

CITY OF NORTH LAS VEGAS WATER TEST RESULTS

UNDERSTANDING TEST RESULTS:

This report contains results of water quality monitoring performed in 2010. The EPA sets national standards for tap water to protect public health. The Safe Drinking Water Act requires water agencies to meet these health-based water standards and send customers an annual water quality report.

The City's drinking water meets or surpasses all state and federal Safe Drinking Water Act standards. The following are a few additional facts to assist in reading this report:

- Read the table on pages 3-4 from left to right to learn which contaminants were found in the City's water, how they are measured, their detected quantities and how those findings compare to state and federal limits. You'll also see contaminants' possible sources.
- The EPA requires water agencies to monitor for approximately 90 (primary) regulated contaminants. Federal standards usually measure contaminant levels in extremely tiny quantities such as parts per million or parts per billion. Even small concentrations of certain constituents can be a health concern. That's why many regulatory standards are set at very low levels.
- This report shows results for the regulated contaminants detected in the City of North Las Vegas' water supply. If a contaminant was not detected, it is not reported.
- EPA requirements for monitoring vary. The City monitors for each contaminant at required sites (treatment facilities, distribution system and/or groundwater wells) and reports those results to the Nevada Division of Environmental Protection (NDEP).

SNWA INFORMATION:

The Southern Nevada Water Authority: Meeting the Needs of the Region's Water Agencies. The agency responsible for drawing nearly all municipal water from Lake Mead, treating it to drinking-water standards and delivering it to the distribution systems of local water agencies. The City of North Las Vegas is a member of the Southern Nevada Water Authority. The SNWA is also responsible for long-term water planning, which includes developing new water sources and managing conservation efforts. Each SNWA member agency is responsible for enforcing watering restrictions within its service area. To learn more, visit www.snwa.com.

DEFINITIONS:

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

Disinfection by-product (DBP): A substance created by the chemicals or processes used to destroy potentially harmful microorganisms.

Maximum Contaminant Level (MCL): The highest level of a contaminant that is allowed in drinking water. MCLs are set as close to the MCL Goals as feasible using the best available treatment technology.

Maximum Contaminant Level Goal (MCLG): The level of a contaminant in drinking water below which there is no known or expected risk to health. MCLGs allow for a margin of safety.

Maximum Residual Disinfectant Level (MRDL): 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.

Maximum Residual Disinfectant Level Goal (MRDLG): 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 contamination.

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

N/A: Not applicable

N/D: Not detected. Does not equate to zero, but refers to an amount below analytical reporting limits.

Nephelometric Turbidity Unit (NTU): A measurement of water's clarity.

Part per billion (ppb): A unit used to describe the levels of detected contaminants. Equivalent to 1 cent in \$10 million.

Part per million (ppm): A unit used to describe the levels of detected contaminants. Equivalent to 1 cent in \$10,000.

Picocuries per liter (pCi/L): A measure of the radioactivity in water. Low levels of radiation occur naturally in many water systems, including the Colorado River.

Running annual average: Based on the monitoring requirements, the average of 12 consecutive monthly averages or the average of four consecutive quarters.

Turbidity: A measure of water clarity, which serves as an indicator of the treatment facility's performance.



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BE WATER SMART:

The City of North Las Vegas Utilities Department promotes "Water Smart" Programs to encourage water conservation. In this dry desert environment, water is the most precious resource. Lake Mead is the main drinking water source for the Las Vegas Valley and during the last 10 years, the surface elevation has decreased by more than 120 feet, which has reduced the storage capacity of Lake Mead more than 50%. Together we can learn to "Be Water Smart" and work to sustain our drinking water sources for the future. For information on water saving tips, visit the City of North Las Vegas Utility Department's Web site at: www.cityofnorthlasvegas.com/Departments/Utilities/Utilities.shtm



MAYOR & COUNCIL

Pictured from left to right: Councilwoman Anita G. Wood, Councilman Robert L. Eliason, Mayor Shari L. Buck, Councilman-Mayor Pro Tempore William E. Robinson, Councilman Richard J. Cherchio.



