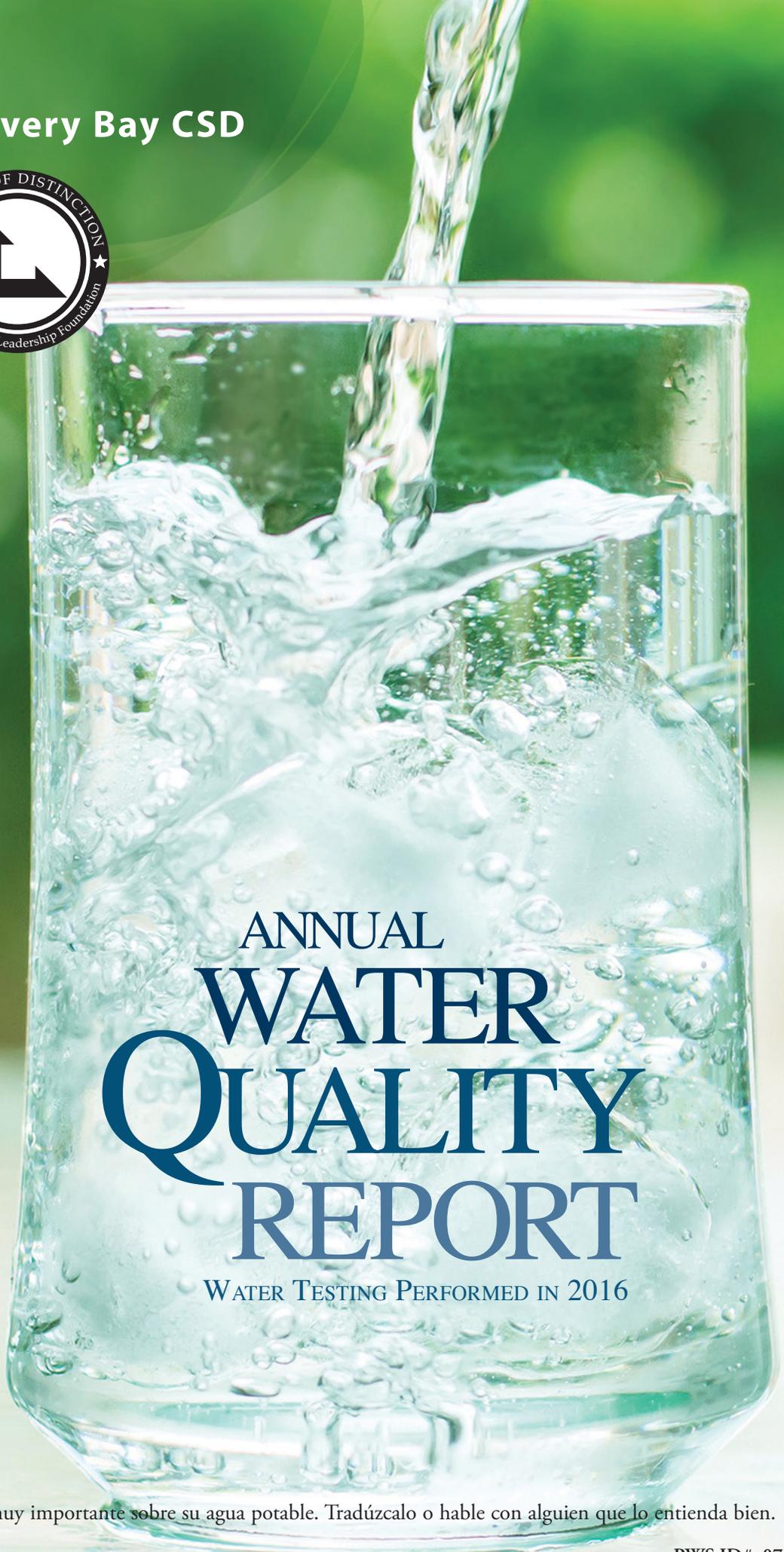


Presented By
Town of Discovery Bay CSD



ANNUAL
WATER
QUALITY
REPORT
WATER TESTING PERFORMED IN 2016

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

PWS ID#: 0710009

We've Come a Long Way

Once again we are proud to present our annual water quality report covering the period between January 1 and December 31, 2016. In a matter of only a few decades, drinking water has become exponentially safer and more reliable than at any other point in human history. Our exceptional staff continues to work hard every day—at any hour—to deliver the highest quality drinking water without interruption. Although the challenges ahead are many, we feel that by relentlessly investing in customer outreach and education, new treatment technologies, system upgrades, and training, the payoff will be reliable, high-quality tap water delivered to you and your family.

Where does our water in Discovery Bay come from?

