## 2017 Consumer Confidence Report

# Water System Name:Naval Auxiliary Landing Field (NALF)Report Date:01 July 2018San Clemente Island (SCI) #3710707

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:	Blend of multiple sources from the Sweetwater Authority (SWA) and the City of San Diego (CITYSD) that is barged over to SCI from Naval Base San Diego (NBSD). The Majority of the water for the calendar year was from SWA.
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. Sweetwater Authority receives water from the Sweetwater River (drawn at the Sweetwater Reservoir in Spring Valley), deep freshwater wells in National City, brackish water wells in Chula Vista, and the region's imported supply.
Drinking Water Source Assessment information:	The City of San Diego and the Sweetwater Authority produces annual reports detailing the sources of our water, where it's purchased from, and how it is treated and delivered. These reports are available online at <u>https://www.sandiego.gov/water/quality/reports</u> and <u>https://www.sweetwater.org/274/Water-Quality</u> . The various sources of drinking water provided from the two distributors are vulnerable to contamination. Source water assessments are available for each of the sources.
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 <u>anh.ngo@navy.mil</u> , or during the weekly meetings held at San Clemente Island.
For more information, contact:	NBC Drinking Water Program ManagerPhone:(619) 545-2724

#### TERMS USED IN THIS REPORT

**CSD MDL (City of San Diego Water Quality Lab method detection limit):** lowest quantifiable concentration of a measured analyte detectable by the lab

**DLR:** detection limit for reporting

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 (SMCL) 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

**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.

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

**Variances and Exemptions**: State Board permission to exceed an MCL or not comply with a treatment technique under certain conditions.

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.

**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 1 Assessment**: 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.

**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

NL: notification level

OU: odor units

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

**ppb**: parts per billion or micrograms per liter ( $\mu$ g/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 and the Sweetwater Authority are responsible for compliance sampling and monitoring of the water provided. NAVFAC Southwest Utilities performs compliance sampling within the Naval Base Coronado (NBC) water distribution system for Naval Auxiliary Landing Field San Clemente Island.

The data for 2017 is summarized below. For water that is barged in from the City of San Diego, depending on how the system is running it may be obtained from the Otay Treatment Plant or the Alvarado Treatment Plant. Data shown in straight brackets [CITYSDALV] is obtained from the City of San Diego Alvarado Treatment Plant monitoring. Data shown in (CITYSDOTAY) is obtained from the City of San Diego Otay Treatment Plant. Data

shown in curly brackets {SWA} is obtained from the Sweetwater Authority treated-water monitoring. No brackets indicate the monitoring was conducted at Naval Base Coronado. 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.

IABLE I –		RESULT	S SHOWI	NG THE DI	TECHO	VOF COLIF	FORM BACTERIA
<b>Microbiological</b> <b>Contaminants</b> )	Highest No. of Detections	No. of months in violation		MCL		MCLG	Typical Source of Bacteria
Total Coliform Bacteria (state 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 a sample or system fails to analyz	are total coliform	-positive and i	s either <i>E. co</i> sample for <i>E</i>	<i>li</i> -positive or sys	stem fails to ta	ke repeat sample	s following E. coli-positive routine
					DETECTI	ON OF LEA	D 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	10	17.4	2	15	0.2	Internal corrosion of household wate plumbing systems; discharges from industrial manufacturers; erosion of natural deposits
Copper (ppm)	August 2017	10	.227	0	1.3	0.3	Internal corrosion of household plumbing systems; erosion of natura deposits; leaching from wood preservatives
	TABLE 3	- SAMPL	ING RES	ULTS FOR S	SODIUM A	AND HARDN	NESS
Chemical or Constituent (and reporting units)	Sample Year	Level Detecte (Averag	d T	Range of Detections	MCL	PHG (MCLG)	Typical Source of Contaminant
Sodium (ppm)	2017	[77.9] (103) {112}	(6	52.2 - 100] 57.4 - 125) 96 - 140}	none	none	Salt present in the water and is generally naturally occurring
Hardness (ppm)	2017	[214] (214) {227}	] (	139 – 283] 156 – 258) 100 – 300}	none	none	Sum of polyvalent cations present in the water, generally magnesium and calcium, and are usually naturally occurring
TABLE 4 – DE	TECTION O	F CONTA	MINANT	S WITH A <u>I</u>	PRIMARY	DRINKING	WATER STANDARD
Chemical or Constituent (and reporting units)	Sample Year	Level Detecte (Averag	d T	Range of Detections	MCL [MRDL]	PHG (MCLG) [MRDLG]	Typical Source of Contaminant
DISINFECTANT RESIDU	UAL AND DIS	INFECTIO	N BY-PRC	DUCTS ANI	D PRECUR	SORS	<u>.</u>
Chlorine Residual (ppm)	2017	1.124		0.46 - 2.2	[4.0] As Cl <sub>2</sub>	[4.0] As Cl <sub>2</sub>	Drinking water disinfectant added for treatment
Total Trihalomethanes (TTHM) (ppb)	Monthly	RAA =		5.2 - 113.5	80	[N/A]	By-product of drinking water disinfection
Haloacetic Acids (HAA) (ppb)	Monthly	RAA=3	37	2.0 - 80	60	[N/A]	By-product of drinking water disinfection
Chlorate (ppb)	2017	[n/a] (242)	(	[n/a] ND – 393)	n/a	NL = 800ppb	By-product of drinking water disinfection

