

## 2020 Consumer Confidence Report

### Water System Information

Water System Name: Darwin Community Service District

Report Date: 6/9/2021

Type of Water Source(s) in Use: Spring 01

Name and General Location of Source(s): Spring 01; ~ 9 miles south of the service area, on the naval base

Drinking Water Source Assessment Information: Assessment Performed by, and may be viewed at, Inyo County Environmental Health Services, County Services Building, 207 W. South Street Bishop CA 93514, on February 2003, on source Intake 01. The activities to which the Darwin Community Services District water supply is most vulnerable includes the military operations at the China Lake Naval Weapons Base and the many historic mining sites in the area. There have been no contaminants detected in the water supply, however the source is still considered vulnerable to activities located near the drinking water source.

Time and Place of Regularly Scheduled Board Meetings for Public Participation: The DCSD Board meetings are held the second Sunday of each month at 9:30 a.m. Location is at the 'Darwin Station,' corner of Main and Market Streets.

For More Information, Contact: Michael Laemmle, 760-876-5605

### About This Report

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 to December 31, 2020 and may include earlier monitoring data.

### Importance of This Report Statement in Five Non-English Languages (Spanish, Mandarin, Tagalog, Vietnamese, and Hmong)

Language in Spanish: Este informe contiene información muy importante sobre su agua para beber. Favor de comunicarse Darwin CSD a : P O Box 5 Darwin CA 93522, 760-876-5605 para asistirlo en español.

Language in Mandarin: 这份报告含有关于您的饮用水的重要讯息。请用以下地址和电话联系 Darwin CSD 以获得中文的帮助: : P O Box 5 Darwin CA 93522, 760-876-5605.

Language in Tagalog: Ang pag-uulat na ito ay naglalaman ng mahalagang impormasyon tungkol sa inyong inuming tubig. Mangyaring makipag-ugnayan sa Darwin CSD : P O Box 5 Darwin CA 93522, o tumawag sa 760-876-5605 para matulungan sa wikang Tagalog.

Language in Vietnamese: Báo cáo này chứa thông tin quan trọng về nước uống của bạn. Xin vui lòng liên hệ Darwin CSD tại : P O Box 5 Darwin CA 93522, 760-876-5605 để được hỗ trợ giúp bằng tiếng Việt.

Language in Hmong: Tsab ntawv no muaj cov ntsiab lus tseem ceeb txog koj cov dej haus. Thov hu rau Darwin CSD ntawm : P O Box 5 Darwin CA 93522, 760-876-5605 rau kev pab hauv lus Askiv.

## Terms Used in This Report

Term	Definition
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 <i>E. coli</i> MCL violation has occurred and/or why total coliform bacteria have been found in our water system on multiple occasions.
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).
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.
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.
Regulatory Action Level (AL)	The concentration of a contaminant which, if exceeded, triggers treatment or other requirements that a water system must follow.
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.
Variances 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.
ND	Not detectable at testing limit.
ppm	parts per million or milligrams per liter (mg/L)
ppb	parts per million or milligrams per liter (mg/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)

## Sources of Drinking Water and Contaminants that May Be Present in Source 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 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.

## Regulation of Drinking Water and Bottled Water Quality

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.

## About Your Drinking Water Quality

### Drinking Water Contaminants Detected

Tables 1, 2, 3, 4, 5, 6, and 8 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**

Complete if bacteria are detected.

Microbiological Contaminants	Highest No. of Detections	No. of Months in Violation	MCL	MCLG	Typical Source of Bacteria
Total Coliform Bacteria (State Total Coliform Rule)	0	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	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	None	Human and animal fecal waste
<i>E. coli</i> (Federal Revised Total Coliform Rule)	0	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**

Complete if lead or copper is detected in the last sample set.

