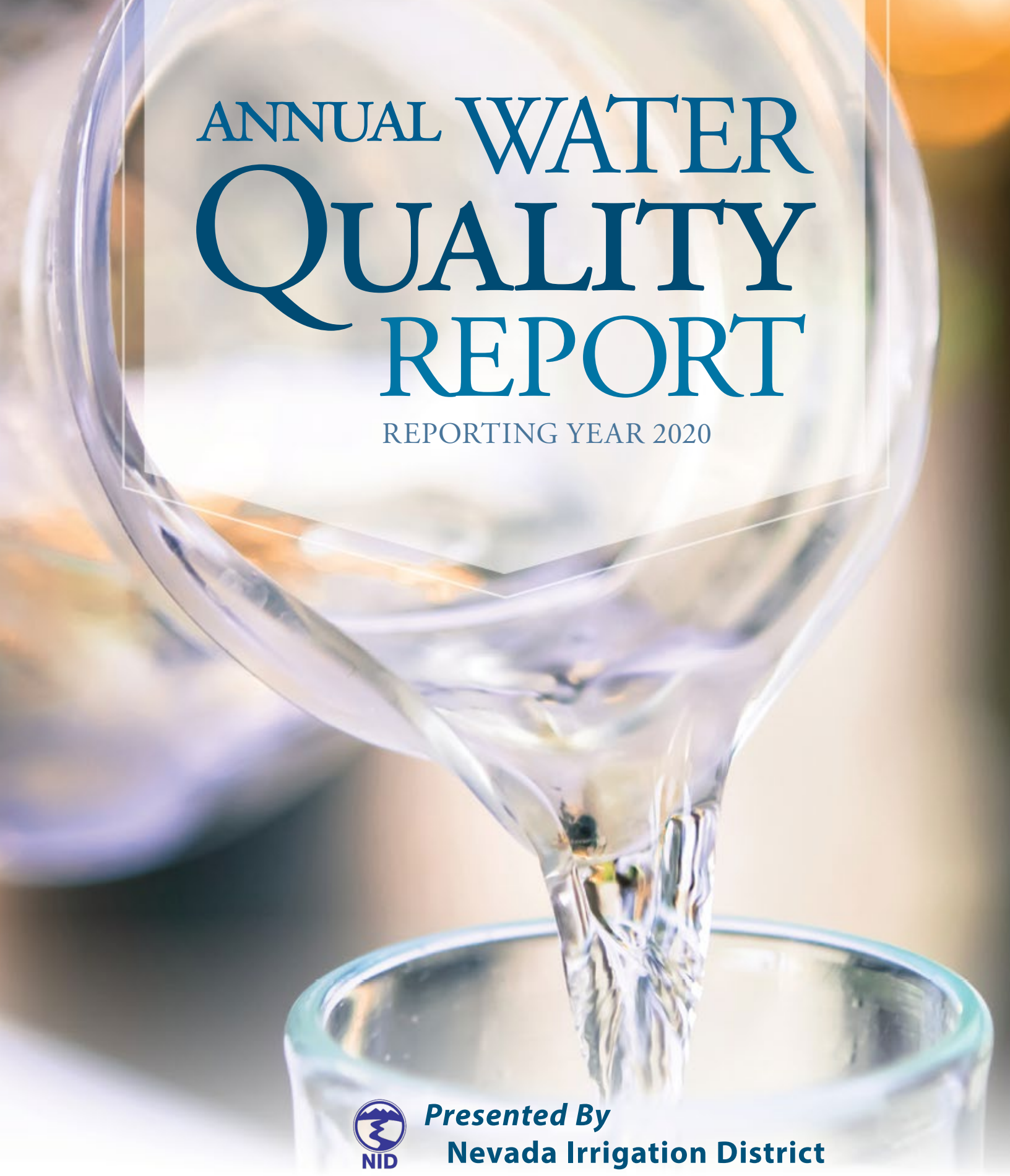


ANNUAL WATER QUALITY REPORT

REPORTING YEAR 2020

Presented By

Nevada Irrigation District

Este informe contiene información muy importante sobre su agua potable. Tradúzcalo o hable con alguien que lo entienda bien.

