



Montana State University Extension Water Quality

The well test program was first offered in 1989 by the Montana State University Extension Water Quality (MSUEWQ). Since its inception, the program has reached thousands of well owners. In the spring of 2009, the program targeted the top 17 Montana counties with the highest rate of new well drilling and attracted over 390 participants.



The Well Educated program guides private well owners through the process of testing water quality, provides materials to help interpret test results, and offers insight on ways to help protect drinking water resources. The program is offered as a service for Montana well owners to provide affordable well testing services accompanied by test result interpretation, while simultaneously providing a useful water quality data source for managers.

New in 2009, a DVD titled, *Taking Care of yOur Ground Water*, was included in participants' informational packets. This DVD is a useful tool for educating homeowners on the connection of well and septic systems to the water cycle and the steps they can take to help protect ground water resources. After watching this video, 27% of homeowners identified a potential problem with their well or septic system.

2009 Water Quality Summary

Over 30 parameters were available for testing in 2009. Following is a summary of results for selected parameters.

Parameter	# Participants Who Tested for Parameter	Samples Meeting EPA Drinking Water Goals and Standards	Samples Not Meeting Drinking Water Goals and Standards	Maximum Contaminant Level (mg/L)
Bacteria (<i>E.coli</i>)	327	95.4%	4.6%	0%
Bacteria (total coliforms)	327	71.3%	28.7%	5.0%
Cadmium	86	100%	0%	0.005
Copper	48	100%	0%	1.3
Fluoride	203	99.5%	0.5%	4.0
Nitrate	356	96.3%	3.7%	10
Selenium	45	100%	0%	0.05

Parameter	# Participants Who Tested for Parameter	EPA Drinking Water Goal	Samples Meeting EPA Drinking Water Goal	EPA Drinking Water Standards	Samples Meeting EPA Drinking Water Standards	Samples Not Meeting EPA Goals & Standards
Arsenic	107	0.000 mg/L	67%	< 0.010 mg/L	30%	3%
Lead	83	0.000 mg/L	78%	< 0.015 mg/L	22%	0%

2009 Survey Results

- 93% of participants stated they would participate in the program again.
- 95% of participants started a well file with materials from the program
- 31% agreed strongly and 51% agreed that the DVD increased their knowledge of their well and septic systems