



Cal-WATCH



Clear Lake Private Water System Testing Year One Results

Between March and November of 2021, Big Valley Rancheria sampled from private drinking water intakes and wells within 50 feet of the Clear Lake shoreline. Of 493 eligible addresses, the Cal-WATCH project was able to sample from 52 homes. Results of our sampling are summarized below.

Coliform Bacteria

52 homes tested

40%

of systems contained Total Coliform present

90%

of systems with Total Coliform present were intakes

6%

of systems (3 homes) had E. Coli present

Fluridone

10 homes tested

10%

of systems (1 home) contained detectable fluridone

FOR MORE INFORMATION:

Email:
info@trackingcalifornia.org

Website:
Cal-watch.org

This work is supported by grant 6NUE1EH001427-02-01 from the CDC as part of the Environmental Health Capacity Building funding program

Nitrates

52 homes tested

24%

of systems contained detectable nitrate levels

100%

of systems with nitrates were wells

100%

of systems tested below the EPA's regulatory limit for nitrates (10 mg/L)

Cyanotoxins

46 homes tested

100%

of systems with detectable cyanotoxins were intakes

56%

of intakes contained cyanotoxins over EPA's health advisory level (0.3 ug/L)*

0%

1.24
ug/L

average microcystin concentration for systems with toxins above EPA advisory levels

of systems contained saxitoxin (5 tested) cylindrospermopsin (5 tested), or anatoxin (1 tested)

*36 homes were tested twice for cyanotoxins, the highest toxin levels measured were used for this analysis

Results by treatment system table

	BACTERIA AND NITRATES				HERBICIDES		MICROCYSTIN			
TREATMENT	TOTAL HOUSEHOLDS TESTED #	% COLIFORM DETECTS	% E COLI DETECT	% NITRATES DETECT	TOTAL HOUSEHOLDS TESTED #	% HERBICIDE DETECT	TOTAL HOUSEHOLDS TESTED #	% CYANOBACTERIA PRESENT	% Microcystin DETECT	% Microcystin >0.3 ug/L
INTAKES	34	50%	6%	0%	6	17%	31	71%	64.2%	45.3%
CHLORINE AND FILTER	24	54%	8%	0%	6	17%	21	65%	58.3%	41.7%
CHLORINE, FILTER AND U.V.	2	0%	0%	0%	0	0%	2	100%	100.0%	33.3%
CHLORINE, FILTER OZONE	1	0%	0%	0%	0	0%	1	100%	50.0%	50.0%
FILTER	4	75%	0%	0%	0	0%	4	60%	71.4%	57.1%
FILTER AND U.V.	3	33%	0%	0%	0	0%	3	100%	80.0%	60.0%
WELLS	18	22%	6%	56%	5	0%	15	20%	0.0%	0.0%
CHLORINE AND FILTER	6	0%	0%	100%	2	0%	6	20%	0.0%	0.0%
FILTER AND U.V.	1	0%	0%	100%	0	0%	1	100%	0.0%	0.0%
FILTER, U.V., AND OZONE	1	0%	0%	100%	0	0%	1	0%	0.0%	0.0%
FILTER	4	50%	0%	25%	0	0%	1	0%	0.0%	0.0%
NONE	6	33%	17%	17%	3	0%	6	13%	0.0%	0.0%

* please note that some households participated in multiple toxin sampling rounds and that microscopy was not performed on many of the first set of samples due to scheduling issues.