		{320}	$\{130 - 590\}$			
Chlorite (ppb)	2017	[n/a] (0.45) {0.38}	$[n/a] \\ (ND - 1.0) \\ \{0.03 - 0.58\}$	1.0	0.05	By-product of drinking water disinfection
Total Organic Carbon (TOC)(ppm)	2017	[2.8] (4.6) {5.1}	[1.9 - 5.0] (2.0 - 6.7) (2.2 - 9.0)	TT	n/a	Various natural and manmade sources
OTHER PARAMETERS				-		-
Turbidity (NTU)	2017	[Max Level Found = 0.26] (Max Level Found = 0.14) {Max Level Found = 0.33}	[100%  of samples $\leq 0.3$ ] (100%  of samples $\leq 0.3$ ) $\{100\% \text{ of}$ samples $\leq 0.3$ }	$TT = 95\% \text{ of} \\ samples \\ \le 0.3$	n/a	Soil runoff
CHEMICAL PARAMETE	RS	,	, <b>,</b> ,			
Arsenic (ppb)	2017	[ND] (ND) {ND}	[ND] (ND) {ND}	10	0.004	Erosion of natural deposits, glass, and electronics production waste
Barium (ppm)	2017	[ND] (ND) {0.1}	[ND - 0.10] (ND - 0.10) {ND - 0.1}	1	2	Erosion of natural deposits
Fluoride (naturally occurring) (ppm)	2017	[0.2] (0.3) {0.6}	$[0.1 - 0.3] \\ (0.2 - 0.5) \\ \{\text{ND} - 0.8\}$	2	1	Erosion of natural deposits
Fluoride (treatment- related) (ppm)	2017	[0.6] (0.5)	[0.5 - 0.7] (0.3 - 0.6)	2	1	Water additive that promotes strong teeth
RADIOACTIVE PARAME	TERS	(0.5)	(0.3 - 0.0)	<u> </u>	<u> </u>	
Gross Alpha Particle	2017	[ND]	n/a	15	(0)	Erosion of natural deposits
Activity (pCi/L)		(6) {n/a}				
Gross Beta Particle Activity (pCi/L)	2017	[4.6] (4.1) {n/a}	n/a	50*	(0)	Decay of natural and manmade deposits
Radium 226 (pCi/L)	2017	[ND] (ND) {n/a}	n/a	5**	0.05	Erosion of natural deposits
Radium 228 (pCi/L)	2017	[1.4] (ND)	n/a	-	0.019	Erosion of natural deposits
Uranium (pCi/L)	2017	[1.2] (ND) {n/a}	n/a	20	0.43	Erosion of natural deposits
	× /	<u>.</u>		î		bined Radium- 226 & 228 MCL
TABLE 5 – DETH	ECTION OF	CONTAMINA	NTS WITH A <u>SF</u>	<b>CONDAR</b>	<u>Y</u> DRINKIN	NG WATER STANDARD
<b>Chemical or Constituent</b> (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] (139) {160}	$[61.8 - 110] \\ (83.6 - 170) \\ \{100 - 200\}$	500	0.5	Runoff/leaching from natural deposits; seawater influence
Color (CU)	2017	[ND] (2) {5}	[ND - ND] (ND - 3) {3 - 8}	15	1	Naturally-occurring organic materials
Foaming Agents (MBAS)(ppb)	2017	[70] (70) {ND}	n/a	500	30	Municipal and industrial waste discharges
Manganese (ppb)	2017	[ND] (ND) {ND}	[ND - 41] (ND - 23) {ND - 43}	50	20	Leaching from natural deposits
Odor- Threshold (OU)	2017	[ND] (1) {ND}	[ND - 1] (1 - 1) {ND - 1}	3	(1)	Naturally-occurring organic materials
Specific Conductance (µS/cm)	2017	[746] (876)	$[476 - 970] \\ (618 - 1050)$	1,600	n/a	Substances that form ions when in water; seawater influence

