NORTH MARIN WATER DISTRICT

2020 ANNUAL WATER QUALITY REPORT · NOVATO EDITION · PUBLISHED JUNE 2021

Water served by North Marin Water District to its customers comes from protected watersheds and is purified using modern treatment techniques to remove pathogens, including bacteria and viruses. Water is continuously monitored to ensure that it surpasses all state and federal standards for health and safety.

This brochure is a snapshot of water quality monitoring performed in 2020. Included are details about where your water comes from, what it contains, and how it compares to regulatory standards. As you continue to keep your family safe from the COVID-19 virus you can feel confident that your tap remains a safe and reliable source of clean, good-tasting drinking water. If you have any questions regarding this Water Quality Report, contact Pablo Ramudo, Water Quality Supervisor, (415) 761-8929 or (800) 464-6693.



This report is available on our website: www.nmwd.com

North Marin Water District's Stafford Lake Water Treatment Plant produces about 25% of the water needed for Novato. This facility is designed to produce water which meets or exceeds strict state and federal standards for water quality. The water treatment process starts with chlorine dioxide and polymers prior to filtration through layers of anthracite and garnet sand. The water then passes through granular activated charcoal to remove any remaining impurities before adjusting the pH to 8.3 for corrosion control and the addition of a small amount of chlorine for disinfection.

Most of Novato's water supply is purchased as treated water from Sonoma County Water Agency (SCWA).

The SCWA water supply is collected from gravel beds 80 feet below and adjacent to the Russian River. The quality of this naturally filtered water is excellent, making additional treatment unnecessary. Water from additional SCWA wells in the Santa Rosa plain can be blended with the Russian River well water to augment water supply. Before delivering the water to Novato, SCWA adds small amounts of chlorine and sodium hydroxide to ensure purity and to adjust the pH to 8.3.

The Stafford Lake water supply blends with the SCWA water supply in the Novato water distribution system. The percentage from each source can vary by day and by season.

Este informe contiene información muy importante sobre su agua potable. Tradúzcalo o hable con alguien que lo entienda bien. Para más información, llame al (415) 761-8929.

Image Image <t< th=""><th colspan="6">TABLE 1 Report on Detected Constituents with a Primary Drinking Water Standard (PDWS)</th><th></th><th colspan="2"></th><th colspan="2">STAFFORD WATER TREATMENT PLANT</th></t<>	TABLE 1 Report on Detected Constituents with a Primary Drinking Water Standard (PDWS)									STAFFORD WATER TREATMENT PLANT	
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Gross Alpha Image Image	Nitrate (as N)	mg/L	10	10			ND	ND	NE)	ND
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The results below are part of monitoring conducted in 2019 in compliance with the Fourth Unregulated Contaminant Monitoring Rule (UCMR4). In addition to the regulated haloacetic acids presented in table 1, detections of other classes of haloacetic acids are presented below. Other contaminants tested in compliance with UCMR4 were not detected in drinking water.ONSTITUENTUNITSPrimary MCL [Notification Level]State PHG or Federal (MCLG)System RangeSystem AverageMeets Regulations (YES/NO)HAA6Brμg/Ln/an/aBy-product of drinking water disinfection0.84 - 8.85.8YesHAA9μg/Ln/an/aBy-product of drinking water disinfection2.0 - 2.29.6Yes	Second CONSTITUENT Color Odor Odor Chloride Sulfate Sulfate Turbidity al Dissolved Solids Sodium Hardness (4) Radon	Ary Drinking Wa UNITS PCU TON mg/L mg/L MTU mg/L mg/L mg/L mg/L	Standar SMCL 15 3 500 500 500 1000 n/a n/a n/a	rd rd Na Na Na Na Na Na Na Na Na N	aturally-occurring orga aturally-occurring orga unoff / leaching of natu g of natural deposits, tr Soil runoff unoff / leaching of natu ally-occurring and trea Leaching of natural See "Radon in Air," ba	nic materials nic materials ural deposits eatment chemicals ural deposits tment chemicals deposits deposits ack page	WATER Average 5 ND 5.2 12 0.03 130 8.3 110 103	AGENCY Range 4-9 ND 5.1-4.5 11 – 13 0.013 – 2.0 120-150 7.5-9.1 100 – 120 82.4-114	TRE Average ND NA 76 9.7 0.15 240 36 110 n/a	AMEN ge	T PLANT Range ND NA 70-82 7.7-12 0.09 – 0.19 240 30-40 110-120 n/a
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HAA9 μg/L n/a n/a By-product of drinking 2.0 – 2.2 9.6 Yes	Second CONSTITUENT Color Odor Odor Chloride Sulfate Sulfate Turbidity tal Dissolved Solids Sodium Hardness (4) Radon Manganese Manganese	ary Drinking Wa UNITS PCU TON mg/L mg/L MTU mg/L mg/L grint μmhos/cm μg/L lated contamin ults below are p	Standar SMCL 15 3 500 500 500 1000 n/a n/a 1600 500 1600 1600 1600 50 1600 1600 50 1600 1600 50 0 1600 50	rd r	aturally-occurring orga aturally-occurring orga unoff / leaching of natu g of natural deposits, tr Soil runoff unoff / leaching of natu ally-occurring and trea Leaching of natural See "Radon in Air," ba Gubstances that form ic Leaching from natura in 2019 in complia ted in table 1, detect	nic materials inic materials iral deposits reatment chemicals iral deposits iral deposits iran deposits itment chemicals deposits ack page ons in water I deposits I	WATER Average 5 ND 5.2 12 0.03 130 8.3 110 103 240 ND ulated Contantal	AGENCY Range 4-9 ND 5.1-4.5 11 – 13 0.013 – 2.0 120-150 7.5-9.1 100 – 120 82.4-114 230-260 ND minant Monit	TRE Average ND NA 76 9.7 0.15 240 36 110 n/a 420 ND	AMEN ge	T PLANT Range ND NA 70-82 7.7-12 0.09 – 0.19 240 30-40 110-120 n/a 390-440 ND-25
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LEGEND

