



**S N O W M A S S**  
**W A T E R & S A N I T A T I O N**  
D I S T R I C T

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D I S T R I C T

# 2015 DRINKING WATER QUALITY CONSUMER CONFIDENCE REPORT



Your Guide to SWSD's Drinking Water Quality

SWSD | 0177 Clubhouse Drive | Snowmass, Colorado 81615 | 970.923.2056

## Why You should read this Report!

*Esta es información importante. Si no la pueden leer, necesitan que alguien se la traduzca.*



Dear Valued Snowmass Water & Sanitation District Water Consumer,

This report presents important information on Snowmass Water and Sanitation District's (District) drinking water quality. It also discusses our local raw water supplies and our commitment and methods to turn these into drinking water you can trust, delivered to your tap daily. The District's mission is to provide high-quality water every day of the year. On behalf of the entire District staff, I truly look forward to serving you! Please contact me at 970.923.2056 for more information or with any questions on this report.

Sincerely,

Kit Hamby  
District Manager

## Our Continuing Commitment to You

The District's trained, licensed water professionals are committed to:

- High-quality drinking water meeting or exceeding all regulatory standards
- A modern, proactively maintained and reliable water system
- A forward-thinking approach anticipating future community needs and regulations

We know that our customers value their tap water. We appreciate the community support and investment critical to achieving our mission!



## Drinking Water Quality Report Highlights

This year's *Drinking Water Quality Consumer Confidence Report* shows:

- The District's drinking water quality and its monitoring program exceeded all state and federal regulatory standards in 2015
- District staff members conduct many routine tests beyond those reported herein to monitor and optimize water quality
- The District actively monitors the quality of its water supplies and collaborates with others to maintain and improve them
- The District's drinking water treatment systems employ multiple barriers to protect our water from disease-causing microorganisms and other contaminants
- The District is currently taking steps necessary to continue to deliver high-quality drinking water to your tap, well into the future
- Because no municipal or bottled drinking water is 100% "pure," vulnerable populations should pursue additional information on their drinking water



## District Water Supplies



The following table presents information on the raw water supplies the District uses to produce drinking water for its customers.

### District Raw Water Supply

Source	East Snowmass Creek	Snowmass Creek	West Fork Brush Creek	Ziegler Reservoir
Supply Type	Surface water	Surface water	Surface water	Surface water
Fraction of Total Supply	96%	2%	2%	N/A
Watershed Location	Nat'l Forest (NF) Wilderness	NF & Residential/Agri-cultural Lands	NF/Ski Resort Property	Limited local area around reservoir
Potential Contamination Sources*	To varying degrees for each water supply: Surface runoff from forest lands, especially if fire-impacted; runoff from road surfaces, and pasture lands			

\* Note: The Colorado Department of Public Health and Environment has provided the District with a Source Water Assessment Report (SWAR) listing these potential contamination sources for our supplies. You may obtain a SWAR copy and/or learn about local opportunities to help protect our water supplies by contacting Dean Wieser at the District 970.923.2056 or by visiting the following website:  
<https://www.colorado.gov/pacific/cdphe/source-water-assessment-and-protection-swap>

The SWAR provides a screening-level evaluation of potential contamination that could occur. It does not mean such contamination has occurred or will occur. Unlike some Western Colorado raw water supplies, the District's are very high in quality. In recent history, no significant contamination events in raw water supplies have been observed. The District uses the SWAR and other information to make decisions and take actions to minimize risks to our drinking water.



## Managing and Monitoring Our Water Supplies

Snowmass Water and Sanitation District is committed to effective management and monitoring of the District's raw water supplies. Three recent examples of this commitment are:



- East Snowmass Creek supplies the vast majority of the District's raw water. District staff has collaborated with other watershed stakeholders such as the Snowmass-Capitol Creek Caucus and the Aspen Skiing Company, to protect water supplies by dramatically reducing system leaks and increasing water storage.
- The District originally constructed Ziegler Reservoir to provide system reliability and emergency raw water storage; however it is also a critical tool in protecting minimum stream flows in Snowmass Creek year-round.
- The District has developed a municipal water efficiency plan (<http://www.swsd.org/conservation-plan>) and has taken initial implementation steps. The efficiency program will extend our valuable water resources and minimize the cost of future drinking water infrastructure improvements.