PWS ID#: 2910004, 2910014, 2910023, 2910006, 3110026

Quality First

Once again, we are pleased to present our annual water quality report covering all testing performed between January 1 and December 31, 2020. As in years past, we are committed to delivering the best-quality drinking water possible. To that end, we remain vigilant in meeting the challenges of new regulations, source water protection, water conservation, and community outreach and education, while continuing to serve the needs of all our water users. Thank you for allowing us the opportunity to serve you and your family.

We encourage you to share your thoughts with us on the information contained in this report. After all, well-informed customers are our best allies.

Source Water Assessment

In 2016 and 2017, NID teamed with the Placer County Water Agency and Starr Consulting to update its Source Water Susceptibility Assessment. This assessment describes the susceptibility and types of constituents that may come into contact with your drinking water source. The report confirmed that district watersheds have very low levels of contaminants. To a limited extent, those contaminants found are usually associated with wildlife and human recreational activity. Leading sources of potential contamination include highways, roadways, and railroads near rivers, and raw-water canals, septic tanks, unidentified utility pipelines crossing canals, recreation at upstream reservoirs, historic and active mining operations, and utility operations. This new assessment (Watershed Sanitary Survey 2017 Update) can be found on the NID website (nidwater.com/surface-water-treatment-watershed-sanitary-survey).

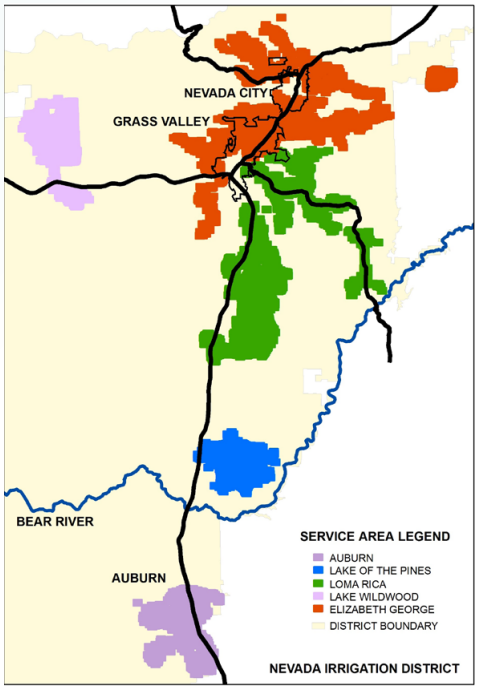
> “We remain vigilant in delivering the best-quality drinking water”

Lead in Home Plumbing

If present, elevated levels of lead can cause serious health problems, especially for pregnant women and young children. Lead in drinking water is primarily from materials and components associated with service lines and home plumbing. We are responsible for providing high-quality drinking water, but we cannot control the variety of materials used in plumbing components. When your water has been sitting for several hours, you can minimize the potential for lead exposure by flushing your tap for 30 seconds to 2 minutes before using water for drinking or cooking. (If you do so, you may wish to collect the flushed water and reuse it for another beneficial purpose, such as watering plants.) If you are concerned about lead in your water, you may wish to have your water tested. Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available from the Safe Drinking Water Hotline at (800) 426-4791 or at www.epa.gov/safewater/lead.

Sierra Snowpack Is the Source of Your Water

NID treated and distributed more than 3.2 billion gallons of surface water last year. This water originates in the Sierra Nevada snowpack on five mountain watersheds. These include the Middle and South Yuba rivers, the Bear River, north fork of the North Fork American River, and Deer Creek. Most of this water is routed through Lake Spaulding and transported to NID's water treatment plants via canal systems operated by NID and the Pacific Gas and Electric Company.



Water Quality Testing

Effective operation and maintenance of the drinking water distribution system assures that quality drinking water travels through the system to your meter. The residual chlorine in the water after treatment prevents regrowth of organisms during storage and transmission in the distribution system. Annual flushing of water mains and rotation of stored supplies also keeps water fresh and limits the growth of organisms. The district conducts weekly water quality testing in the distribution system to ensure that drinking water continues to meet state and federal requirements.