		{960}	{730-1200}				
Sulfate (ppm)	2017	[136]	[57.7 – 236]	500	(0.5)	Runoff/leaching from natural	
		(110)	(75.2 - 183)			deposits; industrial wastes	
		{127}	$\{34 - 221\}$				
Total Dissolved Solids	2017	[457]	[293 - 625]	1000	10	Runoff/leaching from natural	
(ppm)		(511)	(355 - 620)			deposits	
		{593}	$\{470 - 730\}$				
TABLE 6 – DETECTION OF UNREGULATED CONTAMINANTS							
Chemical or Constituent (and reporting units)	Sample Year	Level Detected	Range of Detections	Notifica	tion Level	Health Effects Language	
	-		0	Notifica	tion Level	Health Effects Language The babies of some pregnant	
	-		0	Notific2	tion Level	The babies of some pregnant women who drink water containing	
(and reporting units)	-	<b>Detected</b> [0.13]	Detections	Notifica	tion Level	The babies of some pregnant women who drink water containing boron in excess of the notification	
	Year	Detected	<b>Detections</b> [0.10 - 0.14]	Notifica	tion Level	The babies of some pregnant women who drink water containing	

### 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) or submit an online question at https://www.epa.gov/ground-water-and-drinking-water/safe-drinking-water-hotline.

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. EPA and 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 (1-800-426-4791).

If present, elevated levels of lead can cause serious health problems, especially for pregnant women and young children. 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 facility may be higher than at other buildings in the community as a result of materials used in the plumbing. If you are concerned about elevated lead levels in your building, you may wish to have your water tested and/or flush your tap for 30 seconds to 2 minutes before using tap water. Lead in drinking water is primarily from materials and components associated with service lines and home plumbing. Naval Facilities Engineering Command (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 the 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. If you do so, you may wish to collect the flushed water and reuse it for another beneficial purpose, such as watering plants. 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 <a href="http://www.epa.gov/lead">http://www.epa.gov/lead</a>.

Ten locations were sampled for lead in August 2017 at San Clemente Island. Two locations out of the ten indicated levels above the Action Level (the cottages: Building 60134 and 60135). This area is not highly used and goes through long periods of inactivity. After flushing, the cottages were resampled and the small cottage Building 60135 had results below the Action Level. Naval Base Coronado implemented corrective actions for the cottages to ensure health, safety, and compliance by investigating the lead source and remediated by replacing the plumbing infrastructure to both facilities which was completed on 19 April 2018. Furthermore, as part of a step-out investigation, three additional samples were taken in the vicinity of the cottages. Out of the three locations sampled, one location had a lead concentration above the Action Level (Building 60114). Naval Base Coronado is currently investigating the source of the lead and intends to implement corrective actions in this building.

NAVFAC Southwest personnel are conducting an investigation to determine what actions are necessary to minimize lead in the drinking water at SCI. Although additional testing is being performed, testing has not been performed at all of the buildings at SCI. Testing the water is essential because you cannot see, taste, or smell lead in the drinking water. NAVFAC Southwest will test approximately 100 drinking water fixtures over the next five years, roughly 10 samples every six months; however, Public Works Department plans to expedite this schedule. Investigations and corrective actions will be implemented for any areas that may exceed the action level.