ACTING
CITY MANAGER
Maryann I. Ustick

CONTACTS:

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Water Quality Issues:
(702) 633-1484

Water Customer Service:
(702) 633-1484

Espanol
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EPA's Safe Drinking Water
Hotline (800) 426-4791



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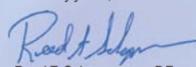
WATER QUALITY REPORT 2011

DEAR VALUED WATER CUSTOMER

The 2011 Water Quality Report has been prepared and distributed to City of North Las Vegas customers in accordance with federal and state regulations of the Safe Drinking Act. I encourage you to take the time to become familiar with the information and know the facts:

"WATER DELIVERED BY THE CITY OF NORTH LAS VEGAS MEETS OR SURPASSES ALL STATE OF NEVADA AND FEDERAL DRINKING WATER STANDARDS."

The City of North Las Vegas' priority is to deliver our customers safe and reliable drinking water with quality customer service. The City of North Las Vegas Utility employees work hard every day to ensure the water provided to our community meets the regulatory standards and is delivered with good water pressure for your use. We take pride in keeping you informed about the quality of our water and the service we provide.

Sincerely yours,

 Reed T. Schepmann, P.E.
 Acting Director of Utilities



WATER SOURCE:

Clean water begins at the source: More than 90 percent of the water supplied to North Las Vegas Customers comes from Lake Mead, and virtually all of the water in Lake Mead originates as snowmelt in the Rocky Mountains that flows down the Colorado River.

The remainder of the water supplied to customers, about four percent, comes from wells that tap a deep groundwater aquifer beneath the valley. Groundwater is used primarily between May 1 and October 1 annually to meet peak water demands in the summer months. During these months, those customers who live in the northwest part of the City, have the potential to receive a blend of treated Lake Mead water and groundwater. Groundwater in the Las Vegas Valley aquifer is naturally recharged from precipitation in the Spring Mountains and the Sheep Mountain Range.

SOURCE WATER ASSESSMENT:

The Federal Safe Drinking Water Act was amended in 1996 and requires states to develop and implement source water assessment programs, which analyze existing and potential threats to the quality of public drinking water throughout the service area. The purpose of Source Water Protection is to help prevent contaminants from entering public water sources. A summary of the City of North Las Vegas' susceptibility to potential sources of contamination was initially provided to the State of Nevada in 2003.

Detailed information pertaining to the findings of the source water assessment is available for viewing in person Monday through Thursday, by appointment at the City of North Las Vegas Utility Department Office located at 2829 Fort Sumter Drive, North Las Vegas. Please call (702) 633-1275 for an appointment. Additional information about the Nevada Source Water Assessment Program may be found at www.ndep.nv.gov/bsdw.

CONTAMINANTS THAT MAY BE PRESENT IN SOURCE (UNTREATED) WATER INCLUDE:

- Microbial contaminants, such as viruses and bacteria, may come from sewage treatment plants, septic systems, agricultural livestock operations and wildlife.
- Inorganic contaminants, such as salts and metals, can be naturally-occurring or result from urban storm water runoff, industrial or domestic wastewater discharges, oil and gas production, mining or farming.
- Pesticides and herbicides may come from a variety of sources such as storm water run-off, agriculture, and residential users.

- Organic contaminants, including synthetic and volatile organic chemicals, which are by-products of industrial processes and petroleum production, may also come from gas stations, urban storm water run-off, and septic systems.

To ensure tap-water safety, the EPA prescribes regulations that limit the amount of certain contaminants in water provided by public water systems. Food and Drug Administration regulations establish limits for contaminants in bottled water, which must provide similar protection for public health. For more information on bottled-water quality, call the International Bottled Water Association at (800) 928-3711.

ABOVE & BEYOND THE SAFE DRINKING WATER ACT:

While the EPA requires water agencies to monitor for approximately 90 regulated contaminants, the City goes above and beyond to monitor for about 30 additional, unregulated contaminants. One unregulated contaminant that is closely monitored is Cryptosporidium.