Substances That Could Be in Water

The sources of drinking water (both tap water and bottled water) include rivers, lakes, streams, ponds, reservoirs, springs, and wells. As water travels over the surface of the land or through the ground, it dissolves naturally occurring minerals and, in some cases, radioactive material, and can pick up substances resulting from the presence of animals or from human activity.

In order to ensure that tap water is safe to drink, the U.S. Environmental Protection Agency (U.S. EPA) and the State Water Resources Control Board (State Board) prescribe regulations that limit the amount of certain contaminants in water provided by public water systems. The U.S. Food and Drug Administration regulations and California law also establish limits for contaminants in bottled water that provide the same protection for public health. Drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. The presence of contaminants does not necessarily indicate that water poses a health risk.

Contaminants that may be present in source water include:

Microbial Contaminants, such as viruses and bacteria, that may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife;

Inorganic Contaminants, such as salts and metals, that can be naturally occurring or can result from urban storm-water runoff, industrial or domestic wastewater discharges, oil and gas production, mining, or farming;

Pesticides and Herbicides, that may come from a variety of sources such as agriculture, urban storm-water runoff, and residential uses;

Organic Chemical Contaminants, including synthetic and volatile organic chemicals, which are by-products of industrial processes and petroleum production, and which can also come from gas stations, urban storm-water runoff, agricultural applications, and septic systems; Radioactive Contaminants, that can be naturally occurring or can be the result of oil and gas production and mining activities.

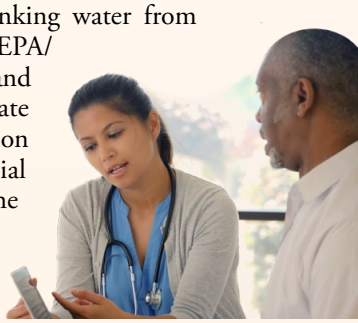
More information about contaminants and potential health effects can be obtained by calling the U.S. EPA's Safe Drinking Water Hotline at (800) 426-4791.

NID Pledges Water Quality—Seeks Public Participation

The Board of Directors encourages public participation on issues concerning our water systems. District policy is set by the elected Board of Directors. Board meetings are held at 9:00 a.m. on the second and fourth Wednesdays of each month at the NID Business Center in Grass Valley. Check NID's website (www.nidwater.com) or call the main office at (530) 273-6185 to confirm meeting times.

Important Health Information

Some people may be more vulnerable to contaminants in drinking water than the general population. Immunocompromised persons such as persons with cancer undergoing chemotherapy, persons who have undergone organ transplants, people with HIV/AIDS or other immune system disorders, some elderly, and infants may be particularly at risk from infections. These people should seek advice about drinking water from their health-care providers. The U.S. EPA/CDC (Centers for Disease Control and Prevention) guidelines on appropriate means to lessen the risk of infection by *Cryptosporidium* and other microbial contaminants are available from the Safe Drinking Water Hotline at (800) 426-4791 or http://water.epa.gov/drink/hotline.



QUESTIONS? For additional water quality information, customers may contact NID Treated Water Superintendent Fred Waymire at the district office, (530) 273-6185.

Test Results

Our water is monitored for many different kinds of substances on a very strict sampling schedule. And, the water we deliver must meet specific health standards. Here, we only show those substances that were detected in our water. Remember that detecting a substance does not mean the water is unsafe to drink; our goal is to keep all detects below their respective maximum allowed levels.

The State recommends monitoring for certain substances less than once per year because the concentrations of these substances do not change frequently. In these cases, the most recent sample data are included, along with the year in which the sample was taken.

