

Puerto Rico Coral Reef Ecosystem Valuation: Importance & Satisfaction of Natural Resources and Facilities

Background

A recent analysis of socioeconomic survey data provides new insight into the importance and satisfaction of natural resources, facilities and services among reef-using visitors in Puerto Rico. The report **Importance and Satisfaction Ratings by Reef Using Visitors in Puerto Rico**, is the result of a partnership with NOAA’s Office of National Marine Sanctuaries (ONMS), Environmental Protection Agency, and University of Puerto Rico, Sea Grant., and estimates the attitudes of recreational visitors to Puerto Rico who use the coral reefs.

Respondents were asked to rate several environmental characteristics and access to facilities within Puerto Rico based on their level of importance and satisfaction. The level of importance was rated on a scale of 1 – “Not Important” to 5 - “Extremely Important”. Satisfaction was rated on a scale of 1 – “Terrible” to 5 - “Delighted”. In 2016 to 2017, reef using visitors could also answer “don’t know” or “not applicable” for both importance and satisfaction. These ratings can be used individually to inform decisions and better understand what users value or they can be used together to determine where management is doing a good job or where improvement is needed.

How to read the matrix?

By comparing the importance and satisfaction ratings, business and management can identify which areas need improvement, where they are doing well, and where resources could be redirected. The figure to the right shows the importance/satisfaction matrix and how priority areas are identified. For example, something with relatively high importance and relatively high satisfaction such as clean water and the amount of living corals would get a “Keep up the good work.” Alternatively, something with relatively low satisfaction and relatively high importance as availability of public restrooms and well maintained roads and bridges would get “Concentrate here” indicating these items should receive more attention.

Importance/ Satisfaction Matrix Coral Reef Using Visitors to Puerto Rico
A guide for Management

Importance	Relatively More Important	<p>Concentrate Here (Relatively More Important, Relatively Less Satisfied)</p> <ol style="list-style-type: none"> 1. Availability of public restrooms 2. Well maintained roads and bridges 3. Parking 4. Good maps and signage for navigation 	<p>Keep Up the Good Work (Relatively More Important, Relatively More Satisfied)</p> <ol style="list-style-type: none"> 1. Clear water 2. Clean water for swimming 3. Amount of living corals on reefs 4. Different kinds of fishes and sea life to view 5. Public safety
	Relatively Less Important	<p>Low Priority (Relatively Less Important, Relatively Less Satisfied)</p> <ol style="list-style-type: none"> 1. Public transportation 2. Availability of life guards for beach safety 	<p>Possible Overkill (Relatively Less Important, Relatively More Satisfied)</p> <ol style="list-style-type: none"> 1. Different kinds of fishes and sea life to catch 2. Artificial reefs 3. Marina facilities, boat ramps 4. Mooring buoys and navigational markers
		Relatively Less Satisfied	Relatively More Satisfied
		Satisfaction	

What are the key findings?

Based on respondents who use coral reefs for recreation, another area that may require additional focus includes good maps and signs for navigation. Respondents felt like signs were relatively more important, but they were relatively less satisfied with the quality of maps and signs for navigation. If satisfaction is not improved, it is possible that respondents may eventually switch to recreate in other areas that provide them with greater satisfaction or they switch activities if they still choose to visit Puerto Rico.



Map of Puerto Rico

Why is this important?

The results of this research will inform management about areas they can improve or where there may be some public misperceptions. For example, if respondents are reporting something is relatively unimportant to them, but from a scientific perspective, it is imperative for a healthy ecosystem outreach efforts to generate a better appreciation for healthy reefs might become a management priority.

What should I know?

A healthy environment provides us with various recreational opportunities. Knowing what respondents find important, such as clean water, different kinds of fishes and sea life to view, control of invasive species, amount of living corals on reefs, and easy, abundant and quality beach and shorelines, reveals those aspects they find most valuable and how they might use the resources. For example, some of the most common activities in Puerto Rico were snorkeling and swimming, which reflects the importance of coral reef organisms and quality beaches.

What about facilities?

Respondents also answered questions about facilities that are on Puerto Rico. Respondents indicated that resorts with a focus on ecotourism and the cleanliness of streets and sidewalks was relatively more important and that they were relatively more satisfied with them. However, parking and well maintained roads and bridges were ranked as relatively more important, but reef using visitors were relatively less satisfied with these items. This indicates that business and management should focus on these items to increase user satisfaction.

More Information:

A complete copy of the report is available at:
https://www.coris.noaa.gov/activities/projects/pr_reef_ecosystem_valuation/

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Photos: Environmental Protection Agency