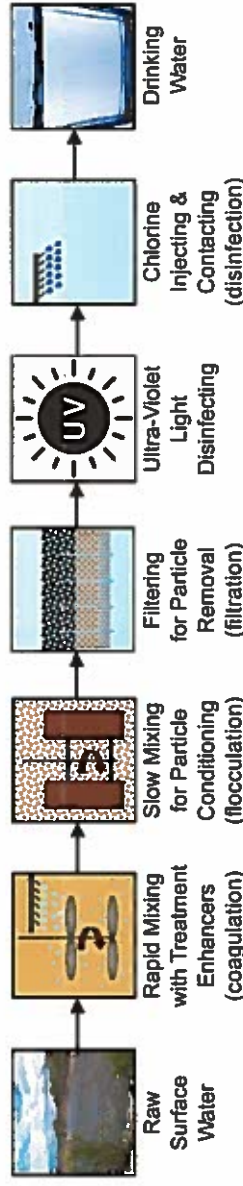
## Transforming Raw Water into Drinking Water



Raw water supplies for drinking water production (both tap water and bottled water) include rivers, lakes, streams, ponds, reservoirs, springs, and wells. As water travels over the land's surface 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 raw 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, which can be naturally occurring or result from urban stormwater 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 stormwater runoff, and residential uses
- Organic chemical contaminants, including synthetic and volatile organic chemicals, which are byproducts of industrial processes and petroleum production, and also may come from gas stations, urban stormwater runoff, and septic systems
- Radioactive contaminants, that can be naturally occurring or be the result of oil and gas production and mining activities

Turning raw water into drinking water requires several treatment and purification steps. To ensure that the finished drinking water product is safe to drink, the Colorado Department of Public Health and Environment sets regulations limiting the amount of certain contaminants in water provided by public water systems. The Food and Drug Administration regulates contaminant levels in bottled water that must provide the same protection for public health.



To produce quality, reliable, drinking water the District invests water customer fees in:

- **Treatment.** We employ time-tested treatment methods in combination with advanced technology (UV Disinfection) with multiple barriers to contaminant passage. We produce drinking water meeting all health-based water quality standards.
- **Training.** All of our treatment plant supervisors maintain "A"-level licenses, the highest attainable in the State.
- **Testing.** In 2015 we went beyond the minimum water quality monitoring required by law. Additional testing focused on building a better understanding of our water quality from source to tap. This will allow us to identify future improvements to make the water even safer and more appealing to our customers.
- **Maintenance.** We are dedicated to proactively maintaining the District's valuable water infrastructure. We have recently launched a state-of-the-art geographic information system (GIS) that allows us to more efficiently and effectively track and plan critical maintenance and repair activities. We survey all of our water system lines for leaks once a year.
- **Capital Improvements.** We make system improvements annually. We completed multiple projects in 2015, including a robust waterline replacement program aimed at upgrading the integrity of our infrastructure and reducing the incidence of costly waterline breaks and inconvenient service interruptions.



## Investing in Our Water Quality Future

High-quality and reliably delivered drinking water is critical to Snowmass economy and community vitality. The District is committed to long-term planning and investment to continuously improve tap water quality. We live this commitment by:

- Anticipating future water quality regulations and trends in the drinking water industry. We believe these trends warrant investing in state-of-the-art treatment processes
- Developing capital improvement programs and updating rate structures to ensure we have the capacity to rehabilitate or replace any aging infrastructure
- Conducting raw and treated water quality monitoring above what regulations require so we can detect and respond to any important changes
- Leading a community water efficiency program. Our website provides you with water efficiency tips. Improving water-use efficiency makes our water supply more reliable and allows staff to focus more on continuing to improve water quality



## Water Quality Testing Results

The District conducted all the water quality testing in 2015 required by Federal and State regulations. Indeed, the District conducted many more tests than regulations require. Testing revealed the District's drinking water quality exceeded all regulatory standards set to safeguard public health. The results tables on the next page present 2015 results and corresponding water quality standards for detected contaminants. These results show:

- The District met health-based water quality standards for all detected contaminants
- Measured levels of all detected contaminants were well below the standards
- The District currently adds fluoride (in the form of sodium fluorosilicate) to the potable water supply at a target level of 0.7 parts per million. This is the recommended level by the U.S. Center for Disease Control and the Colorado Department of Public Health and Environment. The District Board voted in 2015 to re-introduce fluoride in consideration of the recommendations of these public health agencies, the results of a public survey, and other factors.