- (Public Health Goal): The level of a contaminant in drinking water below there is no known or expected risk to health. PHGs are set by the California onmental Protection Agency.
- i (Maximum Contaminant Level Goal): The level of a contaminant in drinking below which there is no known or expected risk to health. MCLGs are set by .S. Environmental Protection Agency (EPA).
- (Maximum Contaminant Level): The highest level of a contaminant that is ed in drinking water. Primary MCLs are set as close to the PHGs (or MCLGs) as is pmically and technologically feasible. Secondary MCLs (SMCL) are set to protect dor, taste, and appearance of drinking water. MCLs and SMCLs are set by the rnia and/or U.S. EPA.
- (Primary Drinking Water Standard): MCLs and MRDLs, for contaminants affect health along with their monitoring and reporting requirements, and treatment requirements.
- ction Level): The concentration of a contaminant that, if exceeded, triggers nent or other requirements that a water system must follow.
- reatment Technique): A required process intended to reduce the level of a minant in drinking water.
- (Nephelometric Turbidity Units): A measure of suspended material in water.
- **Percentile:** Compliance based on highest value after eliminating the highest
- (Maximum residual disinfectant level): The level of a disinfectant added for treatment that may not be exceeded at the consumer's tap.
- LG (Maximum residual disinfectant level goal): The level of a disinfectant for water treatment below which there is no known or exposed risk to health. Gs are set by the U.S. EPA.
- lotification Level): The notification level for some unregulated contaminants.
- = milligrams per liter (parts per million) -equivalent to 4 drops of water in the average sized bathtub.
- = micrograms per liter (parts per billion) -equivalent to 50 drops in an olympic size swimming pool
- s/cm = micromhos per centimeter
- Not Detected
- Not Analyzed
- Not Applicable
- platinum cobalt units
- = picocuries per liter

pliance based on a four-quarter running average at each distribution system monitoring location age hardness shown in mg/L equates to 6.4 grains per gallon.

Concerning Lead and Drinking Water

nt, elevated levels of lead can cause serious health problems, especially for women and young children. There is no lead in drinking water produced by and there are no district owned lead service lines within our system, however leach into drinking water from materials and components associated with ers' service lines and home plumbing. NMWD is responsible for providing high drinking water to your meter, but cannot control the variety of materials used plumbing components. When water in your household plumbing has been or several hours, you can minimize the potential for lead exposure by running water for 30 seconds to 2 minutes before using water for drinking or cooking. concerned about lead in your water, you may wish to have your water tested. ion on lead in drinking water, testing methods, and steps you can take to minimize exposure is available from the Safe Drinking Water Hotline or at www.epa.gov/safewater/lead.

