

ANNUAL WATER QUALITY REPORT

Reporting Year 2024



Presented By
City of Healdsburg

This report contains important information about the City's drinking water. Please contact the utility engineering manager at 401 Grove Street or (707) 431-3346 for assistance.

Este informe contiene información importante sobre el agua potable de la ciudad. Favor de comunicarse con el "utility engineering manager" en 401 Grove Street o llame a (707) 431-3346 para asistencia.

PWS ID#: CA4910005

Message from the Director

This report provides you with insights into the water provided by the City of Healdsburg in 2024. It includes information on the water sources, the quality of the water delivered, and the efforts we are making to comply with regulatory requirements. I am pleased to report that the City provided safe and reliable water for 2024 that was compliant with state and federal regulations.

With the rains over the past few years, it might be easy to forget that our water supply, while abundant at the moment, is a precious and finite resource. Some of the challenges ahead include preparing for future droughts, addressing contaminants of emerging concern such as per- and polyfluoroalkyl substances (PFAS) as well as known contaminants, and meeting ever-increasing regulatory requirements.

To take on these issues, the Healdsburg Water Department staff is moving forward with projects and programs to use water sourced from Lake Sonoma as much as possible. Our aquifer storage and recovery (ASR) well project will add groundwater as a source of supply and the aquifer as a storage medium. This project was funded under a Federal Emergency Management Agency (FEMA) Building Resilient Infrastructure and Communities (BRIC) grant. In April we were notified of FEMA's cancellation of the BRIC funding. We are once again seeking funding for the ASR wells, which would diversify our water supply portfolio.

Staff is in the process of testing for PFAS in the water supply, and so far, no actionable levels have been encountered for these contaminants. For known contaminants, we are building treatment for *Cryptosporidium* removal at the Dry Creek wells, and we will do the same for the Fitch wells next.

Our goal is to provide safe and reliable water in which you, the community, can have confidence into the future. That is what we have done, and that is what we will continue to do.

Sincerely,

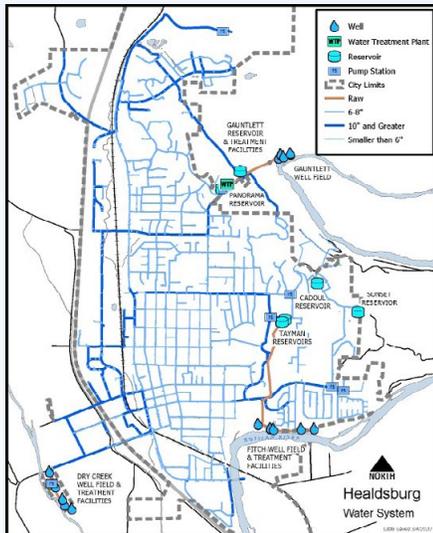
Patrick Fuss, Acting Utility Director

Where Does My Water Come From?

The City of Healdsburg's drinking water is sourced from three well fields: two located along the Russian River (approximately 80% of our water supply) and one located on Dry Creek (approximately 20% of our water supply). Our water supply from the Russian River relies on Lake Mendocino, and our water supply from Dry Creek relies on Lake Sonoma.

Before entering the water distribution system, the water is ultrafiltered to improve its quality and remove most contaminants and then chemically treated with orthophosphate (corrosion inhibition), fluoride (dental health), and chlorine (disinfection). The finished water is then stored at various locations throughout the City, ready to be delivered to our homes and businesses.

Because the wells are influenced by the water quality of both the Russian River and Dry Creek, it's very important for us to remain aware of the health of these watersheds and the impact we have on them. Water conservation in the community will also continue to be important as we work to develop a more resilient water supply and prepare for the next drought as well as strive to meet new state water conservation targets.

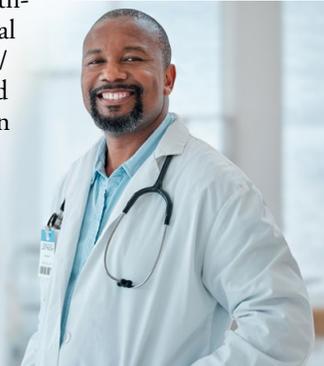


Community Participation

You are invited to participate in the City Council's public forum and voice your concerns about your drinking water. The council meets the first and third Monday of each month at 6:00 p.m. at City Hall, 401 Grove Street. You may also send comments directly to the Healdsburg City Council at citycouncil@healdsburg.gov.

