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# 2017 Consumer Confidence Report

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Water System Name: **Naval Air Station North Island & Naval Amphibious Base Coronado #3710750** Report Date: 01 July 2018

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*We test the drinking water quality for many constituents as required by state and federal regulations. This report shows the results of our monitoring for the period of January 1 - December 31, 2017 and may include earlier monitoring data.*

**Este informe contiene información muy importante sobre su agua potable. Tradúzcalo ó hable con alguien que lo entienda bien.**

Type of water source(s) in use:	Surface Water that is treated at the City of San Diego's Alvarado municipal water plant.
Name & general location of source(s):	The City of San Diego primarily imports a blend of water (an average of 85%) from the Colorado River Aqueduct and the State Water project, the remaining source is from local runoff captured in the reservoirs.
Drinking Water Source Assessment information:	The City of San Diego produces an annual report detailing the sources of our water, where it's purchased from, and how it is treated and delivered. This report is available online at <a href="https://www.sandiego.gov/water/quality/reports">https://www.sandiego.gov/water/quality/reports</a> The source(s) of water is vulnerable to contamination based on the following: the Colorado River winds through thousands of miles of unprotected watershed containing towns, farms, old mining/industrial sites and the State Water Project is subject to potential contaminants such as pesticides and herbicides.
Time and place of regularly scheduled board meetings for public participation:	N/A. Naval Base Coronado (NBC) does not currently hold scheduled board meetings. Any concerns or comments can be submitted to <a href="mailto:anh.ngo@navy.mil">anh.ngo@navy.mil</a> .
For more information, contact:	NBC Drinking Water Program Manager Phone: (619) 545-2724

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TERMS USED IN THIS REPORT	
<b>CSD MDL (City of San Diego Water Quality Lab method detection limit):</b> lowest quantifiable concentration of a measured analyte detectable by the lab	<b>Secondary Drinking Water Standards (SDWS):</b> 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.
<b>DLR:</b> detection limit for reporting	<b>Treatment Technique (TT):</b> A required process intended to reduce the level of a contaminant in drinking water.
<b>Maximum Contaminant Level (MCL):</b> 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 (SMCL) are set to protect the odor, taste, and appearance of drinking water.	<b>Regulatory Action Level (AL):</b> The concentration of a contaminant which, if exceeded, triggers treatment or other requirements that a water system must follow.
<b>Maximum Contaminant Level Goal (MCLG):</b> 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).	<b>Variances and Exemptions:</b> State Board permission to exceed an MCL or not comply with a treatment technique under certain conditions.
	<b>Level 1 Assessment:</b> A Level 1 Assessment is a study of the water system to identify potential problems and determine (if possible) why total coliform bacteria have been found in our water system.

**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.

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

**Running Annual Average (RAA):** For trihalomethanes and haloacetic acids, the highest locational running annual average.

**Level 2 Assessment:** A Level 2 Assessment is a very detailed study of the water system to identify potential problems and determine (if possible) why an *E. coli* MCL violation has occurred and/or why total coliform bacteria have been found in our water system on multiple occasions.

**ND:** not detectable at testing limit

**OU:** odor units

**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 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 byproducts 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 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. EPA and the State Water Resources Control Board (State Board) prescribe regulations that limit the amount of certain contaminants in water provided by public water systems. State Board regulations also establish limits for contaminants in bottled water that provide the same protection for public health.

**The City of San Diego performs compliance sampling at the Alvarado Treatment Plant and Naval Facilities Engineering Command (NAVFAC) Southwest Utilities performs compliance sampling within the Naval Base Coronado (NBC) water distribution system for Naval Air Station North Island and Naval Amphibious Base.**

**The data for 2017 is summarized below. Data shown in brackets [example] is obtained from the City of San Diego Alvarado Treatment Plant monitoring. Tables 1, 2, 3, 4, 5, and 6 list all of the drinking water contaminants that were detected during the most recent sampling for the constituent.** 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. Any violation of an AL, MCL, MRDL, or TT is asterisked. Additional information regarding the violation is provided later in this report.

TABLE 1 – SAMPLING RESULTS SHOWING THE DETECTION OF COLIFORM BACTERIA

Microbiological Contaminants	Highest No. of Detections	No. of months in violation	MCL	MCLG	Typical Source of Bacteria
Total Coliform Bacteria (Total Coliform Rule)	(In a month)	0	One positive monthly sample	0	Naturally present in the environment
Fecal Coliform or <i>E. coli</i> (state Total Coliform Rule)	(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	-	Human and animal fecal waste
<i>E. coli</i> (Federal Revised Total Coliform Rule)	(In the year)	0	(a)	0	Human and animal fecal waste

(a) 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	Sample Date	No. of samples collected	90 <sup>th</sup> percentile level detected	No. sites exceeding AL	AL	PHG	Typical Source of Contaminant
Lead (ppb)	August 2017	20	ND	0	15	0.2	Internal corrosion of household water plumbing systems; discharges from industrial manufacturers; erosion of natural deposits
Copper (ppm)	August 2017	20	0.745	0	1.3	0.3	Internal corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives

