



Applying knowledge to improve water quality

Southwest States & Pacific Islands Regional Water Program

A Partnership of USDA CSREES & Land Grant Colleges and Universities

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Beaches, Shorelines, Coastal Waters Get Mixed Reviews

As part of the Water Issues survey conducted in the Pacific Islands, residents were asked to rate the water quality associated with the beaches, shorelines and coastal waters where they live. Respondents were asked to grade these waters as one of the following: (1) *good or excellent*; (2) *good and improving*; (3) *good but deteriorating*; (4) *fair*; (5) *poor but improving*; (6) *poor*, or (7) *no opinion/I don't know*. Survey respondents provided a range of answers (Table 1). Over 45% of respondents graded the status of these areas as good (*good or excellent* + *good and improving* + *good but deteriorating*). However, just over a third of respondents felt that these areas were in poor shape. Most survey respondents are economically and culturally sustained by and connected to their shorelines and coastal waters as reflected by the 92% of the sample who expressed opinions. Consequently, their observations should have merit.



An unofficial dump on Majuro, Marshall Islands



Sign warning of beach closure after heavy rains caused sewage spills and urban runoff

Table 1. Pacific Island respondent's answers to the question "What is the quality of beaches, shorelines and coastal waters?"

Response	Percent of respondents
Good or excellent	10
Good and improving	12
Good, but deteriorating	24
Fair	12
Poor, but improving	12
Poor	23
No opinion/ I don't know	8

Water Issues Survey Background

The results of the water issues discussed in this fact sheet are from a 37-question survey conducted by the Pacific Islands water quality team with support from the Pacific Northwest water quality program. The survey was used to document public awareness, aptitudes, attitudes, and actions toward water quality in Guam, American Samoa, the Republic of Palau, the Federated States of Micronesia, the Commonwealth of the Northern Mariana Islands, and the Republic of the Marshall Islands. Fifty surveys were completed from each of the six island jurisdictions for a total of 300 completed surveys. The collected data was analyzed using the SAS procedure at the University of Idaho and has a sampling error of +/- 5 percent.

Southwest States and Pacific Islands Regional Water Program

Southwest States

The University of Arizona

Dr. Kitt Farrell-Poe
kittp@ag.arizona.edu

University of California

Dr. Laosheng Wu
laowu@mail.ucr.edu

University of Nevada Reno

Dr. Mark Walker
mwalker@equinox.unr.edu

Pacific Islands

University of Hawaii

Dr. Carl Evensen
evensen@hawaii.edu

University of Guam

David Crisostomo
dcrisost@uog9.uog.edu

American Samoa Community College

Dr. Don Vargo
donvargo@rocketmail.com

College of the Marshall Islands

Amlet Kalemén
akalemén20002000@yahoo.com

College of Micronesia

Jackson Phillip
jphillip@comfsm.fm

Northern Marianas College

Lawrence Duponcheel
lawontinian@gtepacific.net

Palau Community College

Leilanie Rechelluul
leirechelluul@yahoo.com

Regional Agency Liaison

Christine French
christine.french@ucr.edu

The wide range of answers to the beaches, shorelines, and coastal waters question is a function of the island of residence (Table 2). In general, a majority of residents of the Commonwealth of the Northern Mariana Islands (CNMI), the Republic of the Marshall Islands (RMI), and Palau felt that these ecosystems were in good shape. Conversely, only about one-third of the respondents from Guam and American Samoa considered the water quality associated with these systems to be good. In fact, a majority of American Samoa's respondents considered these ecosystems to be in poor shape. Based on this survey a ranking of the perception of water quality associated with beaches, shorelines, and coastal waters from best to worst would be: CNMI; Palau; RMI; Federated States of Micronesia (FSM); Guam; and American Samoa.

Table 2. Impact of island of residence on the response to the question "What is the quality of beaches, shorelines, and coastal waters?"

Response	Island					
	CNMI	RMI	G	P	FSM	AS
	%					
Good	55	53	36	56	39	30
Fair	19	6	18	8	14	8
Poor	19	31	41	26	41	4
No opinion	8	8	6	10	6	8

CNMI= Northern Mariana Islands, RMI= Republic of the Marshall Islands, G= Guam, P= Palau, FSM= Federated States of Micronesia, AS= American Samoa.

According to the Pacific Regional Environment Programme (SPREP), a regional organization established by the governments and administrations of the Pacific region, the region's coastal and marine resources are threatened by both on-shore and off-shore pollution. From marine accidents to a lack of appropriate technology for waste recycling, the pollution crisis has resulted in a proliferation of plastics, paper, glass, metal and even drums of hazardous chemicals into coastal waters. Tourism, a key money-earner for some Pacific island countries, is beginning to be affected by the spread of litter. The region once had a competitive advantage over other tourist destinations because of the reputed beauty of its lagoons and beaches. But according to reports from SPREP, that advantage is shrinking under the weight of solid waste piling up around shorelines and waterways alike.



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