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.



Smart Living Healdsburg



Converting your lawn to a climate-ready landscape can help conserve water in our dry summer months. New state regulations will limit the use of potable water for irrigating grass that does not serve recreational or community-gathering purposes on commercial properties. Resources to help with lawn conversions are available at www.SavingWaterPartnership.org.

Rebates and Incentive Programs

- Lawn conversion
- Clothes washers
- High-efficiency toilets and urinals
- Laundry-to-landscape graywater systems
- Irrigation controllers
- Free do-it-yourself (DIY) tool kits at the library

For more information, please visit www.SmartLivingHealdsburg.org.

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, 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 result from urban stormwater runoff, industrial or domestic wastewater discharges, oil and gas production, mining, or farming.

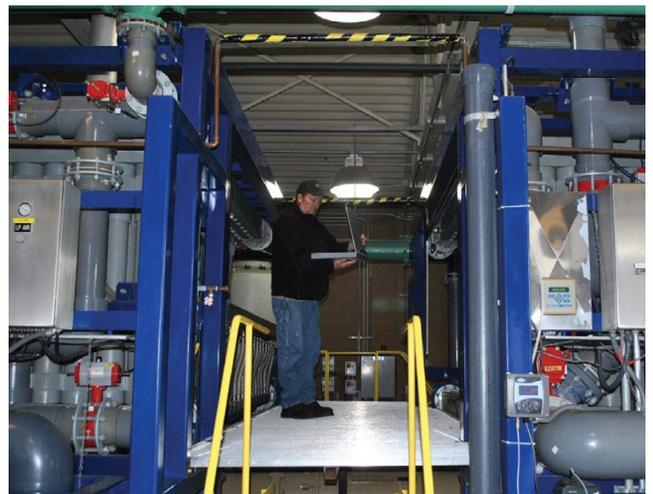
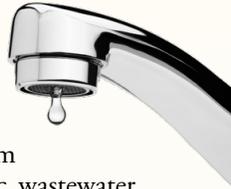
Pesticides and Herbicides that may come from a variety of sources such as agriculture, urban stormwater runoff, and residential uses.

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

Radioactive Contaminants that can be naturally occurring or the result of oil and gas production and mining activities.

To ensure that tap water is safe to drink, the U.S. EPA and the State Water Resources Control Board (SWRCB) prescribe regulations that limit the amount of certain contaminants in water provided by public water systems. 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. More information about contaminants and potential health effects can be obtained by calling the U.S. EPA Safe Drinking Water Hotline at (800) 426-4791.



Source Water Assessment

A source water assessment has been completed for the watersheds that contribute to the City's water supply: the Sonoma County Water Agency 2023 Watershed Sanitary Survey.

The purpose of the assessment is to determine the susceptibility of each drinking water source to potential contaminant sources (PCSs). The report includes background information and a relative vulnerability rating of higher, moderate, or lower. It is important to understand that a higher vulnerability rating does not imply poor water quality, only the system's potential to become contaminated within the assessment area. The vulnerability rating for the PCSs is summarized in the following table:

VULNERABILITY ASSESSMENT RANKING FOR EACH PCS IN STUDY AREA	
CONTAMINANT SOURCE	VULNERABILITY
Spills	High
Wineries	Low
Agriculture	Low/Medium
Mines	Low/Medium
Urban Runoff	Low
Wastewater	Medium
Recreation	Low
Leaking Underground Storage Tanks	Low
Fires	Medium/High

The Sonoma County Water Agency 2023 Watershed Sanitary Survey can be found at bit.ly/SonomaCountyWSS2023.



