

**Comprehensive Regional Decision Support Framework to Prioritize Sites for
Coral Reef Conservation in the U.S. Virgin Islands**

Survey of Professional SCUBA Divers

Thank you for agreeing to complete our survey. Your participation is voluntary, so we very much appreciate your taking time out of your busy schedule to provide information about coral reefs in the U.S. Virgin Islands. We estimate that it will take you about 30 minutes to complete this survey, including 10 minutes for questions and 20 minutes for the mapping activity. However, you may take as much time as you like!

The public reporting burden for this collection of information is estimated to average 30 minutes including the time for reviewing instructions, searching for 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 suggestions for reducing this burden to: Dr. Theresa L. Goedeke, NOAA National Ocean Service, National Centers for Coastal Ocean Science, 1305 East-West Highway, Silver Spring, MD 20910. Responses provided for this survey will be anonymous. No personally identifiable information is being collected with this survey; responses will not be attributed to individuals. Notwithstanding any other provisions of the law, no person is required to respond to, nor shall any person be subjected to a penalty for failure to comply, with a collection of information subject to the requirements of the Paperwork Reduction Act unless that collection of information displays a currently valid OMB Control Number.

Section 1: Diving Questions

Instruction: The questions below will help us to understand the nature and extent of your experience diving on or around coral reef areas in the U.S. Virgin Islands (USVI). Except where otherwise indicated, *we are only interested in your diving activity and experience in the USVI*. Please do not consider diving that you have done outside the USVI for your occupation or leisure/recreation.

- 1) Do you presently engage in diving as a part of your occupation in the USVI?
 - Yes
 - No [If no, survey is terminated.]
- 2) How long have you engaged in diving as a part of your occupation in the USVI?

Years_____ Months_____

- 3) Which of the following best describes the types of diving activity you engage in as a part of your occupation in the USVI? (Check all that apply)
 - Scientific research or data collection
 - Teaching or instruction in SCUBA
 - Teaching or instruction other than SCUBA

- Salvage and/or construction
- Monitoring or maintenance of in-water infrastructure
- Watercraft/vessel repair or maintenance
- Tour or recreational SCUBA guide
- Emergency response, search and rescue
- Wildlife/fisheries management or monitoring
- Other _____
- Not applicable

4) In the *previous 12 months*, approximately how many dives have you completed on or around coral reefs as a part of your occupation in the USVI?

- 1-49
- 50-99
- 100-199
- 200-299
- 300 or more
- None

5) Over the *course of your career* so far in the USVI, approximately how many dives have you completed on or around coral reefs as a part of your occupation?

- 1-399
- 400-799
- 800-1199
- 1200-1599
- 1600-1999
- 2000 or more

6) Do you engage in diving for leisure or recreational activity in the USVI?

- Yes
- No [If no, skip to Question 10]

7) How long have you engaged in diving for leisure or recreation in the USVI?

Years_____ Months_____

8) In the *previous 12 months*, approximately how many dives have you completed on or around coral reefs for leisure or recreation in the USVI?

- 1-49
- 50-99
- 100-199
- 200-299
- 300 or more
- None

9) Approximately *how many dives in total* have you completed on or around coral reefs for

leisure or recreation in the USVI?

- 1-399
- 400-799
- 800-1199
- 1200-1599
- 1600-1999
- 2000 or more

10) Please indicate the degree to which you agree with the following statements related to the value of coral reef ecosystems in general, not just in the USVI.