REGULATED SUBSTANCES

				Loma Rica		North Auburn		Elizabeth George		Lake Wildwood		Lake of the Pines			
SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED	MCL [MRDL]	PHG (MCLG) [MRDLG]	AMOUNT DETECTED	RANGE LOW-HIGH	AMOUNT DETECTED	RANGE LOW-HIGH	AMOUNT DETECTED	RANGE LOW-HIGH	AMOUNT DETECTED	RANGE LOW-HIGH	AMOUNT DETECTED	RANGE LOW-HIGH	VIOLATION	TYPICAL SOURCE
Chlorine (ppm)	2020	[4.0 (as Cl2)]	[4 (as Cl2)]	0.95	0.30–1.38	0.79	0.53–1.16	0.90	0.45–1.34	0.91	0.63–1.39	0.97	0.45–1.61	No	Drinking water disinfectant added for treatment
Control of DBP precursors [TOC] (ppm)	2020	TT	NA	0.97	0.61–1.2	1.11	0.82 – 1.30	0.91	0.63–1.20	1.08	0.91–1.20	1.43	1.10–1.90	No	Various natural and man-made sources
Cryptosporidium (Units)	2019	Surface water treatment=TT	HPC=NA; Others = (0)	ND[1]	ND[1]	0.0116	ND–0.279	0.004[1]	ND–0.093[1]	ND	ND	0.039	ND–0.093	No	Naturally present in the environment
Haloacetic Acids (ppb)	2020	60	NA	28.5	21.0–37.0	19.4	18.0–21.0	22.8	16.0–35.0	32.1	18.0–50.0	25.0	20.0–30.0	No	By-product of drinking water disinfection
TTHMs [Total Trihalomethanes] (ppb)	2020	80	NA	52.8	34.0–64.0	45.4	26.0–57.0	44.0	26.0–64.0	31.3	12.0–47.0	45.5	20.0–61.0	No	By-product of drinking water disinfection
Turbidity[2] (NTU)	2020	TT	NA	0.028 Average	0.02–0.14	0.023 Average	0.01–0.16	0.028 Average	0.02–0.13	0.026 Average	0.02–0.11	0.020 Average	0.02–0.13	No	Soil runoff
Turbidity (lowest monthly percent of samples meeting limit)	2020	TT = 95% of samples meet the limit	NA	100	NA	100	NA	100	NA	100	NA	100	NA	No	Soil runoff

Tap water samples were collected for lead and copper analyses from sample sites throughout the community

				Loma Rica		North Auburn		Elizabeth George		Lake Wildwood		Lake of the Pines			
SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED	AL	PHG (MCLG)	AMOUNT DETECTED (90TH %ILE)	SITES ABOVE AL/ TOTAL SITES	AMOUNT DETECTED (90TH %ILE)	SITES ABOVE AL/ TOTAL SITES	AMOUNT DETECTED (90TH %ILE)	SITES ABOVE AL/ TOTAL SITES	AMOUNT DETECTED (90TH %ILE)	SITES ABOVE AL/ TOTAL SITES	AMOUNT DETECTED (90TH %ILE)	SITES ABOVE AL/ TOTAL SITES	VIOLATION	TYPICAL SOURCE
Copper (ppm)	2020	1.3	0.3	ND[3]	0/31[3]	ND	0/20	ND[3]	0/41[3]	ND	0/20	ND	0/20	No	Internal corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives
Lead (ppb)	2020	15	0.2	ND[3]	0/31[3]	ND	0/20	ND[3]	0/41[3]	ND	0/20	ND	0/20	No	Internal corrosion of household water plumbing systems; discharges from industrial manufacturers; erosion of natural deposits

SECONDARY SUBSTANCES

SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED	SMCL	PHG (MCLG)	Loma Rica AMOUNT DETECTED	Loma Rica RANGE LOW-HIGH	North Auburn AMOUNT DETECTED	North Auburn RANGE LOW-HIGH	Elizabeth George AMOUNT DETECTED	Elizabeth George RANGE LOW-HIGH	Lake Wildwood AMOUNT DETECTED	Lake Wildwood RANGE LOW-HIGH	Lake of the Pines AMOUNT DETECTED	Lake of the Pines RANGE LOW-HIGH	VIOLATION	TYPICAL SOURCE
Aluminum (ppb)	2020	200	NS	67	NA	ND	NA	79	NA	ND	NA	75	NA	No	Erosion of natural deposits; residual from some surface water treatment processes
Chloride (ppm)	2020	500	NS	2.4	NA	3.6	NA	2.9	NA	3.8	NA	4.4	NA	No	Runoff/leaching from natural deposits; seawater influence
Manganese (ppb)	2020	50	NS	ND	ND	11	NA	ND	NA	ND	NA	ND	NA	No	Leaching from natural deposits
Specific Conductance (µS/cm)	2020	1,600	NS	65	NA	66	NA	66	NA	77	NA	79	NA	No	Substances that form ions when in water; seawater influence
Sulfate (ppm)	2020	500	NS	9.3	NA	11	NA	9.3	NA	11	NA	10	NA	No	Runoff/leaching from natural deposits; industrial wastes
Total Dissolved Solids (ppm)	2020	1,000	NS	45	NA	50	NA	45	NA	53	NA	52	NA	No	Runoff/leaching from natural deposits

