What is your	race?					
🗆 Whi	te/Caucasian		Asian		Pacific Islander	
Afric	can American		Native American	ı	Other	
🔲 Hisp	banic					

eted?	
4-year College Degree	
Masters Degree	
O Doctoral Degree	
e physical sciences?	
No	
0	
nvironmental cause?	
No Do	n't know
0	\bigcirc
the past 12 months?	
r	Masters Degree Doctoral Degree No No No Doctoral cause?

- 🔲 \$500 \$999
- more than \$1,000

41.

On a 0 to 10 scale, where 0 means it does not describe you at all and 10 means it describes you perfectly, how well does the word "environmentalist" describe you?



End. Thank You! You have completed the survey.

You will now be taken to the website of Our Florida Reefs, where you can explore and learn more about the coral reefs near the beaches in South Florida.

https://fiu.qualtrics.com/ControlPanel/Ajax.php?action=GetSur...