## Helpful Drinking Water Quality Definitions

The following definitions will help you to better understand the water quality results presented in this year's report:

- **Action Level (AL)** - the level of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow
- **Maximum Contaminant Level (MCL)** - 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. The State of Colorado enforces these standards
- **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. These are non-enforceable benchmarks
- **Nephelometric Turbidity Unit (NTU)** - turbidity is a measure of the "cloudiness" of water due to the presence of light-reflecting particles. Turbidity in excess of 5 NTU is just noticeable to the average person
- **Parts per Billion (ppb)** - a unit of measure for the level (concentration) of a substance in water. One part per billion corresponds to one minute in 2,000 years
- **Parts per Million (ppm)** - a unit of measure of the level (concentration) of a substance in water. One part per million corresponds to one minute in two years
- **Running Annual Average (RAA)** - an average of monitoring results for the previous 12 calendar months.
- **Treatment Technique (TT)** - a treatment technique is a required process intended to reduce the level of a contaminant in drinking water

# Water Quality Testing Results

Results Measured at the Water Treatment Facility - Parameters Regulated with MCLs						
Detected Contaminant & Unit of Measure	Regulatory Standards		Measurements in SWSD Water		Standard Met? (high value ≤ MCL?)	Typical Source(s) of Contaminant
	MCL	MCLG	Highest Value	Value Range		
Fluoride, ppm	4	4	1.1 (0.7 average)	0.00 to 1.10	Yes	Erosion of natural deposits; water additive to promote dental health
Nitrate, ppm	10	10	0.18	N/A	Yes	Fertilizer runoff; septic tank leaching; discharge from sewage plants; erosion of natural deposits

Results Measured at the Water Treatment Facility - Parameters Regulated with TT Requirements					
Detected Contaminant	Treatment Technique (TT) Definition	Standard Set by the TT	Measured in SWSD Water	Standard Met?	Typical Source(s) of Contaminant
Turbidity	Filtration: percentage of filtered water turbidity measurements ≤ 0.3 NTU must be ≥ TT standard every month	95% (min.)	100%	Yes	Soil runoff

Results Measured in the Water Distribution System							
At Selected Monitoring Sites...							
Detected Contaminant & Unit of Measure	Regulatory Standards		Measurements in SWSD Water		Standard Met? (Highest RAA ≤ MCL?)	Typical Source(s) of Contaminant	
	MCL	MCLG	Highest RAA Value	Range of Values			
Total trihalomethanes, ppb	80	0	8.2	single sample	Yes	Byproduct of drinking water disinfection	
Haloacetic acids (HAA5), ppb	60	N/A	6.0	single sample	Yes	Byproduct of drinking water disinfection	
Chlorine	4	4	0.76	0.45 - 0.76	Yes	Water additive used to control microbes	
At Customer Taps...							
Detected Contaminant & Unit of Measure	Regulatory Standard: Action Level	Measurements in SWSD Water*		Standard Met? (90th pctle. no greater than AL?)	Typical Source(s) of Contaminant		
		90th Percentile Value	90th Percentile Value				
Copper, ppm	1.3	0.12	0.12	Yes	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives		
Lead, ppb	15	2.3	2.3	Yes	Corrosion of household plumbing systems; erosion of natural deposits		

\* Measurements taken during 2014, as required by the State

## A Message for Vulnerable Populations

All 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 the water poses a health risk.

The District recognizes that 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 of infections. These people should seek advice about drinking water from their health care providers.



For more information about contaminants and potential health effects, or to receive a copy of the U.S. Environmental Protection Agency (EPA) and the U.S. Centers for Disease Control (CDC) guidelines on appropriate means to lessen the risk of infection by Cryptosporidium and microbiological contaminants, call the EPA Safe Drinking Water Hotline at 800.426.4791 or visit [www.epa.gov/safewater](http://www.epa.gov/safewater).

## Lead and Drinking Water

Municipal drinking water is a unique product – it is the only life-sustaining resource reliably delivered by others to your home around the clock for your convenient use on demand. This requires special infrastructure – a valuable, extensive, and expensive piping network. While the plumbing industry has reduced the lead level in residential plumbing systems, it has not yet entirely eliminated it. Homes built prior to 1986 are more likely to have plumbing materials with greater lead levels, but newer homes are also at risk.

Infants and young children are typically more vulnerable to lead in drinking water than the general population. It is possible that lead levels at your home may be higher than other homes in the community primarily as a result of materials used in your home's plumbing. If you are concerned about elevated lead levels in your home's water, you may wish to:

- have your water tested for lead
- flush your tap for 30 seconds to 2 minutes before using your home's tap water
- contact Dean Wieser, water treatment plant supervisor, 970.923.2056 for additional guidance
- call EPA's Safe Drinking Water Hotline 800.426.4791 for more information

## How You Can Help Create Snowmass's Water Quality Future

There are multiple ways you can help create the District's water quality future:

- Attend board meetings when water issues are up for discussion and decision. These occur the third Tuesday of each month at 8:30 am at the District office.
- Support the District's investments in system improvements
- Use water wisely; consuming less when possible. The lower the demand for water is, the more effective the District's processes are.



Please contact Kit Hamby, District Manager at 970.923.2056 or [khamby@swsd.org](mailto:khamby@swsd.org) for more information on the contents of this report, the District's drinking water quality, or the above-noted participation opportunities. We would love to hear from you!