Lead and Copper	Sample Date	No. of Samples Collected	90 <sup>th</sup> Percentile Level Detected	No. Sites Exceeding AL	AL	PHG	No. of Schools Requesting Lead Sampling	Typical Source of Contaminant
Lead (ppb)	9/10/2020	5	0	0	15	0.2	None	Internal corrosion of household water plumbing systems; discharges from industrial manufacturers; erosion of natural deposits
Copper (ppm)	9/10/2020	5	.08	0	1.3	0.3	Not applicable	Internal corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives

**Table 3. Sampling Results for Sodium and Hardness**

<b>Chemical or Constituent (and reporting units)</b>	<b>Sample Date</b>	<b>Level Detected</b>	<b>Range of Detections</b>	<b>MCL</b>	<b>PHG (MCLG)</b>	<b>Typical Source of Contaminant</b>
Sodium (ppm)	3/24/20	35	n/a	None	None	Salt present in the water and is generally naturally occurring
Hardness (ppm)	3/24/20	300	n/a	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**

<b>Chemical or Constituent (and reporting units)</b>	<b>Sample Date</b>	<b>Level Detected</b>	<b>Range of Detections</b>	<b>MCL [MRDL]</b>	<b>PHG (MCLG) [MRDLG]</b>	<b>Typical Source of Contaminant</b>
Fluoride (mg/L)	3/24/2020	0.21	n/a	2	1	Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories
HAA5 (Sum of 5 Haloacetic Acids) (ug/L)	6/19/2020	3.1*	n/a	60	n/a	Byproduct of drinking water disinfection
Nitrate (as Nitrogen, N) (mg/L)	3/24/2020	0.42	n/a	10	10	Runoff and leaching from fertilizer use; leaching from septic tanks and sewage; erosion of natural deposits
Turbidity (NTU)	3/24/2020	1.0*	n/a	TT	n/a	Soil runoff
TTHMs (Total Trihalomethanes) (ug/L)	6/19/2020	160*	n/a	80	n/a	Byproduct of drinking water disinfection

**Table 5. Detection of Contaminants with a Secondary Drinking Water Standard**

<b>Chemical or Constituent (and reporting units)</b>	<b>Sample Date</b>	<b>Level Detected</b>	<b>Range of Detections</b>	<b>SMCL</b>	<b>PHG (MCLG)</b>	<b>Typical Source of Contaminant</b>
Chloride (mg/L)	3/24/2020	30		500		Runoff/leaching from natural deposits; seawater influence
Color (Units)	3/24/2020	10		15		Naturally-occurring organic materials
Iron (ug/L)	3/24/2020	30		300		Leaching from natural deposits; industrial wastes
Manganese (ug/L)	3/24/2020	27		50		Leaching from natural deposits
Sulfate (mg/L)	3/24/2020	150		500		Runoff/leaching from natural deposits; industrial wastes
Specific Conductance (µS/cm)	3/24/2020	740		1600		Substances that form ions when in water; seawater influence
Total Dissolved Solids (TDS) (mg/L)	3/24/2020	500		1000		Runoff/leaching from natural deposits
Turbidity (NTU)	3/24/2020	1.0*		TT	N/A	Soil runoff

**Table 6. Detection of Unregulated Contaminants**

<b>Chemical or Constituent (and reporting units)</b>	<b>Sample Date</b>	<b>Level Detected</b>	<b>Range of Detections</b>	<b>Notification Level</b>	<b>Health Effects Language</b>
Dimethoate (CYGON) (ug/L)	5/20/2019	<10 ug/L		N/A	N/A
Diazinon	5/20/2019	<0.25 ug/L		N/A	N/A
Metolachlor	5/20/2019	<0.50 ug/L		N/A	N/A

### 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).

**Lead-Specific Language:** 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. Darwin Community Service District 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 (1-800-426-4791) or at <http://www.epa.gov/lead>.

