

ANNUAL WATER QUALITY REPORT

Reporting Year 2025

Presented By



Town of Valdeese

PWS ID#: NC0112010



Our Commitment

We are pleased to present to you this year's annual water quality report. This report is a snapshot of last year's water quality covering all testing performed between January 1 and December 31, 2025. Included are details about your source of water, what it contains, and how it compares to standards set by regulatory agencies. Our constant goal is to provide you with a safe and dependable supply of drinking water. We want you to understand the efforts we make to continually improve the water treatment process and protect our water resources. We are committed to ensuring the quality of your water and providing you with this information because informed customers are our best allies.

Where Does My Water Come From?

The surface water that is used by the Town of Valdese Water Treatment Plant is taken right out of Lake Rhodhiss, which is part of the Catawba River system.

Disinfection By-Products Explained

Disinfection by-products, commonly called DBPs, form when disinfectants such as chlorine react with naturally occurring organic matter in water. Two of the most commonly monitored DBPs are total trihalomethanes (TTHMs) and haloacetic acids (HAA5). While disinfectants play a vital role in protecting public health by killing harmful bacteria and viruses, these reactions can produce small amounts of DBPs. Long-term exposure to elevated levels of DBPs has been associated with increased health risks, which is why strict federal standards regulate these substances.

We carefully balance the need for effective disinfection with the control of DBP formation. This includes optimizing treatment processes, managing natural organic matter, maintaining proper disinfectant levels, and adjusting system operations seasonally. Customers can help reduce DBP exposure at home by allowing tap water to run briefly before use, using certified carbon filters, and refrigerating drinking water to allow some DBPs to dissipate.

Disinfection remains one of the most important public health achievements in modern history. Water utilities continuously work to ensure that water is both microbiologically safe and compliant with DBP regulations.

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 can be particularly at risk from infections. These people should seek advice about drinking water from their health-care providers. U.S. Environmental Protection Agency (U.S. EPA)/Centers for Disease Control and Prevention (CDC) guidelines on appropriate means to lessen the risk of infection by *Cryptosporidium* and other microbial contaminants are available from the Safe Drinking Water Hotline (800-426-4791) or epa.gov/safewater.

Source Water Assessment

The North Carolina Department of Environmental Quality (DEQ), Public Water Supply (PWS) Section, Source Water Assessment Program (SWAP) conducted assessments for all drinking water sources across North Carolina. The purpose of the assessments was to determine the susceptibility of each drinking water source (well or surface water intake) to potential contaminant sources (PCSs). The results of the assessment are available in SWAP Assessment Reports that include maps, background information, and a relative susceptibility rating of higher, moderate, or lower. It is important to understand that a higher susceptibility rating does not imply poor water quality, only the system's potential to become contaminated by PCSs in the assessment area.

The relative susceptibility rating of each source for the Town of Valdese was determined by combining the contaminant rating (number and location of PCSs within the assessment area) and the inherent vulnerability rating (i.e., characteristics or existing conditions of the well or watershed and its delineated assessment area). The assessment findings are summarized in the table below:

SUSCEPTIBILITY OF SOURCES TO POTENTIAL CONTAMINANT SOURCES		
SOURCE NAME	SUSCEPTIBILITY RATING	SWAP REPORT DATE
Lake Rhodhiss	Higher	September 9, 2020

The complete SWAP Assessment Report for the Town of Valdese may be viewed at ncwater.org/?page=600. Note that because SWAP results and reports are periodically updated by the PWS Section, the results available on this website may differ from the results that were available at the time this Consumer Confidence Report was prepared. If you are unable to access your SWAP report online, you may mail a written request for a printed copy to: Source Water Assessment Program – Report Request, 1634 Mail Service Center, Raleigh, NC 27699-1634, or email requests to swap@deq.nc.gov. Please indicate your system name and number, and provide your name, mailing address, and phone number. If you have any questions about the SWAP report, please contact the Source Water Assessment staff at (919) 707-9098.

