



2021 Consumer Confidence Report  
DRINKING WATER

Water System Name:  
**San Clemente Island**

**Public Water System ID #3710707**

Report Date:  
**01 July 2022**



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<https://www.processindustryforum.com/wp-content/uploads/2014/04/Clean-water-supply.jpg> accessed on 17May2019

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## OUR COMMITMENT TO PROVIDING SAFE DRINKING WATER

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*Naval Base Coronado (NBC) is pleased to present our Water Quality Report, also referred to as the Consumer Confidence Report (CCR). The CCR is an annual report containing data from water quality testing performed during the past year and may include earlier monitoring data for some constituents.*

*Last year, the water delivered to you met all U.S. EPA and State Board drinking water health standards. Details within provide information on where we obtain our water, what is in your water, and how it compares to state standards that are considered safe for the public.*

*Special Note to Consumers: While this report presents drinking water data from 2021, we want consumers to feel confident that our drinking water system remains safe to drink as we all face difficulties with the evolving challenges created by COVID-19 impacts. Our water comes from local drinking water treatment plants where it is treated in accordance with the Safe Drinking Water Act (SDWA) to remove contaminants prior to being disinfected at multiple locations throughout our distribution system. Essential water system personnel continuously monitor, sample, and disinfect the water prior to reaching your tap. The water system operators, utility managers, contractors, laboratory personnel, and the Navy command work with state regulatory agencies to ensure, with a high level of confidence, that our drinking water quality meets state and federal regulations.*

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**Este informe contiene información muy importante sobre su agua para beber. Favor de comunicarse San Clemente Island Water System #3710707 a NBCPAO@navy.mil para asistirlo en español.**

Where do we get our water from?

The Navy purchases water from the City of San Diego (CITYSD) and Sweetwater Authority (SWA) that is filled on a barge at Naval Base San Diego and transported to San Clemente Island (SCI). The majority of water for the calendar year comes from SWA.

The water from Sweetwater Authority is primarily from four sources: The Sweetwater River which is drawn at the Sweetwater Reservoir in Spring Valley, deep freshwater wells located in National City, brackish water wells in Chula Vista, and the region's imported water supply is from the Colorado River and/or the State Water Project.

The water from the City of San Diego can be distributed from either the Otay Treatment Plant or the Alvarado Treatment Plant depending on demand levels within the distribution system. The City of San Diego imports a majority of its raw surface water supply from the San Diego County Water Authority. The Water Authority is a blend from the Colorado River and/or the State Water Project.

The Navy continuously monitors for water quality parameters at the barge, holding tanks, storage tanks, and boosts with disinfectants to maintain drinking quality standards, as well as treatment methods to reduce trihalomethanes, a byproduct of disinfecting the water with chlorine.

**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, 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*, 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 byproducts of industrial processes and petroleum production, and can also come from gas stations, urban stormwater runoff, agricultural application, and septic systems.
- *Radioactive contaminants*, which can be naturally-occurring or be the result of oil and gas production and mining activities.

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. More information about contaminants and potential health effects can be obtained by calling the U.S. Environmental Protection Agency's (EPA) Safe Drinking Water Hotline (1-800-426-4791).

How do I know it's safe?

In order to ensure that tap water is safe to drink, the U.S. EPA and the State Board prescribe regulations that limit the amount of certain contaminants in water provided by public water systems. The U.S. Food and Drug Administration regulations and California law also establish limits for contaminants in bottled water that provide the same protection for public health.

The City of San Diego and Sweetwater Authority conduct compliance sampling and monitoring of the water they supply. Naval Facilities Engineering Systems Command (NAVFAC) Southwest Utilities personnel conducts compliance sampling of the water delivered to SCI and in its distribution system. There are routine monitoring stations around the island where we measure water quality parameters; monitoring also occurs at water storage locations.

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. U.S. EPA/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).

What about Lead?

If present, elevated levels of lead can cause serious health problems, especially for pregnant women and young children. Lead that may be found in drinking water is primarily from materials and components associated with service lines and plumbing. Naval Base Coronado is responsible for providing high quality drinking water; however, there may be an unknown variety of materials used in plumbing components installed historically. The Reduction of Lead in Drinking Water Act (RLDWA) went into effect on January 4, 2014. The RLDWA has reduced the lead content allowed in water system and plumbing products by changing the definition of lead-free in Section 1417 of the SDWA from not more than 8% lead content, to not more than a weighted average of 0.25% lead with respect to the wetted surfaces of pipes, pipe fittings, plumbing fittings, and plumbing fixtures. The SDWA prohibits the use of these products in the installation or repair of any public water system or facility providing water for human consumption if they do not meet the lead-free requirement.