The Town of Discovery Bay CSD obtains its water from six (6) ground water wells underlying the community, which then flows through two (2) water treatment facilities that remove iron and manganese from our ground water sources. The average depth of our wells are approximately 400 feet.

Important Health Information

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 may be particularly at risk from infections. These people should seek advice about drinking water from their health care providers. The U.S. EPA/CDC (Centers for Disease Control and Prevention) guidelines on appropriate means to lessen the risk of infection by *Cryptosporidium* and other microbial contaminants are available from the Safe Drinking Water Hotline at (800) 426-4791 or <http://water.epa.gov/drink/hotline>.



Substances That Could Be in 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.

In order to ensure that tap water is safe to drink, the U.S. Environmental Protection Agency (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. 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. Additional information on bottled water is available on the California Department of Public Health website (<http://www.cdph.ca.gov/programs/Pages/fdbBVW.aspx>). 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.

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 can 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, which are by-products of industrial processes and petroleum production, and which can also come from gas stations, urban stormwater runoff, agricultural applications, and septic systems;

Radioactive Contaminants, that can be naturally occurring or can be the result of oil and gas production and mining activities.

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

Source Water Assessment

Vulnerability assessments are required for all new sources under the CA Waterworks Standards (Chapter 16 of Title 22, CA Code of Regulations), which became effective March 9, 2008. Because Wells 1, 2, 4A, and 5A were all constructed and permitted prior to this date, they are exempt. A source water assessment was conducted for the Well 6 of the Town of Discovery Bay water system in May 2009 and for Well 7 in August 2015.

Discussion of Vulnerability

A known contaminant plume of MTBE exists beneath a site on the corner of Discovery Bay Boulevard and Willow Lake Road, which used to be a gas station (located southwest of the Well No. 6). Since the removal of three former underground storage tanks, piping and dispenser islands in 1998, remediation efforts have been underway for the removal of MTBE in the shallow aquifer. The plume occurs in the shallow aquifer extending to 25.5 feet below ground surface, at which a low permeability layer 13 feet thick prevents further vertical migration. The Central Valley Regional Water Quality Control Board approved monitored natural attenuation as a corrective action method in February 2008, in part because of naturally decreasing concentration trends.

Although there is not a reported ground water contamination associated with an identified dry cleaning business, it is considered a possible contaminating activity (PCA) due to proximity.

The PCA concerned with unauthorized dumping is associated with boats that have sunk and accidental spills of fuel product into the waterways that are part of Discovery Bay. From 1991 to present there have been more than 20 reports of sunken vessels and product sheens observed in the waterways.

Obtaining Information

A copy of the complete assessment may be viewed at State Water Resources Control Board Division of Drinking Water 850 Marina Bay Parkway, Bldg., P-2 Richmond, CA 94804.

You may request a summary of the assessment be sent to you by contacting Marco Pacheco, P.E., Associate Sanitary Engineer, at phone: (510) 620-3467; fax: (510) 620-3455; or e-mail: marco.pacheco@waterboards.ca.gov.

Getting Involved with the Community

If you want to learn and get involved with your community, please attend the Town of Discovery Bay Community Services District Board of Director's regularly scheduled meetings. They are held on the 1st and 3rd Wednesdays of each month, starting at 7:00 p.m. at the Town of Discovery Bay Community Center located at 1601 Discovery Bay Blvd. Please also view our website for news, current and past agendas and minutes of our Board meetings, and issues that affect our community at www.todb.ca.gov.

Board Members for 2017

Bob Leete, *President*

Kevin Graves, *Vice President*

Bill Mayer, *Director*

Bill Pease, *Director*

Chris Steele, *Director*

Lead in Home Plumbing

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. We are 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. (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 or at www.epa.gov/lead.

QUESTIONS?

If you have any questions about this report or concerns about your water services, please contact the Town of Discovery Bay CSD district office at (925) 634-1131 or visit our website at www.todb.ca.gov. We want you to be informed about your water quality and water services, and we welcome any questions or concerns.

Water Conservation. It's For Life.

The potential for wide swings in precipitation from one year to the next shows why we must be prepared for either flood or drought in any year. Although this year may be wet, dry conditions could return again next year. 2017 may be only a wet outlier in an otherwise dry extended period. Unfortunately, the scientific ability to determine if next year will be wet or dry (known as sub-seasonal to seasonal forecasting, or long-range weather forecasting) isn't yet capable of delivering reliable predictions.