OTHER UNREGULATED SUBSTANCES

SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED	Loma Rica AMOUNT DETECTED	Loma Rica RANGE LOW-HIGH	North Auburn AMOUNT DETECTED	North Auburn RANGE LOW-HIGH	Elizabeth George AMOUNT DETECTED	Elizabeth George RANGE LOW-HIGH	Lake Wildwood AMOUNT DETECTED	Lake Wildwood RANGE LOW-HIGH	Lake of the Pines AMOUNT DETECTED	Lake of the Pines RANGE LOW-HIGH
Alkalinity (ppm)	2020	17	NA	15	NA	14	NA	16	NA	17	NA
Calcium (ppm)	2020	4.0	NA	3.7	NA	4.2	NA	3.6	NA	3.9	NA
Hardness, Total [as CaCO3] (ppm)	2020	12	NA	13	NA	13	NA	13	NA	14	NA
pH (Units)	2020	7.60	NA	7.94	NA	7.70	NA	7.62	NA	7.94	NA
Sodium (ppm)	2020	7.6	NA	11	NA	8.1	NA	10	NA	10	NA

[1] Sampled in 2018.
[2] Turbidity is a measure of the cloudiness of the water. We monitor it because it is a good indicator of the effectiveness of our filtration system.
[3] Sampled in 2019.

Definitions

90th %ile: The levels reported for lead and copper represent the 90th percentile of the total number of sites tested. The 90th percentile is equal to or greater than 90% of our lead and copper detections.

AL (Regulatory Action Level): The concentration of a contaminant which, if exceeded, triggers treatment or other requirements that a water system must follow.

MCL (Maximum Contaminant Level): The highest level of a contaminant that is allowed in drinking water. Primary MCLs are set as close to the PHGs (or MCLGs) as is economically and technologically feasible. Secondary MCLs (SMCLs) are set to protect the odor, taste and appearance of drinking water.

MCLG (Maximum Contaminant Level Goal): The level of a contaminant in drinking water below which there is no known or expected risk to health. MCLGs are set by the U.S. EPA.

MRDL (Maximum Residual Disinfectant Level): The highest level of a disinfectant allowed in drinking water. There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants.

MRDLG (Maximum Residual Disinfectant Level Goal): The level of a drinking water disinfectant below which there is no known or expected risk to health. MRDLGs do not reflect the benefits of the use of disinfectants to control microbial contaminants.

NA: Not applicable.

ND (Not detected): Indicates that the substance was not found by laboratory analysis.

NS: No standard.

NTU (Nephelometric Turbidity Units): Measurement of the clarity, or turbidity, of water. Turbidity in excess of 5 NTU is just noticeable to the average person.

PDWS (Primary Drinking Water Standard): MCLs and MRDLs for contaminants that affect health along with their monitoring and reporting requirements, and water treatment requirements.

PHG (Public Health Goal): The level of a contaminant in drinking water below which there is no known or expected risk to health. PHGs are set by the California EPA.

ppb (parts per billion): One part substance per billion parts water (or micrograms per liter).

ppm (parts per million): One part substance per million parts water (or milligrams per liter).

TT (Treatment Technique): A required process intended to reduce the level of a contaminant in drinking water.

µS/cm (microsiemens per centimeter): A unit expressing the amount of electrical conductivity of a solution.