At SCI, we are continuing to find and eliminate sources of lead that can potentially impact drinking water. Many buildings located on the island were built when it was conventional to use lead containing materials. Lead enters drinking water primarily as a result of the corrosion, or wearing-away of materials containing lead in the water distribution system and plumbing. In 2018, we completed sampling at over 50 locations for our Priority Lead Sampling Program ahead of our 2022 schedule. Our team is continuing to implement corrective actions for locations which may pose a health risk.

*Our Efforts to Minimize Your Exposure to Lead.*

- **Health and Safety Code (HSC) Section 116885.** The Navy compiled an inventory of known materials for user service lines in the distribution system. No known lead user service lines have been identified.
- **Lead and Copper Rule Monitoring Program:** In addition to the Priority Lead Sampling Program, the Navy is compliant with the lead and copper rule and conducts standard tap monitoring every 6-months at approved sample sites.
- **Priority Lead Sampling Program.** The Navy has a lead and copper sampling program in order to find locations which may have lead sources in the plumbing system and to implement corrective actions by replacement. An initial inventory of cold water taps on SCI was conducted in 2017 and locations were categorized in groups based on building age, whether they were likely to be used for consumption, and if testing was ever conducted. Priorities 0 to 5 were set and details on each priority can be seen below.

Priority	Sample Location Criteria
5	Building is older than 1990, fixture is more likely used for consumption (i.e. kitchen sink, fountain, or bottle fill), no fixtures in the building have been tested for lead and copper
4	Building is older than 1990, fixture is more likely used for consumption (i.e. kitchen sink, fountain, or bottle fill), some fixtures in the building have been tested for lead and copper
3	Building is older than 1990, fixture is less likely to be used for consumption (i.e. bathroom sink), no fixtures in the building have been tested for lead and copper
2	Building is older than 1990, fixture is less likely to be used for consumption (i.e. bathroom sink), some fixtures in the building have been tested for lead and copper
1	Building is newer than 1990 and no fixtures in the building have been tested for lead and copper
0	Building is newer than 1990 and all fixtures that have been tested for lead and copper were below the action level

After review by the Navy and with the Division of Drinking Water, it has been determined that Priority 2 and 0 locations will not be sampled and buildings with multiple locations could collect representative samples. Priority 1 locations were sampled in 2019 and of the 55 locations sampled, no locations exceeded the action level for lead.

- The Navy sampled Priority 3, 4 and 5 locations in 2017-2018. Of the 81 locations sampled, 9 locations exceeded the action level for lead. At each location with an exceedance, an investigation was conducted to find the source of lead, and projects were created for the replacement of these fixtures. After corrective actions were conducted, resamples were taken of these 9 locations. Of the 9 resampled locations, 6 were corrected in 2020 and the remaining 3 were corrected in 2021. NBC PWD has successfully implemented corrective actions to all Priority 1, 3, 4, and 5 locations identified on San Clemente Island. For more information, or if you would like a copy of sample results, please email [NBCPAO@navy.mil](mailto:NBCPAO@navy.mil).

*What can I do to minimize exposure to lead?*

- **Flush.** It is always a good idea to flush your faucet at work and/or at home, especially when water has been sitting for several hours (i.e. overnight or over a weekend). You can minimize the potential for lead exposure by flushing your tap for 30 seconds to 2 minutes prior to utilizing for consumption. You may need to flush longer if your building has recently been shut down or experienced reduced occupancy. Contact your Facility Manager or Assistant Public Works Officer for flushing guidance.
- **Use Cold Water.** Hot water dissolves lead more quickly than cold water, so use cold water to prepare food and drinks.
- **Clean Your Aerator.** Metal debris can be trapped on the aerator screens on water outlets, especially if construction or plumbing work may have occurred in your area. Simply twist off the aerator (may need a wrench and vinegar if there is build-up), carefully tap and clean any debris which may be caught on the filtration screen, and reinstall.

- Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available from the Safe Drinking Water Hotline (1-800-426-4791) or at <http://www.epa.gov/lead>.

**Water Complaints**

Does the filter on your fountain or faucet need to be changed? Please coordinate with your building monitor or facility manager. Make sure filters are marked with the date they were changed out and keep a log book.