QUESTIONS? For more information about this report, or for any questions relating to your drinking water, please call Eric Wilson, Water Treatment Plant Superintendent, at (828) 874-6788.

What Causes the Pink Stain on Bathroom Fixtures?

The reddish-pink color frequently noted in bathrooms on shower stalls, tubs, tile, toilets, sinks, and toothbrush holders and on pets' water bowls is caused by the growth of the bacterium *Serratia marcescens*. *Serratia* is commonly isolated from soil, water, plants, insects, and vertebrates (including humans). The bacteria can be introduced into the house through any of these sources. The bathroom provides a perfect environment (moist and warm) for bacteria to thrive.

The best solution to this problem is to clean and dry these surfaces to keep them free from bacteria. Chlorine-based compounds work best, but keep in mind that abrasive cleaners may scratch fixtures, making them more susceptible to bacterial growth. Chlorine bleach can be used periodically to disinfect the toilet and help eliminate the occurrence of the pink residue. Keeping bathtubs and sinks wiped down using a solution that contains chlorine will also help to minimize its occurrence. *Serratia* will not survive in chlorinated drinking water.

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. Contaminants that may be present in source water include:

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

Inorganic Contaminants, such as salts and metals, which can occur naturally in the soil or groundwater or may result from urban stormwater runoff, industrial or domestic wastewater discharges, oil and gas production, mining, or farming.

Pesticides and Herbicides, which may come from a variety of sources such as agriculture, urban stormwater runoff, and residential uses.

Organic Chemical Contaminants, including synthetic and volatile organic chemicals, which are by-products of industrial processes and petroleum production and can also come from gas stations, urban stormwater runoff, and septic systems.

Radioactive Contaminants, which can occur naturally or be the result of oil and gas production and mining activities.

To ensure that tap water is safe to drink, the U.S. 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 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 mean that water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the Safe Drinking Water Hotline (800-426-4791) or visiting epa.gov/safewater.

Think Before You Flush!

Flushing unused or expired medicines can be harmful to your drinking water. Properly disposing of unused or expired medication helps protect you and the environment. Keep medications out of our waterways by disposing responsibly. To find a convenient drop-off location near you, please visit bit.ly/3IeRyXy.

Community Participation

You are invited to participate in our public forum and voice your concerns about your drinking water. We meet the first Monday of every month at Valdese Town Hall, 105 Massel Avenue Southwest.

BY THE NUMBERS



82

The average number of gallons of water an American uses per day.



27%

The percent of household water use attributable to toilets.



700

The average number of gallons that a household can save each year with water-efficient fixtures.



50-100

The typical design lifespan of underground drinking water pipes, in years.



<1%

The percent of Earth's water that is readily available as fresh drinking water.

Count on Us

Delivering high-quality drinking water to our customers involves far more than just pushing water through pipes. Water treatment is a complex, time-consuming process. Because tap water is highly regulated by state and federal laws, water treatment plant and system operators must be licensed and are required to commit to long-term, on-the-job training before becoming fully qualified. Our licensed water professionals have a basic understanding of a wide range of subjects, including mathematics, biology, chemistry, and physics. Some of the tasks they complete on a regular basis include:

- Operating and maintaining equipment to purify and clarify water.
- Monitoring and inspecting machinery, meters, gauges, and operating conditions.
- Conducting tests and inspections on water and evaluating the results.
- Maintaining optimal water chemistry.
- Applying data to formulas that determine treatment requirements, flow levels, and concentration levels.
- Documenting and reporting test results and system operations to regulatory agencies.
- Serving our community through customer support, education, and outreach.

So the next time you turn on your faucet, think of the skilled professionals who stand behind each drop.

Protecting Your Water

Bacteria are a natural and important part of our world. There are around 40 trillion bacteria living in each of us; without them, we would not be able to live healthy lives. Coliform bacteria are common in the environment and generally not harmful themselves. The presence of this bacterial form in drinking water is a concern, however, because it indicates that the water may be contaminated with other organisms that can cause disease.