	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
I enjoy looking at and experiencing coral reefs.	<input type="checkbox"/>				
Coral reefs provide economically valuable resources to support my business, job or livelihood.	<input type="checkbox"/>				
Coral reefs are places where I can pass down the wisdom, knowledge and traditions of my family, ancestors or culture.	<input type="checkbox"/>				
Coral reefs provide a place for me to engage in my favorite recreational and leisure activities.	<input type="checkbox"/>				
Coral reefs are places where I can learn about the environment through observation or experimentation.	<input type="checkbox"/>				
Coral reefs provide living space for a variety of fish and other marine species that are important to me.	<input type="checkbox"/>				
Coral reefs are sacred, religious or spiritually special places to me.	<input type="checkbox"/>				
Coral reefs provide food and other natural resources that I need to sustain my way of life.	<input type="checkbox"/>				

Section 2: Mapping Exercise

Instruction: For this mapping exercise, we would like for you to place the informational pins provided under each tab on your map in the locations where you feel you can contribute information about coral reefs in the USVI. The information that you provide should be based on your own personal observation and experience diving in the USVI. Except where otherwise noted, you may use pins more than once or not at all.

You may increase or decrease the resolution of your map to locate areas or orient yourself, but are limited to a resolution of 1:24000 or finer for mapping purposes. For this survey, we will assume that the information you provide with your informational pins covers an area of up to 50 meters around each point marked by a pin. Please place your informational pin on the side of the reef that you want to describe, meaning either the fore-reef or back reef. Please place your informational pin near the reef area that you want to describe, as opposed to the location where you typically enter the water (for example, where you anchor or moor your boat).

Tab 1: Reef Characteristics & Features

Instruction: Please identify the characteristics and features below that you *most associate* with the reefs where you dive by placing pins on the map. You may place as many or as few pins as you feel are needed to adequately represent your observational knowledge.

- Fish spawning aggregation site
- Large herbivorous fish (e.g., parrotfish or surgeonfish)
- Large predatory fish (e.g., sharks or barracuda)
- Endangered or threatened species present (e.g., elkhorn and staghorn coral)
- Large variety of coral species
- Large variety of fish species
- Large amount of live coral cover
- Large amount of physical reef structure
- Good water clarity/visibility
- Small amount of macro algae/seaweed

Tab 2: Reef Activity Areas

Instruction: Based on your experience as a diver in the U.S. Virgin Islands, please identify the reefs that are the best places for diving tourism, personal diving and research activities on or around coral reefs by placing a pin on the appropriate locations on your map. These locations may be areas that you visit/use yourself or areas where you have observed others visiting/using coral reef resources. You may place as many or as few pins as you feel are needed to well represent the location of these activities.

- Diving Tourism Activities
- Personal Diving Activities
- Research Activities

Tab 3: Stressors & Recovery Potential

Instruction: Please show us which of the stressors listed below influences the reef areas that you are familiar with by placing the applicable stressor pins on your map. For each reef area where you have placed at least one stressor pin, please also give us your assessment about the degree of recovery potential for that reef by placing one recovery potential pin. Stated differently, for each area that you have marked with at least one stressor pin, we would like for you to place one recovery potential pin.

Stressor Pins

- Storms
- Coral Bleaching
- Water Pollution
- Shipping and Other Boats
- Unsustainable Fishing
- Recreational Overuse
- Invasive Species
- No Stressors

Recovery Potential Pins

- High Recovery Potential
- Low Recovery Potential
- No Recovery Potential

Section 3: Informational Coverage & Demographic Questions

11) Thinking about all of the locations where you have experience diving on coral reefs in the USVI, could you tell us approximately what percentage of those areas you have mapped information for us today?

- Less than 20 percent
- 21 to 49 percent
- 50 to 69 percent
- 70 to 89 percent
- 90 to 99 percent
- 100 percent

12) On which island do you live? (Check only one)

- St. Croix
- St. Thomas
- St. John
- Water Island

13) How long have you lived in the USVI?

Years _____ Months _____

14) What is your sex?

- Male
- Female

15) In what year were you born? _____

16) What is the highest level of schooling that you have completed or the highest degree you have received? (Check only one)

- No formal schooling completed
- Elementary school (grades 1-8)
- High school, no degree
- High school graduate or equivalent
- Some college, no degree
- Associate's or occupational degree
- Bachelor's degree
- Master's degree
- Professional school degree
- Doctorate degree