Does your water have an odd taste, color, odor, suspended solids, or do you suspect a water-related illness? Please call the Trouble Desk at 619-524-9123 or After Hours Trouble Desk at 619-524-9223 with details (i.e. building number, concern, complaint POC).

Where can I get more information on drinking water?

City of San Diego and Sweetwater Authority produces annual reports detailing the sources of our water, where it is purchased from, and how it is treated and delivered. These reports are available online at <https://www.sandiego.gov/public-utilities/water-quality/water-quality-reports>, and at <https://www.sweetwater.org/wqreport>. For more information on the sampling and monitoring that we conduct on base, please contact the Naval Base Coronado (NBC) Drinking Water Program Manager at 619-545-1127 or email [NBCPAO@navy.mil](mailto:NBCPAO@navy.mil).

**TERMS USED IN THIS REPORT**

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

**City of San Diego Water Quality Lab Method Detection Limit (CSD MDL):** Lowest quantifiable concentration of a measured analyte detectable by the lab

**California Secondary Maximum Contaminant Level (CA SMCL):** MCL for secondary contaminants under CA regulations

**DLR:** Detection limit for reporting

**DW:** Drinking water

**Maximum Contaminant Level (MCL):** 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 are set to protect the odor, taste, and appearance of drinking water.

**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 are set by the U.S. Environmental Protection Agency (U.S. EPA).

**Public Health Goal (PHG):** 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 Environmental Protection Agency.

**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 contaminants.

**Nephelometric Turbidity Unit (NTU):** Unit of measure for the turbidity of water.

**ND:** Not detected at testing limit

**NL:** Notification Level

**PFAS:** per- and poly-fluorinated alkyl substances

**Primary Drinking Water Standards (PDWS):** MCLs and MRDLs for contaminants that affect health along with their monitoring and reporting requirements, and water treatment requirements.

**Secondary Drinking Water Standards (SDWS):** MCLs for contaminants that affect taste, odor, or appearance of the drinking water. Contaminants with SDWSs do not affect the health at the MCL levels.

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

**LRAA:** Locational running annual average is a four-quarter average at an individual sample location. The LRAA for each location must be less than the MCL. The highest LRAA of the year detected from all the monitoring locations is indicated on this report and compared to the MCL.

**Variations and Exemptions:** Permissions from the State Water Resources Control Board (State Board) to exceed an MCL or not comply with a treatment technique under certain conditions.

**ppm:** parts per million or milligrams per liter (mg/L)

**ppb:** parts per billion or micrograms per liter (µg/L)

**ppt:** parts per trillion or nanograms per liter (ng/L)

**ppq:** parts per quadrillion or picogram per liter (pg/L)

**pCi/L:** picocuries per liter (a measure of radiation)

The water quality data for 2021 is summarized in the following tables. Data shown in brackets [CITYSDALV] is obtained from the City of San Diego’s Alvarado Treatment Plant. Data shown in parenthesis (CITYSDOTAY) is obtained from the City of San Diego’s Otay Treatment Plant. Data shown in braces {SWA} is obtained from the Sweetwater Authority treated-water monitoring. Data with no brackets/parenthesis indicate the monitoring was conducted at SCI. Tables 1, 2, 3, 4, 5, 6, and 7 list all of the drinking water contaminants that were detected during the most recent sampling. The presence of these contaminants in the water does not necessarily indicate that the water

poses a health risk. The State Board allows us to monitor for certain contaminants less than once per year because the concentrations of these contaminants do not change frequently. Some of the data, though representative of the water quality, are more than one-year old.

TABLE 1 – SAMPLING RESULTS SHOWING THE DETECTION OF COLIFORM BACTERIA					
Microbiological Contaminants (complete if bacteria detected)	Highest No. of Detections	No. of Months in Violation	MCL	MCLG	Typical Source of Bacteria
Total Coliform Bacteria (state Total Coliform Rule)	0 (In a month)	0	1 positive monthly sample <sup>(a)</sup>	0	Naturally present in the environment
Fecal Coliform or <i>E. coli</i> (state Total Coliform Rule)	0 (In the year)	0	A routine sample and a repeat sample are total coliform positive, and one of these is also fecal coliform or <i>E. coli</i> positive	0	Human and animal fecal waste
<i>E. coli</i> (federal Revised Total Coliform Rule)	0 (In the year)	0	(b)	0	Human and animal fecal waste

(a) Two or more positive monthly samples is a violation of the MCL.  
 (b) Routine and repeat samples are total coliform-positive and either is *E. coli*-positive or system fails to take repeat samples following *E. coli*-positive routine sample or system fails to analyze total coliform-positive repeat sample for *E. coli*.