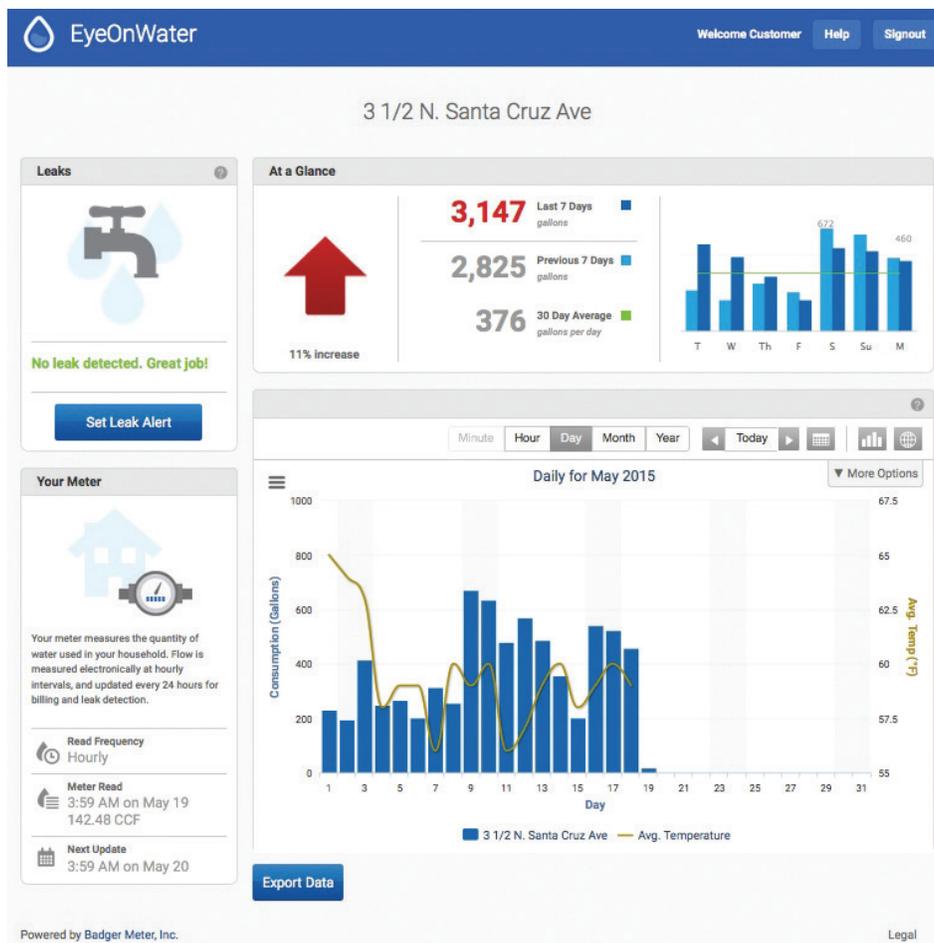
Within Discovery Bay, many previously unmetered homes will have their new meter installed, and residents will be able to monitor their water usage with the Water Utility Customer Portal, which will ultimately result in saving water and money.

To use **EyeOnWater** and see your metered water use, follow these easy steps:

1. Visit <https://eyeonwater.com/signup> on your computer using a supported web browser.
2. Enter your service area zip code: 94505
3. Enter account number on your water bill (include dashes & periods)
4. Enter your e-mail address
5. Create and confirm a password
6. You will get a confirmation e-mail from Badger Meter, Inc. Verify your e-mail address by clicking on the link in the confirmation e-mail. When that's done, sign in using your e-mail and password.

Although the drought feels like it's over, there are still government restrictions in place to use water wisely.

1. Continue to prevent wasteful practices such as watering lawns within 48 hours of a rainstorm.
2. Hosing down sidewalks and driveways is prohibited.
3. Overwatering landscaping to the point where water runs into the streets is prohibited.



Sampling Results

Our water is monitored for many different kinds of contaminants on a very strict sampling schedule. The information below represents only those substances that were detected; our goal is to keep all detects below their respective maximum allowed levels. The State recommends monitoring for certain substances less than once per year because the concentrations of these substances do not change frequently. In these cases, the most recent sample data are included, along with the year in which the sample was taken.