A Message From the United States Environmental Protection Agency

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 materials, and can pick up substances resulting from the presence of animals or from

Contaminants that may be present in source water include:

human activity.

- 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.
- <u>Pesticides and Herbicides</u>, 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 applications and septic systems.
- <u>Radioactive Contaminants</u>, that can be naturally-occurring or be the result of oil and gas production and mining activities.

In order to ensure that tap water is safe to drink, the U.S. Environmental Protection Agency (USEPA) and the California Department of Public Health (CDPH) prescribe regulations that limit the amount of certain contaminants in water provided by public water systems. DHS regulations 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 USEPA's Safe Drinking Water Hotline (1-800- 426-4791).

Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised 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. USEPA/Centers for Disease Control (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 (1-800-426-4791).

Drinking Water Source Assessment for SCWA Groundwater Supply

In January 2001, a Drinking Water Source Assessment for all of the SCWA's water sources was conducted to identify if any potential sources of contamination exist.

The SCWA source water is extracted from groundwater via 6 Rainey Collector Wells and 7 conventional wells located at Wohler and Mirabel, and three wells in the Santa Rosa Plain. The aquifer is recharged by subsurface flows and Russian River water filtering down through the gravel riverbed.

Most of the SCWA water supply comes from wells at Wohler and Mirabel adjacent to the Russian River. These sources are considered to be most vulnerable from wastewater treatment and gravel mining in the area. However, no contaminants associates with these activities were detected in the drinking water.

The SCWA also operates three groundwater wells on the Santa Rosa Plain near Occidental Road, Todd Road and Sebastopol Road. These sources are considered to be most vulnerable from animal feeding operations. However, no contaminants associated with this activity were detected in the drinking water.

A copy of the complete assessment may be reviewed at the California Water Boards-Division of Drinking Water Field Operations Branch office located at 50 D Street, Suite 200, Santa Rosa, CA 95404. You may request a summary of this assessment be sent to you by contacting the Office Representative at 707-876-2145 (voice) or by email to dwpdist18@ waterboards.ca.gov.

Drinking Water Source Water Assessment For Stafford Lake

An assessment of watershed activities, which may affect the Stafford Lake source of supply, was performed in 2002 as required by the U.S. Environmental Protection Agency. The watershed activities identified with the highest potential for contamination of Stafford Lake are animal feeding/ waste disposal at the existing stable and dairy operations on the watershed. These activities increase the potential to introduce microbial contaminants and nutrients to Stafford Lake. NMWD actively works with the stable and dairy owners to control their operations and reduce potential contaminants. The Stafford Lake source water is routinely monitored by NMWD to insure the controls are effective.

A copy of the complete assessment is on file at the North Marin Water District office at 999 Rush Creek Place, Novato.

Cryptosporidium & Giardia

Monitoring performed by NMWD on untreated water in Stafford Lake has intermittently shown the presence of cryptosporidium, a microbial pathogen found in surface waters throughout the U.S. NMWD's filtration is designed and operated to remove cryptosporidium, but 100% removal cannot be guaranteed. Should you be concerned? Healthy individuals should not be concerned. However, immunocompromised people are at greater risk. We suggest immuno-compromised individuals consult their physician regarding appropriate precautions.

Radon In Air

Radon is a radioactive gas that can move from decomposed granite soils into a home through cracks and holes in the foundation. Radon can also get into indoor air when running tap water for showering and other household activities. In most cases, radon from tap water is a small source of radon in air. Radon is a known human carcinogen. It can lead to lung cancer. Drinking water containing radon may also cause increased risk of stomach cancer. The SCWA water was tested for Radon and showed an average of 103 and a range of 82.4 – 114 pCi/L (picocuries per liter). There is no federal regulation for radon levels in drinking water. Exposure over a long period of time to air transmitting radon may cause adverse health effects. If you are concerned about radon in your home, test the air in your home! Testing is inexpensive and easy. For additional information, call your state radon program or call EPA's Radon Hotline (800-SOS-RADON).

Notice To Kidney Dialysis Patients

Chlorine dioxide is used as a pre-oxidant in water produced from Stafford Water Treatment Plant. Customers undergoing kidney dialysis treatment are advised to use sufficient pre-treatment to ensure chlorine dioxide does not pose a threat to the dialysis process.