### Summary Information for Violation of a MCL, MRDL, AL, TT, or Monitoring and Reporting Requirement

**Table 7. Violation of a MCL, MRDL, AL, TT or Monitoring Reporting Requirement**

Violation	Explanation	Duration	Actions Taken to Correct Violation	Health Effects Language
TTHM Monitoring	the system failed to comply with a primary drinking water standard and the TTHM MCL by not sampling quarterly.	9/15/19-present	increased the monitoring to one sample per quarter each for TTHM and HAA5.	Some people who drink water containing trihalomethanes in excess of the MCL over many years may experience liver, kidney, or central nervous system problems, and may have an increased risk of getting cancer.
HAA5 Monitoring	the system failed to comply with a primary drinking water standard and the TTHM MCL by not sampling quarterly.	9/15/19-present	increased the monitoring to one sample per quarter each for TTHM and HAA5.	Some people who drink water containing haloacetic acids in excess of the MCL over many years may have an increased risk of getting cancer.
Certified Treatment Operator	The system failed to employ or utilize a water treatment operator certified at the appropriate level for the classification of the treatment plant and distribution system. (T2, D1)	10/8/20-present	The operator has taken the required training classes, and applied to take the written examination. However written exams are currently delayed due to covid.	None
Surface Water Treatment Rule Violation (TT)	In August 2019, the System's surface water treatment was taken offline due to severe corrosion of the raw water tank. The System currently bypasses the raw water tank and bag filtration. The System currently treats water with chlorination and delivers monthly Boil Water Notices to its population.	8/17/19 – present	Pending construction of a new raw water tank in 2021.	Inadequately protected water may contain disease-causing organisms. These organisms can cause symptoms such as diarrhea, nausea, cramps, and associated headaches.

## For Systems Providing Surface Water as a Source of Drinking Water

**Table 10. Sampling Results Showing Treatment of Surface Water Sources**

Treatment Technique <sup>(a)</sup> (Type of approved filtration technology used)	SWRCB approved Rosedale bag filtration technology/chlorination.
Turbidity Performance Standards <sup>(b)</sup> (that must be met through the water treatment process)	<p>Turbidity of the filtered water must:</p> <p>1 – Be less than or equal to [Enter Turbidity Performance Standard to Be Less Than or Equal to 95% of Measurements in a Month] NTU in 95% of measurements in a month.</p> <p>2 – Not exceed [Enter Turbidity Performance Standard Not to Be Exceeded for More Than Eight Consecutive Hours] NTU for more than eight consecutive hours.</p> <p>3 – Not exceed [Enter Turbidity Performance Standard Not to Be Exceeded at Any Time] NTU at any time.</p>
Lowest monthly percentage of samples that met Turbidity Performance Standard No. 1.	100% *
Highest single turbidity measurement during the year	1.0 NTU, 3/24/2020
Number of violations of any surface water treatment requirements	1 continuously, untreated surface water due to raw water tank failure

(a) A required process intended to reduce the level of a contaminant in drinking water.

(b) Turbidity (measured in NTU) is a measurement of the cloudiness of water and is a good indicator of water quality and filtration performance. Turbidity results which meet performance standards are considered to be in compliance with filtration requirements.

## Summary Information for Violation of a Surface Water TT

**Table 11. Violation of Surface Water TT**

Violation	Explanation	Duration	Actions Taken to Correct Violation	Health Effects Language
<b>SWTR-Filtration* (TT)</b>	See below	August 17, 2019-present	Pending construction of a new raw water tank in 2021.	Inadequately protected water may contain disease-causing organisms. These organisms can cause symptoms such as diarrhea, nausea, cramps, and associated headaches.

\*The water system is wholly served by one spring and one surface water treatment plant. The raw water tank to the treatment plant developed multiple leaks during summer 2019, and upon evaluation could not hold enough water to supply the treatment plant. As a result, the raw water tank was taken out of service. The spring water source was temporarily modified to bypass the treatment plant and deliver water straight to the finished water tank without treatment except for chlorine. The water system was placed on a boil water order due to the unfiltered surface water. Currently, the raw water tank continues to be bypassed pending construction of a new tank in 2021. The boil order will remain in effect, and the Darwin CSD staff will continue to issue monthly boil water notices to the community, until the treatment plant resumes operation and returns to compliance with treatment requirements.

During the period: August 17, 2019 – current, filtered water turbidity monitoring has been suspended.

Turbidity has no health effects. However, high levels of turbidity can interfere with disinfection and provide a medium for microbial growth. Turbidity may indicate the presence of disease-causing organisms. These organisms include bacteria, viruses, and parasites that can cause symptoms such as nausea, cramps, diarrhea, and associated headaches.