REGULATED SUBSTANCES

SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED	MCL [MRDL]	PHG (MCLG) [MRDLG]	AMOUNT DETECTED	RANGE LOW-HIGH	VIOLATION	TYPICAL SOURCE
Arsenic (ppb)	2015	10	0.004	ND	ND-4	No	Erosion of natural deposits; runoff from orchards; glass and electronics production wastes
Barium (ppm)	2015	1	2	ND	ND-0.21	No	Discharges of oil drilling wastes and from metal refineries; erosion of natural deposits
Fluoride (ppm)	2015	2.0	1	0.4	ND-1.5	No	Erosion of natural deposits; water additive that promotes strong teeth; discharge from fertilizer and aluminum factories
Gross Alpha Particle Activity (pCi/L)	2016	15	(0)	2.628	ND-5.27	No	Erosion of natural deposits
Haloacetic Acids- Stage 2 (ppb)	2016	60	NA	15 (Average Level)	5-24	No	By-product of drinking water disinfection
Selenium (ppb)	2015	50	30	ND	ND-6	No	Discharge from petroleum, glass, and metal refineries; erosion of natural deposits; discharge from mines and chemical manufacturers; runoff from livestock lots (feed additive)
TTHMs [Total Trihalomethanes]- Stage 2 (ppb)	2016	80	NA	65 (Average Level)	19.2-122	No	By-product of drinking water disinfection

Tap water samples were collected for lead and copper analyses from sample sites throughout the community

SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED	AL	PHG (MCLG)	AMOUNT DETECTED (90TH%TILE)	SITES ABOVE AL/TOTAL SITES	VIOLATION	TYPICAL SOURCE
Copper (ppm)	2015	1.3	0.3	0.30	0/45	No	Internal corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives
Lead (ppb)	2015	15	0.2	2.1	0/45	No	Internal corrosion of household water plumbing systems; discharges from industrial manufacturers; erosion of natural deposits

SECONDARY SUBSTANCES

SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED	SMCL	PHG (MCLG)	AMOUNT DETECTED	RANGE LOW-HIGH	VIOLATION	TYPICAL SOURCE
Chloride (ppm)	2015	500	NS	154	82-480	No	Runoff/leaching from natural deposits; seawater influence
Color (Units)	2015	15	NS	4	ND-10	No	Naturally occurring organic materials
Iron (ppb)	2015	300	NS	128	ND-240	No	Leaching from natural deposits; industrial wastes
Manganese (ppb)	2015	50	NS	110	50-170	No	Leaching from natural deposits
Odor-Threshold (TON)	2015	3	NS	1	ND-4	No	Naturally occurring organic materials
Specific Conductance (µS/cm)	2015	1,600	NS	1,163	941-2,190	No	Substances that form ions when in water; seawater influence
Sulfate (ppm)	2015	500	NS	77	47-98	No	Runoff/leaching from natural deposits; industrial wastes
Total Dissolved Solids (ppm)	2015	1,000	NS	678	560-1,250	No	Runoff/leaching from natural deposits
Turbidity (NTU)	2015	5	NS	0.4	ND-1.1	No	Soil runoff
Zinc (ppm)	2015	5.0	NS	ND	ND-0.06	No	Runoff/leaching from natural deposits

Treated Water

SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED	SMCL	PHG (MCLG)	AMOUNT DETECTED	RANGE LOW-HIGH	VIOLATION	TYPICAL SOURCE
Iron (ppb)	2016	300	NS	ND	ND-ND	No	Leaching from natural deposits; Industrial wastes
Manganese (ppb)	2016	50	NS	ND	ND-ND	No	Leaching from natural deposits

UNREGULATED AND OTHER SUBSTANCES ¹

SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED	AMOUNT DETECTED	RANGE LOW-HIGH	TYPICAL SOURCE
Boron ² (ppm)	2015	2.5	2.2–3.5	NA
Hardness (ppm)	2015	196	121–360	Sum of polyvalent cations present in the water, generally magnesium and calcium, and are usually naturally occurring
Sodium (ppm)	2015	165	111–293	Salt present in the water and is generally naturally occurring

¹ Unregulated contaminant monitoring helps U.S. EPA and the State Water Resources Control Board to determine where certain contaminants occur and whether the contaminants need to be regulated.

² Some pregnant women who drink water containing boron in excess of the notification level may have an increased risk of having babies with developmental effects, based on studies in laboratory animals.

Definitions

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

µS/cm (microsiemens per centimeter): A unit expressing the amount of electrical conductivity of a solution.

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

MCLG (Maximum Contaminant Level Goal): 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. EPA.

MRDL (Maximum Residual Disinfectant Level): 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.

MRDLG (Maximum Residual Disinfectant Level Goal): 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.

NA: Not applicable

ND (Not detected): Indicates that the substance was not found by laboratory analysis.

NS: No standard

NTU (Nephelometric Turbidity Units): Measurement of the clarity, or turbidity, of water. Turbidity in excess of 5 NTU is just noticeable to the average person.

pCi/L (picocuries per liter): A measure of radioactivity.

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

PHG (Public Health Goal): 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 EPA.

ppb (parts per billion): One part substance per billion parts water (or micrograms per liter).

ppm (parts per million): One part substance per million parts water (or milligrams per liter).

TON (Threshold Odor Number): A measure of odor in water.