This naturally occurring organism found in many U.S. source waters can cause gastrointestinal distress. The EPA now requires larger water systems that treat surface water to assure removal of Cryptosporidium. The Southern Nevada Water System monitors and tests for Cryptosporidium in both its source and treated water supplies. Ozonation, used at both our regional water treatment facilities, is among the most effective processes at destroying microorganisms such as Cryptosporidium. The Southern Nevada Water Authority's Microbiology Laboratory is among the few municipal facilities certified by the EPA for Cryptosporidium and Giardia detection.

CITY OF NORTH LAS VEGAS WATER TEST RESULTS

City of North Las Vegas
2010 Water Quality Monitoring Data

REGULATED CONTAMINANTS	UNIT	MCL (EPA Limit)	SDWA (EPA Goal)	NORTH LAS VEGAS DISTRIBUTION SYSTEM (1)			NORTH LAS VEGAS GROUNDWATER (WELLS) (2)		ALFRED MERRITT SMITH WATER TREATMENT FACILITY (3)			RIVER MOUNTAINS WATER TREATMENT FACILITY (4)			POSSIBLE SOURCES OF CONTAMINATION	
				MINIMUM	MAXIMUM	AVERAGE	MINIMUM	MAXIMUM	MINIMUM	MAXIMUM	AVERAGE	MINIMUM	MAXIMUM	AVERAGE		
Alpha Particles	pCi/L	15	0	Entry Point Monitoring Only			N/D	6.3 (2)	N/D	N/D	N/D	N/D	N/D	Erosion of natural deposits of certain minerals that are radioactive and may emit a form of radiation known as alpha radiation		
Arsenic	ppb	10	0	Entry Point Monitoring Only			1.5	2.2 (2)	1.3	2.1	1.8	1.7	2.2	1.9	Erosion of natural deposits	
Barium	ppm	2	2	Entry Point Monitoring Only			0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	Erosion of natural deposits; discharge from metal refineries; discharge of drilling wastes	
Beta Particles and Photon Emitters	pCi/L	50 (3)	0	Entry Point Monitoring Only			N/D	N/D	4.4	4.4	4.4	4.7	4.7	4.7	Decay of natural and man-made deposits of certain minerals that are radioactive and may emit a form of radiation known as photons and beta radiation	
Bromate	ppb	10	0	Entry Point Monitoring Only			N/A		1.4	8.4	5.0 (4)	1.4	12 (5)	3.7 (4)	By-product of drinking water disinfection with ozone	
Copper (6)	ppm	1.3 (7)	1.3	0.03	0.7	0.63 (90th% value)	Distribution System Monitoring Only									Corrosion of household plumbing systems; erosion of natural deposits
Fluoride	ppm	4.0	4.0	0.7	0.8	0.7	0.2	0.3 (2)	0.4	0.8	0.7	0.7	0.8	0.8	Erosion of natural deposits; water additive (8)	
Free Chlorine Residual	ppm	4.0 (9)	4.0 (MRDL)	N/D	2.6	0.9 (4)	Distribution System Monitoring Only									Water additive used to control microbes
Haloacetic Acids				Distribution System Monitoring Only									By-product of drinking water disinfection			
Stage 1 DBP Rule (10)	ppb	60	N/A (11)	14	30	24 (4)	Distribution System Monitoring Only									Corrosion of household plumbing systems; erosion of natural deposits
Stage 2 DBP Rule (IDSE) (10)	ppb	N/A	N/A	14	21	18	Distribution System Monitoring Only									Erosion of natural deposits
Lead (6)	ppb	15 (7)	0	N/D	3.2	N/D (90th% value)	Distribution System Monitoring Only									Corrosion of household plumbing systems; erosion of natural deposits
Mercury	ppb	2	2	Entry Point Monitoring Only			N/D	N/D	N/D	N/D	N/D	N/D	0.3	N/D	Erosion of natural deposits; discharge from refineries and factories; runoff from landfills; run-off from cropland	
Nitrate (as Nitrogen)	ppm	10	10	Entry Point Monitoring Only			0.4	2.9	0.5	0.8	0.6	0.4	0.8	0.5	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits	
Radium 226 and Radium 228 (combined)	pCi/L	5	0	Entry Point Monitoring Only			N/D	0.6	N/D	N/D	N/D	N/D	N/D	N/D	Erosion of natural deposits	
Selenium	ppb	50	50	Entry Point Monitoring Only			N/D	2.1 (2)	1.9	2.2	2.0	1.8	2.1	2.0	Erosion of natural deposits; discharge from mines; discharge from petroleum refineries	
Total Coliforms	percent positive per month	5%	0	0%	0.5%	0.2%	Distribution System Monitoring Only									Naturally present in the environment
Total Trihalomethanes				Distribution System Monitoring Only									By-product of drinking water disinfection			
Stage 1 DBP Rule (10)	ppb	80	N/A (11)	44	76	58 (4)	Distribution System Monitoring Only									Erosion of natural deposits
Stage 2 DBP Rule (IDSE) (10)	ppb	N/A	N/A	37	64	50	Distribution System Monitoring Only									Erosion of natural deposits
Turbidity	NTU	95% of the samples < 0.3 NTU (12)	N/A	Treatment Facility Monitoring Only			Treatment Facility Monitoring Only			100% of the samples were below 0.3 NTU. The maximum NTU was 0.119 on August 28, 2010.			100% of the samples were below 0.3 NTU. The maximum NTU was 0.079 on February 8, 2010.			Soil run-off
Uranium	ppb	30	0	Entry Point Monitoring Only			1.4	2.3 (2)	4.5	4.5	4.5	4.2	4.2	4.2	Erosion of natural deposits	