TABLE 3 – SAMPLING RESULTS FOR SODIUM AND HARDNESS

Chemical or Constituent (and reporting units)	Sample Year	Level Detected (Average)	Range of Detections	MCL	PHG (MCLG)	Typical Source of Contaminant
Sodium (ppm)	2017	[77.9]	[52.2 – 100]	none	none	Salt present in the water and is generally naturally occurring
Hardness (ppm)	2017	[214]	[139 – 283]	none	none	Sum of polyvalent cations present in the water, generally magnesium and calcium, and are usually naturally occurring

TABLE 4 – 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
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## DISINFECTANT RESIDUAL AND DISINFECTION BY-PRODUCTS AND PRECURSORS

Chlorine Residual (ppm)	2017	1.11	0.2 – 3.2	[4.0] As Cl <sub>2</sub>	[4.0] As Cl <sub>2</sub>	Drinking Water disinfectant added for treatment
Total Trihalomethanes (TTHM) (ppb)	Quarterly	RAA = 22	10.0 – 31.0	80	[N/A]	By-product of drinking water disinfection
Haloacetic Acids (HAA) (ppb)	Quarterly	RAA = 8	ND – 9.4	60	[N/A]	By-product of drinking water disinfection
Bromate (ppb)	2017	[ND]	[ND – 10.4]	10	0.1	By-product of drinking water disinfection
Total Organic Carbon [TOC] (ppm)	2017	[2.8]	[1.9 – 5.0]	TT	n/a	Various natural and manmade sources

## OTHER PARAMETERS

Turbidity (NTU)	2017	[Max Level Found = 0.26]	[100 % of samples ≤ 0.3]	TT = 95% of samples ≤ 0.3	n/a	Soil runoff
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<b>CHEMICAL PARAMETERS</b>						
Arsenic (ppb)	2017	[ND]	[ND – ND]	10	0.004	Erosion of natural deposits, glass, and electronics production waste
Barium (ppm)	2017	[ND]	[ND – 0.10]	1	2	Erosion of natural deposits
Fluoride (naturally occurring) (ppm)	2017	[0.2]	[0.1 – 0.3]	2	1	Erosion of natural deposits
Fluoride (treatment-related) (ppm)	2017	[0.6]	[0.5 – 0.7]	2	1	Water additive that promotes strong teeth
Nitrate (as N) (ppm)	2017	[ND]	[ND – 0.4]	10	10	Runoff and leaching from fertilizer use; erosion of natural deposits
<b>RADIOACTIVE PARAMETERS</b>						
Gross Alpha Particle Activity (pCi/L)	2017	[ND]	n/a	15	(0)	Erosion of natural deposits
Gross Beta Particle Activity (pCi/L)	2017	[4.6]	n/a	50*	(0)	Decay of natural and manmade deposits
Radium 226 (pCi/L)	2017	[ND]	n/a	5**	0.05	Erosion of natural deposits
Radium 228 (pCi/L)	2017	[1.4]	n/a		0.019	Erosion of natural deposits
Uranium (pCi/L)	2017	[1.2]	n/a	20	0.43	Erosion of natural deposits

\*DDW considers 50 pCi/L to be the level of concern for beta particles. \*\*Combined Radium- 226 & 228 MCL

**TABLE 5 – DETECTION OF CONTAMINANTS WITH A SECONDARY DRINKING WATER STANDARD**

Chemical or Constituent (and reporting units)	Sample Year	Level Detected (Average)	Range of Detections	CA SMCL	CSD MDL (DLR)	Typical Source of Contaminant
Chloride (ppm)	2017	[88.4]	[61.8 – 110]	500	0.5	Runoff/leaching from natural deposits; seawater influence
Color (CU)	2017	[ND]	[ND – ND]	15	1	Naturally-occurring organic materials
Foaming Agents (MBAS)(ppb)	2017	[70]	n/a	500	30	Municipal and industrial waste discharges
Manganese (ppb)	2017	[ND]	[ND – 41]	50	20	Leaching from natural deposits
Odor- Threshold (OU)	2017	[ND]	[ND – 1]	3	(1)	Naturally-occurring organic materials
Specific Conductance (µS/cm)	2017	[746]	[476 – 970]	1,600	n/a	Substances that form ions when in water; seawater influence
Sulfate (ppm)	2017	[136]	[57.7 – 236]	500	(0.5)	Runoff/leaching from natural deposits; industrial wastes
Total Dissolved Solids (ppm)	2017	[457]	[293 – 625]	1000	10	Runoff/leaching from natural deposits

**TABLE 6 – DETECTION OF UNREGULATED CONTAMINANTS**

Chemical or Constituent (and reporting units)	Sample Year	Level Detected	Range of Detections	Notification Level	Health Effects Language
Boron (ppm)	2017	[0.13]	[0.10 – 0.14]	1	The babies of some pregnant women who drink water containing boron in excess of the notification level may have an increased risk of developmental effects, based on studies in laboratory animals.

### Additional General Information on Drinking Water

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. EPA'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. 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).

If present, elevated levels of 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. NAVFAC Southwest is responsible for providing high quality drinking water, but cannot control the variety of materials used in plumbing components. When your water has been sitting for several hours, you can minimize the potential for lead exposure by flushing your tap for 30 seconds to 2 minutes before using water for drinking or cooking. [Optional: If you do so, you may wish to collect the flushed water and reuse it for another beneficial purpose, such as watering plants.] If you are concerned about lead in your water, you may wish to have your water tested. Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available from the Safe Drinking Water Hotline (1-800-426-4701) or at <http://www.epa.gov/lead>.