



Applying knowledge to improve water quality

Pacific Northwest

Regional Water Program

A Partnership of USDA NIFA
& Land Grant Colleges and Universities

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PNWWATER 024

Citizens Give Drinking Water High Marks

Almost 70 percent of Pacific Northwest residents receive their water from a city water system (Table 1). Individual wells followed by community well systems are the next most common domestic water sources. Less than two percent of the population get their water directly from a river, lake, pond or stream. The demographic factors of community size and state of residence do impact drinking water sources. As would be anticipated the larger the community size of residence the greater the likelihood of obtaining water from a city water system. Conversely, as community size decreased a larger percentage of residents relied on individual wells and/or community well systems. Residents of Oregon and Washington were more likely to get their water from a city water system than people living in Alaska or Idaho. This is probably due to the fact that a higher percentage of Oregon and Washington residents live in urban communities.



Table 1. Identified primary water sources by residents of Alaska, Idaho, Oregon and Washington in the water issues survey.

Source of water	Percentage of respondents
City water system	69.8
Individual well	19.1
Community well system	8.4
River, lake, stream	1.2
Don't know	1.5



Public responses to potential pollutants in drinking water are similar (Table 2). Less than five percent of survey respondents consider bacteria, nitrates, pesticides, heavy metals or industrial pollutants as a noticeable or significant problem in drinking water supplies. More significant is the observation that a majority of respondents do not consider any of the pollutants listed to be a problem (Table 2). The most important observation shown in Table 2 is that 4 out of 10 respondents do not have enough information about potential pollutants to have an opinion about risk. Demographic factors did not impact responses



The PNW Water Survey

A 50-question survey was developed by the Pacific Northwest water quality team to document public awareness, aptitudes, attitudes and actions toward water quality in Alaska, Idaho, Oregon and Washington. Demographic data about the survey respondents were also collected. This statistically designed survey was completed by over 50 percent of the 1,800 residents who were solicited for this study in 2002. Several questions in this survey dealt with drinking water quality. The sampling error of this survey question was +/- 3 percent.



Pacific Northwest Regional Water Quality Coordination Project Partners

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Water Resource Research Institutes

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Center (Alaska)

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Idaho Water Resources

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Institute for Water and

Watersheds (Oregon)

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State of Washington

Water Research Center

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to bacteria, nitrates, pesticides, heavy metals and industrial pollutants. However, almost 24 percent of respondents felt that minerals (i.e., calcium, iron) are a noticeable or significant problem in their home water supply.

Table 2. Perceptions of drinking water contamination problems in the Pacific Northwest by respondents to the water issues survey.

Source	Problem		
	No / Minor	Noticeable / Significant	Don't know
Bacteria	59.6	3.5	36.9
Nitrates	52.0	3.9	43.0
Pesticides	54.9	3.4	41.7
Heavy metals	54.6	3.9	41.5
Industrial pollutants	56.4	4.2	39.5
Minerals	43.5	23.2	33.2

Ninety-one percent of survey respondents feel that their home water source is safe to drink (Table 3). The demographic factors of state of residence, community size, age, education and occupation do not impact answers about the safety of drinking water. However, gender and length of residence in the Pacific Northwest do affect answers (Table 3). Females are less likely than males (88 vs. 94 percent) to consider home drinking water safe. Also, people that have resided in the Pacific Northwest for a minimum of 10 years are more likely to consider home drinking water safe than people who have lived in the region less than 10 years.

Table 3. Responses to the survey question: "Do you feel that your home drinking water is safe to drink?"

Parameter	Response	
	YES	NO
	----- percentage of respondents -----	
Overall	91	9
Demographic: Gender		
Female	88	12
Male	94	6
Demographic: Time in PNW		
All life	92	8
> 10 years	93	7
5 to 9 years	84	16
< 5 years	85	15

The answers to the drinking water related survey questions indicate that most residents of the Pacific Northwest are satisfied with the quality of their drinking water. The data also indicate that a significant number of residents need more information about potential drinking water pollutants.