TABLE 2 – SAMPLING RESULTS SHOWING THE DETECTION OF LEAD AND COPPER							
Lead and Copper (complete if lead or copper detected in the last sample set)	Sample Date	No. of Samples Collected	90 <sup>th</sup> Percentile Level Detected <sup>(c)</sup>	No. Sites Exceeding AL	AL	PHG	Typical Source of Contaminant
Lead (ppb)	May 2021	10	2.25	0	15	0.2	Internal corrosion of household water plumbing systems; discharges from industrial manufacturers; erosion of natural deposits
	Nov 2021	10	2.91	0			
Copper (ppm)	May 2021	10	0.332	0	1.3	0.3	Internal corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives
	Nov 2021	10	0.201	0			

(c) Under the lead and copper monitoring rule drinking water health standards are met when the 90th percentile level detected is below the AL.

TABLE 3 – SAMPLING RESULTS FOR SODIUM, HARDNESS, AND TURBIDITY						
Chemical or Constituent (and reporting units)	Sample Year	Level Detected (Average)	Range of Detections	MCL	PHG (MCLG)	Typical Source of Contaminant
Sodium (ppm)	2021	[90.4] (107) {110}	[76.4 – 99.9] (82.9-131) {100-120}	None	None	Salt present in the water and is generally naturally occurring
Hardness (ppm)	2021	[255] (254) {211}	[224-282] (225-276) {94-300}	None	None	Sum of polyvalent cations present in the water, generally magnesium and calcium, and are usually naturally occurring

TABLE 4 –TURBIDITY					
Chemical or Constituent	Sample Year	Max Level Found (NTU)	% of Samples ≤ 0.3	MCL	Typical Source of Contaminant
Turbidity	2021	[0.14] (0.06) {0.2}	[100%] (100%) {100%}	TT = 1 NTU TT=95% of samples ≤ 0.3	Soil runoff

TABLE 5 – DETECTION OF CONTAMINANTS WITH A PRIMARY DRINKING WATER STANDARD						
Chemical or Constituent (and reporting units)	Sample Year	Level Detected (Average)	Range of Detections	MCL [MRDL]	PHG (MCLG) [MRDLG]	Typical Source of Contaminant
<i>DISINFECTANT RESIDUAL AND DISINFECTANT BY-PRODUCTS AND PRECURSORS</i>						

Chlorine Residual (as Cl <sub>2</sub> ; ppm)	2021	1.14	0.48 – 1.67	[4.0]	[4.0]	Drinking water disinfectant added for treatment
Total Trihalomethanes (TTHM; ppb)	2021; quarterly	LRAA = 36	6.9 – 111	80	n/a	By-product of drinking water disinfectant
Haloacetic Acids (HAA; ppb)	2021; quarterly	LRAA = 21.13	1.0 – 44	60	n/a	By-product of drinking water disinfectant
Bromate (ppb)	2021	[ND] (n/a) {n/a}	[ND – 8.0] (n/a) {n/a}	10	0.1	By-product of drinking water disinfectant
Total Organic Carbon (TOC; ppm)	2021	[2.6] (3.5) {6.2}	[2.0-3.2] (2.0 – 5.9) {1.7-8.7}	TT	n/a	Various natural and manmade sources
<b>CHEMICAL PARAMETERS</b>						
Aluminum (ppb) <sup>(d)</sup>	2021	[ND] (ND) {ND}	[ND] (ND) {ND}	1000	600	Erosion of natural deposits; residue from surface water treatment processes
Arsenic (ppb)	2021	[ND] (N/D) {ND}	[N/D] (N/D) {ND}	10	0.004	Erosion of natural deposits; glass and electronics production waste
Barium (ppm)	2021	[ND] (ND) {0.1}	[ND] (ND) {ND – 0.1}	1	2	Erosion of natural deposits; discharges of oil drilling
Fluoride (naturally-occurring; ppm)	2021	[0.3] (0.3) {0.7}	[0.2 – 0.3] (0.3 – 0.5) {0.6-0.9}	2	1	Erosion of natural deposits
Fluoride (treatment-related; ppm)	2021	[0.5] (0.4) {0.7}	[0.4 – 0.7] (0.3 – 0.6) {0.6 – 0.9}	2	1	Water additive that promotes strong teeth; erosion of natural deposits
Nitrate (as N; ppm)	2021	[ND] (ND) {n/a}	[ND – ND] (ND – 0.4) {n/a}	10	10	Runoff and leaching from fertilizer use; erosion of natural deposits
Selenium (ppb)	2021	[ND] (ND) {ND}	[ND] (ND) {ND}	50	30	Erosion of natural deposits; refineries, mines, and chemical water discharge
<b>RADIOACTIVE PARAMETERS</b>						
Gross Alpha Particle Activity (pCi/L)	2021	[ND] (3) {n/a}	[ND – 5] Single Sample {n/a}	15	0	Erosion of natural deposits
Gross Beta Particle Activity (pCi/L)	2021	[7] (5) {n/a}	Single Sample Single Sample {n/a}	50 <sup>(e)</sup>	0	Decay of natural and manmade deposits
Uranium (pCi/L)	2021	[2] (ND) {n/a}	Single Sample Single Sample {n/a}	20	0.43	Erosion of natural deposits
(d) Aluminum has primary and secondary drinking water standards. (e) Division of Drinking Water considers 50 pCi/L to be the level of concern for beta particles						