Water Supply Projects

The City is working on multiple projects to diversify our water supply and make us more resilient in future droughts and changes to water sources, such as the decommissioning of the Potter Valley Project. These projects include the following:

- The Dry Creek Well Field Restoration will increase the current pumping capacity, allowing the City to source more water from Dry Creek and Lake Sonoma rather than being largely reliant on the upper Russian River. Recent rate increases will fund the restoration, and water pumped from Dry Creek well field will be more reliable than the upper Russian River due to Lake Sonoma's multiyear storage. This project is slated for fiscal year 2028-29.
- ASR wells would allow the City to augment its surface water supplies with groundwater in a sustainable manner and increase water supply by approximately 60 million gallons per year. The City received FEMA funding for Phase 1 – Exploration Work and deferred funding for the completion of the ASR wells. However, in April 2025, the Department of Homeland Security, which oversees FEMA, cancelled the FEMA grant. Consequently, the City is seeking other sources of funding at this time.
- The Municipal Recycled Water Pipeline will provide recycled water to the City parks, golf course, cemetery, some public school facilities, and an in-town recycled water kiosk to offset demand for potable water by approximately 27 million gallons per year. This project was funded by a state grant for \$7.1 million and completed in 2025. The City has applied for another state grant to increase the recycled water distribution network.
- A Dry Creek Water Rights Amendment to allow increased year-round rights would improve winter water supplies and allow for maintenance of the well fields along the Russian River. The state is reviewing the City's proposed water rights amendment. If approved, the Dry Creek water treatment plant will need improved infrastructure to accommodate the change in flow. The timeline for the Dry Creek Water Rights Amendment is unclear at this time.
- The Sonoma Water Agency Purchased Water Agreement allows the City to purchase water from Sonoma Water, sourced from Lake Mendocino or Lake Sonoma, when City water rights are not available. The City is working to increase the limits on the volume of water to provide a source of water sufficient for the highest-use months, should supply from any of our existing water rights be diminished. A draft of the agreement is expected by October 2025.

These projects, along with water conservation and efficiency, will increase Healdsburg's water resilience. For more information, please visit healdsburg.gov/waterfaq.

Testing for *Cryptosporidium*

Cryptosporidium is a microbial pathogen found in surface water throughout the U.S. Although filtration removes *Cryptosporidium*, the most commonly used filtration methods cannot guarantee 100 percent removal. Current test methods do not allow us to determine if the organisms are dead or if they are capable of causing disease. Ingestion of *Cryptosporidium* may cause cryptosporidiosis, an abdominal infection. Symptoms of infection include nausea, diarrhea, and abdominal cramps. Most healthy individuals can overcome the disease within a few weeks; however, immunocompromised people, infants and small children, and the elderly are at greater risk of developing life-threatening illness. We encourage immunocompromised individuals to consult their doctor regarding appropriate precautions to take to avoid infection. *Cryptosporidium* must be ingested to cause disease, and it may be spread through means other than drinking water.

In 2018 staff conducted sampling of the wells for biological contaminants under the U.S. EPA's Fourth Unregulated Contaminant Monitoring Rule (UCMR4). UCMR4 required monitoring for biological-based contaminants such as cyanotoxins (blue-green algae), disinfection by-products, and intestinal parasites (*Giardia*, *Cryptosporidium*). The city's wells tested negative for most of the UCMR4 contaminants but positive for *Cryptosporidium* at less than 0.0075 oocyst (cryptosporidium egg) per liter, which is the minimum level requiring treatment.

After negotiation with the California Department of Water Quality, Division of Drinking Water, it was determined that the treatment to be provided would consist of filtration through a cartridge filter followed by disinfection. With this process, it is anticipated that levels of *Cryptosporidium* will be reduced by 99 percent to less than 0.000075 oocyst per liter!

The City engaged a consultant to design filter installations at the Dry Creek and Fitch well fields. The Gauntlett well field is already serviced by an ultrafiltration plant constructed in 2004. The filter installation design was completed in 2023. Due to tight funding constraints, bidding was conducted on only the Dry Creek site in 2024.

Work began on the Dry Creek Water Treatment Plant Upgrades – *Cryptosporidium* Treatment Project in January 2025 and is expected to be completed later this year. The facility will have a capacity of approximately 1,800 gallons per minute and filter water sourced from Dry Creek, which is supplied by Lake Sonoma. Installing the treatment at this location helps the City maximize the diversity of water sources and provide Healdsburg with reliable, high-quality water.