In 2016 the U.S. EPA passed a regulation called the Revised Total Coliform Rule, which requires water systems to take additional steps to ensure the integrity of the drinking water distribution system by monitoring for the presence of bacteria like total coliform and *E. coli*. The rule requires more stringent standards than the previous regulation, and it requires water systems that may be vulnerable to contamination to have procedures in place that will minimize the incidence of contamination. Water systems that exceed a specified frequency of total coliform occurrences are required to conduct an assessment and correct any problems quickly. The U.S. EPA anticipates greater public health protection under this regulation due to its more preventive approach to identifying and fixing problems that may affect public health.

Though we are fortunate in having the highest-quality drinking water, our goal is to eliminate all potential pathways of contamination into our distribution system, and this requirement helps us accomplish that goal.

Lead in Home Plumbing

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. Town of Valdese is responsible for providing high-quality drinking water and removing lead pipes but cannot control the variety of materials used in plumbing components in your home. You share the responsibility for protecting yourself and your family from the lead in your home plumbing. You can take responsibility by identifying and removing lead materials within your home plumbing and taking steps to reduce your family's risk. Before drinking tap water, flush your pipes for several minutes by running your tap, taking a shower, or doing laundry or a load of dishes. You can also use a filter certified by an American National Standards Institute-accredited certifier to reduce lead in drinking water. If you are concerned about lead and wish to have your water tested, contact Eric Wilson at the Town of Valdese at (828) 874-6788. Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available at epa.gov/safewater/lead.

To address lead in drinking water, public water systems were required to develop and maintain an inventory of service line materials by October 16, 2024. Developing an inventory and identifying the location of lead service lines (LSL) is the first step for beginning LSL replacement and protecting public health. The lead service inventory may be viewed at Town Hall, 102 Massel Avenue Southwest. Please contact us if you would like more information about the inventory or any lead sampling that has been done.

Q&A

Why can tap water have a taste?

Taste in drinking water is usually related to naturally occurring minerals, disinfectants, or seasonal changes in source water. While these characteristics may affect taste, they do not typically indicate a health risk.

Why is water sometimes called the “original energy drink”?

Water helps regulate body temperature, supports digestion, and keeps joints moving—without sugar, calories, or caffeine.

Can weather affect drinking water quality?

Heavy rain, drought, or seasonal changes can influence source water conditions. Water systems adjust treatment processes as needed to maintain water quality during changing environmental conditions.

Why is maintaining water infrastructure important?

Pipes, pumps, and treatment facilities are critical for delivering safe drinking water. Regular maintenance and upgrades help prevent leaks, breaks, and service disruptions.

What can customers do to help protect water quality?

Customers can help by reporting leaks, avoiding cross-connections, maintaining household plumbing, and staying informed through their annual water quality report.



Test Results

We routinely monitor for over 150 contaminants in your drinking water according to federal and state laws. The tables below list all the drinking water contaminants that we detected in the last round of sampling for each particular contaminant group. The presence of contaminants does not necessarily indicate that water poses a health risk. Unless otherwise noted, the data presented in these tables is from testing done from January 1 through December 31, 2025.

The U.S. EPA and the state allow us to monitor for certain contaminants less than once per year because the concentrations of these contaminants are not expected to vary significantly from year to year. Some of the data, though representative of the water quality, is more than a year old.

We participated in the fifth stage of the U.S. EPA's Unregulated Contaminant Monitoring Rule (UCMR5) program by performing additional tests on our drinking water. UCMR5 sampling benefits the environment and public health by providing the U.S. EPA with data on the occurrence of contaminants suspected to be in drinking water to determine if it needs to introduce new regulatory standards to improve drinking water quality. Unregulated contaminant monitoring data is available to the public, so please feel free to contact us if you are interested in obtaining that information. If you would like more information on the U.S. EPA's Unregulated Contaminant Monitoring Rule, please call the Safe Drinking Water Hotline at (800) 426-4791. **Please note that no UCMR 5 contaminants were detected in any of our monitoring samples.**

