



Applying knowledge to improve water quality

Southwest States & Pacific Islands Regional Water Program

A Partnership of USDA CSREES
& Land Grant Colleges and Universities

Fall 2005
HPIWQ004

Drinking Water Trends in the Pacific

Drinking water is obtained from many sources in the Pacific Islands (Table 1). As part of the Water Issues survey conducted in the Pacific Islands, almost 60% of residents responded that they use bottled water or a rainwater catchment as their primary source of drinking water (Table 1). Additionally, almost a quarter of the survey respondents receive their drinking water from city water systems. Community well systems, private wells, surface water, and reverse osmosis supply drinking water to smaller percentages of the population. Four percent of survey respondents did not know their primary source of drinking water.



Table 1. Pacific Island respondent answers to the question “Where do you get your drinking water?”

Drinking water source	Percent of respondents
Bottled water	29
Rainwater	29
City water	23
Community water system	7
I don't know	4
Well	4
Surface water	2
Reverse osmosis	2



Drinking water sources are island specific (Table 2). Bottled water is the most common drinking water source on Guam and the Commonwealth of the Northern Mariana Islands. Rainwater catchments are the primary source of drinking water in the Republic of the Marshall Islands, the Federated States of Micronesia, and Palau. Conversely, in American Samoa, city water is the most common source of drinking water.



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.

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Table 2. Impact of island of residence on the first (primary) and second (secondary) most often cited sources of drinking water.

Island	Water source	
	Primary (%)	Secondary (%)
CNMI	Bottled water (42)	City water (25)
RMI	Rainwater (69)	City water (13)
Guam	Bottled water (77)	City water (9)
Palau	Rainwater (67)	City water (29)
FSM	Rainwater (49)	Wells (17)
American Samoa	City water (47)	Bottled water (30)

CNMI= Northern Mariana Islands, RMI= Republic of the Marshall Islands, FSM= Federated States of Micronesia.

Only 55% of survey respondents feel that their home drinking water supply is safe to drink. This relatively low percentage underscores the public's desire to have this issue addressed as a high priority item. Widespread skepticism about the safety of their drinking water is not uniform across all the islands, however. Residents of Palau (78%), FSM (74%), and RMI (61%), where rainwater is the most common source of drinking water (Table 2), are most likely to conclude that their home drinking water is safe to drink (Table 3). Conversely, less than one-third of the respondents from Guam and American Samoa believe that their drinking water is safe.

Table 3. The impact of island of residence on responses about the safety and satisfaction of drinking water in the home.

Island	Percent of respondents answering yes	
	Safe to drink?	Satisfied?
CNMI	59	28
RMI	61	15
Guam	31	4
Palau	78	12
FSM	74	51
American Samoa	28	34

CNMI= Northern Mariana Islands, RMI= Republic of the Marshall Islands, FSM= Federated States of Micronesia.

Water safety does not equate to water satisfaction with the home drinking water supply in the Pacific Islands. The satisfaction level with the home drinking water supply is much lower than the safety level in five of the six Pacific Island entities. It can be interpreted from the data presented in Tables 1 to 3 that the sources, safety, and satisfaction levels of drinking water are island specific.



This material is based on work supported by the Cooperative State Research, Education, and Extension Service, U.S. Department of Agriculture, under Agreement No. 2004-51130-02258