The *Cryptosporidium* treatment for the Fitch well field is planned for fiscal year 2027-28. Water from this well field is sourced from the Russian River, which is supplied by Lake Mendocino. Water from Russian River sources already has treatment from the Gauntlett well field ultrafiltration plant. Additionally, this water is supplied by Lake Mendocino, which is fed from the Potter Valley Project on Lake Pillsbury, which has dam decommissioning planned, creating uncertainty on the reliability of water supplied to the Russian River from Lake Mendocino.

Lead in Home Plumbing

Lead can cause serious health effects in people of all ages, especially pregnant people, infants (both formula-fed and breast-fed), and young children. Lead in drinking water is primarily from materials and parts used in service lines and in home plumbing. The City of Healdsburg is responsible for providing high-quality drinking water and removing lead pipes but cannot control the variety of materials used in the plumbing in your home. Because lead levels may vary over time, lead exposure is possible even when your tap sampling results do not detect lead at one point in time. You can help protect yourself and your family by identifying and removing lead materials within your home plumbing and taking steps to reduce your family's risk. Using a filter certified by an American National Standards Institute-accredited certifier to reduce lead is effective in reducing lead exposures. Follow the instructions provided with the filter to ensure it is used properly. Use only cold water for drinking, cooking, and making baby formula. Boiling does not remove lead from water.

Before using tap water for drinking, cooking, or making baby formula, flush your pipes for several minutes. You can do this by running your tap, taking a shower, or doing laundry or a load of dishes. If you have a lead or galvanized service line requiring replacement, you may need to flush your pipes for a longer period. 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 City completed an initial Lead Service Line Inventory (LSLI) in 2024. The LSLI is an ongoing inventory with the purpose of identifying the types of materials in public and private water service lines and fittings. If lead is identified during inventory inspections, the LSLI requires replacement within certain timeframes. The City did not identify any lead service lines or fittings in the initial LSLI and anticipates completing the LSLI by 2027. The initial LSLI is available upon request. Please see details at healdsburg.gov/WaterReports. If you know the material of your water service line, perhaps as the result of a remodel, please let us know at (707) 431-3369.

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 (a complete list of all our analytical results is available upon request). 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. City water had no violations in 2024.

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 is included, along with the year in which the sample was taken.

The City is currently conducting sampling for the fifth Unregulated Contaminant Monitoring Rule (UCMR5). Unregulated contaminant monitoring helps the U.S. EPA and SWRCB determine where certain contaminants occur and whether the contaminants need to be regulated. UCMR5 requires public water systems to monitor 29 PFAS chemicals as well as lithium. The most recent sampling results are included in the data tables. Through three rounds of sampling, the City had no actionable levels of PFAS or lithium. The City expects to have results for the completed UCMR5 by summer 2025.

For more information, please visit epa.gov/dwucmr/fifth-unregulated-contaminant-monitoring-rule or call the Safe Drinking Water Hotline at (800) 426-4791.