FOOTNOTES:

(1) Some Safe Drinking Water Act (SDWA) regulations require monitoring from the distribution system, while other SDWA regulations require monitoring at the entry points to the distribution system. (Alfred Merritt Smith WTF, River Mountains WTF, and North Las Vegas Wells) (2) Data from 2009. (3) The actual MCL for beta particles is 4 mrem/year. The U.S. Environmental Protection Agency (USEPA) considers 50 pCi/L to be the level of concern for beta particles. (4) This value is the highest running annual average reported in 2010. Reports are filed quarterly. (5) Maximum levels equal to or greater than the MCL are allowable as long as the running annual average does not exceed the MCL. Some people who drink water containing bromate in excess of the MCL over many years may have an

increased risk of cancer. (6) Samples are from the North Las Vegas customers' taps. Annual monitoring not required, data is from 2009. (7) Lead and copper are regulated by a Treatment Technique (TT) that requires systems to control the corrosiveness of their water. If more than 10% of tap-water samples exceed the action level, water systems must take additional steps. For copper the action level is 1.3 ppm, and for lead it is 15 ppb. (8) By state law the Southern Nevada Water Authority (SNWA) is required to fluoridate the municipal water supply. This law is not applicable to groundwater. (9) Chlorine is regulated by MRDL, with the goal stated as a MRDLG. (10) The Stage 1 Disinfectants and Disinfection By-products (DBP) Rule regulates current data collection and monitoring for Haloacetic Acids

and Total Trihalomethanes in the distribution system. The Stage 2 DBP Rule was finalized on January 4, 2006 and collects Initial Distribution System Evaluation (IDSE) data designed to assist in selection of new, future sample locations for DBP testing. Stage 2 data is from 2008. (11) No collective MCLG but there are MCLGs for some of the individual contaminants. Haloacetic Acids: dichloroacetic acid (0), trichloroacetic acid (300 ppb). Trihalomethanes: bromochloromethane (0), bromoform (0), dibromochloromethane (60 ppb). (12) Turbidity is regulated by a Treatment Technique (TT) requirement - 95% of all samples taken after filtration each month must be less than 0.3 NTU. Maximum turbidity cannot exceed 1.0 NTU.*