

# Public Perceptions of Water and Environmental Issues in the Southwest States and Pacific Islands

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## Background of Public Attitudes Survey

Elements of a survey used to assess public awareness, aptitudes, attitudes, and actions toward water quality include:

- > 37-questions, adapted from a similar survey used in the Pacific Northwest.
- > One version was sent to randomly selected residents in Arizona, California, Hawaii, and Nevada. 1766 were returned for an average 51% return rate.
- > Another, slightly modified version was conducted orally with residents of American Samoa, Commonwealth of the Northern Mariana Islands, Guam, Republic of the Marshall Islands, Federated States of Micronesia, and the Republic of Palau. 303 surveys were completed.
- > Data from the six island entities have been pooled for a "Pacific Island" perspective.
- > All surveys were conducted from August 2003 to July 2004.
- > The collected data were analyzed using the SAS procedure at the University of Idaho, and have a sampling error of +/- 5 percent.
- > Survey questions were divided into six sections:
  - > How Do You Feel About the Environment?
  - > Your Environmental Perspective
  - > Water Issues
  - > Water Quality Education
  - > Governance
  - > Demographics



Because some questions were modified to address specific issues of the Pacific Islands, and data collection was conducted orally, there are limitations to combining the results with the states for a true regional result. However, overall trends apparent in both surveys do give a clear regional perspective on some issues.

## Drinking Water Ranked as Most Important Issue

Clean drinking water is the most important water issue in each state and island of the region, according to the survey.

When asked to rank five competing water uses in order from most to least important, respondents in each state/island chose **drinking water/human use as the clear top choice** and recreation as the bottom choice while the rankings for the intermediate uses varied by location (Figure 1).

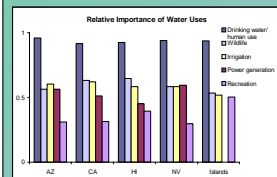


Figure 1. Relative ranking of competing water uses by survey respondents.

Survey respondents also rated the importance of eleven water issues (ten in the Islands) as not important, somewhat important, no opinion, very important, or extremely important. **Clean drinking water again receives top ratings with 100% of Pacific Island respondents ranking it either very or extremely important.** The same combination yielded 99% in AZ, CA, and NV, and 98% in HI.

- Other highly rated issues:**
- > water for household/private sector,
  - > clean groundwater,
  - > clean rivers, and
  - > water for agriculture.

## Does Government do Enough? Too Much? And Who Should be Responsible?

Most respondents from Hawaii and the Pacific Islands feel that environmental protection does not receive enough emphasis from local government. Approximately 40% from the southwest states agree (Figure 2).

The picture changes dramatically in the states, however, when the demographic group of those identified in the occupational category of "farm/ranch/fishing/fish farming/forest products" are singled out. Although this group does not represent a substantial number of responses, the picture is nonetheless interesting:

- Not enough emphasis 14%
- About the right amount 43%
- Too much emphasis 39%

As with the general population responses, agricultural workers in the Pacific Islands generally believe there is not enough emphasis on environmental issues with 51%; only 14% believe there is too much.

When asked **who should be most responsible for protecting water quality**, over 40% of respondents in each of the states favored state government (Figure 3) while the Pacific Island residents were more likely to favor individual citizens (Figure 4). The three mainland states were all very similar in their distribution of who they thought should be responsible. Hawaii was less similar, but in the same general range. The greatest difference is in the Pacific Islands where opinions vary widely by island entity. Those who feel individual citizens should be most responsible ranges from 19% of survey respondents in the Northern Marianas to 53% in the Marshall Islands (the highest in the states was Hawaii at 13%).

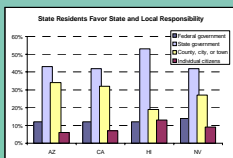


Figure 3. Survey respondents in the states are fairly consistent in who they believe should be responsible for water quality.

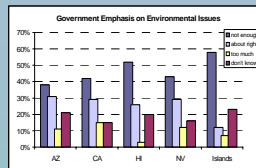


Figure 2. Responses to the question, "in your opinion, does the environment receive the right amount of emphasis from local government and elected officials in your jurisdiction?"

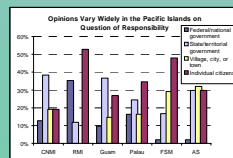


Figure 4. Survey respondents in the islands vary greatly in who they believe should be responsible for water quality.

## Do You Know What a Watershed is?

Yes! Agricultural workers in the states are more likely than the general population to have said yes, they do know what a watershed is. Seventy-four percent of the general population knows about watersheds while 93% of agricultural workers indicated the same.

The same question asked in the islands drew a different response. Likely due to language and cultural differences, the term watershed is not as well known among the general public or agricultural workers with positive responses from 48 and 3%, respectively.

When asked how aware they are of how watershed management affects water quality, between 51 and 54% (varying by state) of the general public indicated they were either somewhat or very aware. Again, the agricultural sector was more aware of this issue, with 85% at least somewhat aware. Island residents were less aware with 56% of the general population (ranging by island from 31 to 66%) and 45% of the agricultural sector at least somewhat aware of how watershed management affects water quality.

## Where Do They Get Their Information?

When asked whether or not they have received water quality information from eight (nine in the islands) different sources, the **most common sources of information** were:

- States**
- > newspapers
  - > television
  - > environmental agencies (government)
  - > environmental groups (citizen groups)
- Islands**
- > radio (not an option in the state survey)
  - > newspapers
  - > environmental agencies (government)
  - > television

When the occupation category of farm/ ranch/ fishing/ fish farming/ forest products is singled out, the percentage of those in the states receiving information from cooperative extension rises to join the top four (tied with environmental groups) at 32%. In the Pacific Islands, 50% of the same group indicate receiving information from extension (Figure 5).

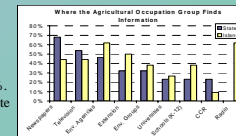


Figure 5. Newspapers and radio play an important part in informing the agricultural community of water quality issues.

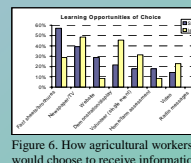


Figure 6. How agricultural workers would choose to receive information.

When asked how they would like to receive water quality information (Figure 6), the same agricultural group indicated that they would prefer:

- States**
- > fact sheets/ brochures
  - > newspaper/TV coverage
- Islands**
- > radio
  - > newspaper/TV coverage

## Region Favors Environmental Protection

Survey recipients were asked how they viewed themselves on environmental issues on a scale from 1 to 10. A value of 1 indicates that all natural resources should be used freely, while a value of 10 indicates that all natural resources should be protected and not used by humans.

On average, residents of the Southwest States and Pacific Islands favor environmental protection of natural resources.

Those working in farm/ ranch/ fish/ forest products settings are more likely to favor an equal balance between protection and resource use with an average of 5.1 in the states, and 5.5 in the islands.