REGULATED SUBSTANCES											
											City of Healdsburg
SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED	MCL [MRDL]	PHG (MCLG) [MRDLG]	AMOUNT DETECTED	RANGE LOW-HIGH	VIOLATION	TYPICAL SOURCE				
Arsenic (ppb)	2024	10	0.004	<2	NA	No	Erosion of natural deposits; runoff from orchards; glass and electronics production wastes				
Barium (ppm)	2024	1	2	<1	NA	No	Discharges of oil drilling wastes and from metal refineries; erosion of natural deposits				
Chlorine (ppm)	2024	[4.0 (as Cl ₂)]	[4 (as Cl ₂)]	0.83	0.33–1.14	No	Drinking water disinfectant added for treatment				
Fluoride (ppm)	2024	2.0	1	0.68	0.51–0.77	No	Leaching from natural deposits				
Hexavalent Chromium (ppb)	2024	10	20	0.36	0.18–0.86	No	Industrial uses and natural geology				
Nitrate [as nitrogen] (ppm)	2024	10	10	0.57	ND–1.2	No	Runoff and leaching from fertilizer use; leaching from septic tanks and sewage; erosion of natural deposits				
pH (units)	2024	6.5 to 8.5	6.5 to 8.5	6.75	6.21–7.49	No	Measure of acidity of the water				
Total Haloacetic Acids (ppb)	2024	60	NS	13.64	ND–51.40	No	By-product of drinking water disinfection				
TTHMs [total trihalomethanes] (ppb)	2024	80	NA	27.2	ND–72.47	No	By-product of drinking water disinfection				
			Dry Creek Well Field			Fitch Mountain Well Field		Gauntlett Well Field			
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	VIOLATION	TYPICAL SOURCE
Turbidity ¹ (NTU)	2024	TT	NA	0.07	0.03–0.25	0.04	0.02–0.16	0.04	0.02–0.09	No	Soil runoff
Turbidity (lowest monthly percent of samples meeting limit)	2024	TT = 95% of samples meet the limit	100	100	100	100	100	100	100	No	Soil runoff
Tap water samples were collected for lead and copper analyses from sample sites throughout the community											
SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED	AL	PHG (MCLG)	AMOUNT DETECTED (90TH %ILE)	RANGE LOW-HIGH	SITES ABOVE AL/TOTAL SITES	VIOLATION	TYPICAL SOURCE			
Copper (ppm)	2023	1.3	0.3	0.76	NA	0/30	No	Internal corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives			

SECONDARY SUBSTANCES

			City of Healdsburg				
SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED	SMCL	PHG (MCLG)	AMOUNT DETECTED	RANGE LOW-HIGH	VIOLATION	TYPICAL SOURCE
Aluminum (ppb)	2024	200	600	<50	NA	No	Erosion of natural deposits; residual from some surface water treatment processes
Chloride (ppm)	2024	500	NS	7.4	4.2–11	No	Runoff/leaching from natural deposits
Specific Conductance (µmho/cm)	2024	1,600	NS	296	180–380	No	Substances that form ions when in water
Sulfate (ppm)	2024	500	NS	22.4	10–36	No	Runoff/leaching from natural deposits
Total Dissolved Solids (ppm)	2024	1,000	NS	181.6	98–300	No	Runoff/leaching from natural deposits

UNREGULATED SUBSTANCES²

			City of Healdsburg			
SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED	AMOUNT DETECTED	RANGE LOW-HIGH	TYPICAL SOURCE		
Alkalinity (ppm)	2024	125.4	81–160	Natural geology		
Bicarbonate (ppm)	2024	125.4	81–160	Natural geology		
Calcium (ppm)	2024	24	15–34	Natural geology		
Hardness, Total [as CaCO ₃] (ppm)	2024	140.8	76–185	Natural geology		
Magnesium (ppm)	2024	19.4	9.1–28	Natural geology		
Perfluorobutanesulfonic Acid [PFBS] (ppb)	2024	0.0043	0.0039–0.0047	Industrial/consumer uses		
Perfluorododecanoic Acid [PFDoA] (ppb)	2024	0.0031	ND–0.0031	Industrial/consumer uses		
Perfluorohexanesulfonic Acid [PFHxS] (ppb)	2024	0.0042	0.0038–0.0045	Industrial/consumer uses		
Sodium (ppm)	2024	8.5	6.5–10	Natural geology		

¹ Turbidity is a measure of the cloudiness of the water. We monitor it because it is a good indicator of water quality. High turbidity can hinder the effectiveness of disinfectants.

² Unregulated contaminant monitoring helps the U.S. EPA and SWRCB determine where certain contaminants occur and whether the contaminants need to be regulated.

The Benefits of Fluoridation

Our system treats your water by adding fluoride to the naturally occurring level to help prevent dental caries in consumers. State regulations require the fluoride levels in the treated water be maintained within a range of 0.6 to 1.2 parts per million (ppm), with an optimum dose of 0.7 ppm. Our monitoring showed that the fluoride levels in the treated water ranged from 0.51 to 0.77 ppm, with an average of 0.68 ppm. Information about fluoridation, oral health, and current issues is available from swrcb.ca.gov/drinking_water/certlic/drinkingwater/Fluoridation.shtml.

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 (µg/L) (parts per billion): One part substance per billion parts water (or micrograms per liter).

ppm (mg/L) (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.

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