REGULATED SUBSTANCES							
SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED	MCL [MRDL]	MCLG [MRDLG]	AMOUNT DETECTED	RANGE LOW-HIGH	VIOLATION	TYPICAL SOURCE
Chlorine (ppm)	2025	4	4	1.29	0.22-1.29	No	Added to water for disinfection purposes
Haloacetic Acids [HAA5] (ppb)	2025	60	NA	36	20-58	No	By-product of drinking water disinfection
Fluoride (ppm)	2025	4	4	0.48	NA	No	Additive to support strong teeth; erosion of natural deposits
Total Organic Carbon [TOC] (Removal Ratio)	2025	TT ¹	NA	2.86	1.21-2.86	No	Naturally present in the environment
Total Trihalomethanes [TTHMs] (ppb)	2025	80 ²	NA	55	28-86	No	By-product of drinking water disinfection
Turbidity (NTU)	2025	TT	NA	0.48	NA	No	Soil runoff
Turbidity (Lowest monthly percent of samples meeting limit)	2025	TT = 95% of samples meet the limit	NA	0.999	NA	No	Soil runoff

LEAD & COPPER ³								
Tap water samples were collected for lead and copper analyses from sample sites throughout the community								
SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED	AL	MCLG [MRDLG]	AMOUNT DETECTED	RANGE LOW-HIGH	SITES ABOVE AL / TOTAL SITES TESTED	VIOLATION	TYPICAL SOURCE
Lead (ppb)	2025	15	0	<0.3	<0.3-0.7	0/30	No	Corrosion of household plumbing, erosion of natural deposits
Copper (ppm)	2025	1.3	1.3	0.08	<0.050-0.131	0/30	No	Corrosion of household plumbing

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

Herbicide: Any chemical(s) used to control undesirable vegetation.

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

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 allow for a margin of safety.

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.

Pesticide: Generally, any substance or mixture of substances intended for preventing, destroying, repelling, or mitigating any pest.

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).

SMCL (Secondary Maximum Contaminant Level): These standards are developed to protect aesthetic qualities of drinking water and are not health based.

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

MICROBIOLOGICAL SUBSTANCES

SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED	MCL [MRDL]	MCLG [MRDLG]	AMOUNT DETECTED	RANGE LOW-HIGH	VIOLATION	TYPICAL SOURCE
Total Coliform Bacteria (presence or absence)	2025	1 positive sample / month	0	0	NA	No	Naturally present in the environment
Fecal Coliform or <i>E. coli</i> (presence or absence)	2025	0	0	0	NA	No	Human and animal fecal waste

SECONDARY SUBSTANCES

SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED	SMCL	MCLG	AMOUNT DETECTED	RANGE LOW-HIGH	VIOLATION	TYPICAL SOURCE
Iron (ppm)	2025	0.3	0.3	0.04	NA	No	Corrosion of household plumbing
Fluoride (ppm)	2025	2	NA	0.48	NA	No	Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories
pH (units)	2025	6.5–8.5	NA	7.5	NA	No	Naturally occurring
Sulfate (ppm)	2025	250	NA	27.6	NA	No	Runoff/leaching from natural deposits; Industrial wastes

UNREGULATED ANALYTICAL RESULTS

SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED	AMOUNT DETECTED	RANGE LOW-HIGH	TYPICAL SOURCE
Alkalinity (ppm)	2025	16.5	NA	Erosion of natural minerals
pH (units)	2025	7.6	NA	Measure of how acidic or basic the water is (7.0 being neutral)
Temperature (Celsius)	2025	17.7	NA	N/A

¹The value reported under Amount Detected for TOC is the lowest ratio of percentage of TOC actually removed to the percentage of TOC required to be removed. A value of greater than 1 indicates that the water system is in compliance with TOC removal requirements. A value of less than 1 indicates a violation of the TOC removal requirements.

²Some people who drink water containing trihalomethanes in excess of the MCL over many years may experience problems with their liver, kidneys, or central nervous system and may have an increased risk of getting cancer.

³This table summarizes our most recent lead and copper tap sampling data. If you would like to review the complete lead tap sampling data, please email ewilson@valdesenc.gov.