**TABLE 6 – DETECTION OF CONTAMINANTS WITH A SECONDARY DRINKING WATER STANDARD**

Chemical or Constituent (and reporting units)	Sample Date	Level Detected	Range of Detections	CA SMCL	CSD MDL (DLR)	Typical Source of Contaminant
Aluminum (ppb)	2021	[ND] (ND) {ND}	[ND] (ND) {ND}	200	(50)	Erosion of natural deposits; residue from some water treatment processes
Chloride (ppm)	2021	[100] (137) {190}	[89.99-116] (105-184) {160-250}	500	0.5	Runoff/leaching from natural deposits; seawater influence
Color (CU)	2021	[ND] (ND) {1}	[ND – 3] (ND – 4) {1}	15	1	Naturally-occurring organic materials
Manganese (ppb)	2021	[2.2] (0.2) {ND}	[ND – 8.2] (ND – 0.7) {ND}	50	(20)	Leaching from natural deposits
Odor-Threshold (OU)	2021	[ND] (ND) {ND}	[ND – 1] (ND-2) {ND}	3	(1)	Naturally-occurring natural deposits
Specific Conductance ( $\mu$ S/cm)	2021	[870] (965) {965}	[749-931] (872-1080) {720-1100}	1,600	n/a	Substances that form ions when in water; seawater influence
Sulfate (ppm)	2021	[182] (166) {97}	[134-206] (106-204) {36-167}	500	(0.5)	Runoff/leaching from natural deposits; industrial wastes
Total Dissolved Solids (ppm)	2021	[570] (608) {563}	[460-662] (535-664) {410-650}	1,000	10	Runoff/leaching from natural deposits
pH	2021	[8.04] (8.15) {8.2}	[7.46-8.35] (7.66-8.55) {7.9-8.6}	n/a	n/a	low pH: corrosion high pH: deposits

**TABLE 7 – DETECTION OF UNREGULATED CONTAMINANTS**

Chemical or Constituent (and reporting units)	Sample Date	Level Detected	Range of Detections	Notification Level	Health Effects Language
Boron (ppm)	2021	[0.1] (0.2) {0.18}	[0.1 – 0.1] (0.1 – 0.2) {0.13 – 0.23}	1	Boron exposures resulted in decreased fetal weight (developmental effects) in newborn rats.
Chromium, hexavalent (ppb)	2021	[0.06] (0.03) {n/a}	Single Sample {n/a}	(e)	Studies show that Cr6 in drinking water may cause an increased risk of stomach cancer and reproductive harm.

(e) The DLR of 1 ppb and the MCL of 10 ppb for Chromium VI were repealed in 2017. The PHG for Cr6 is 0.02ppb.

#### Summary Information for Violation of a MCL, MRDL, AL, NL, or TT

California Code of Regulations, Title 17, Section 7605(c) requires all backflow preventers to be tested at least annually. SCI was issued a citation (No. 05\_14\_21C\_005-3710707\_PP) from the California State Water Resources Control Board – Division of Drinking Water (DDW) on August 4, 2021, for failure to test each backflow prevention devices annually for 2020. SCI was unable to conduct annual backflow prevention certifications during 2020 due to COVID-19 travel restrictions limiting staff from traveling to SCI. NAVFAC certified backflow prevention assembly testers tested and certified all backflow prevention devices on SCI in September 2021, satisfying the corrective actions required for this citation. SCI has returned to compliance.