

PWS ID#: 0710009

## **Quality First**

Once again, we are pleased to present our annual water quality report. As in years past, we are committed to delivering the best-quality drinking water possible. To that end, we remain vigilant in meeting the challenges of new regulations, source water protection, water conservation, and community outreach and education while continuing to serve the needs of all our water users. Thank you for allowing us the opportunity to serve you and your family.

We encourage you to share your thoughts with us on the information contained in this report. After all, well-informed customers are our best allies.

## **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 2018**

Kevin Graves, *President*Bill Mayer, *Vice President*Bob Leete, *Director*Bill Pease, *Director*Chris Steele, *Director* 

# 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**

http://water.epa.gov/drink/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 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

## **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.

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. 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, 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 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, which 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.

## 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. Small Changes = BIG IMPACT

Water is a precious and limited resource, especially in drought-prone California where the next dry period could be right around the corner. As a result, water conservation and the efficient use of California's water supply are major priorities for the State.

The Save Our Water program helps Californians learn ways to save water at home to reduce the effects of drought. Even the simplest changes to daily routines can have a significant impact. By making conservation a way of life in California, we save water, minimize water waste, rebuild our underground aquifers, prepare for the uncertainties of climate change, and minimize the harmful effects of drought.

We encourage all to embrace wise water use as a daily habit, whether we are experiencing a year of heavy or meager rain. Start by following the water conservation tips below and visit SaveOurWater.com for more tips and tools.

## **Indoor Conservation Tips**

#### **LAUNDRY ROOM**

Use the washing machine for full loads only to save water and energy. Install a water-efficient clothes washer.

Save: 16 gallons/load.

#### **KITCHEN**

Run the dishwasher only when full to save water and energy. Install a water- and energy-efficient dishwasher.

♦ Save: 3 to 8 gallons/load.

#### **BATHROOM**

Install low-flow shower heads.

♦ Save: 2.5 gallons/minute

Take five-minute showers instead of 10-minute showers.

• Save: Reducing five minutes will save 2.5 gallons with a low-flow shower head, 25 gallons with a standard 5 gallon per minute shower head.

Fill the bathtub halfway or less.

Save: 12 gallons

Install a high-efficiency toilet.

Save: 19 gallons per person/day

Install aerators on bathroom faucets.

♦ Save: 1.2 gallons per person/day

Turn water off when brushing teeth or shaving.

Save: approximately 8 gallons/day

Don't use the toilet as a wastebasket.

♦ Save: 1.6 to 5 gallons/flush

## **Outdoor Conservation Tips**

#### **LANDSCAPE**

Reduce your watering days to once or twice per week. Water your lawn only when it needs it. Water early in the morning or later in the evening when temperatures are cooler.

♦ Save: 25 gallons/each time you water

Check your sprinkler system frequently and adjust sprinklers so only your lawn is watered and not the house, sidewalk, or street.

♦ Save: 12 to 15 gallons/each time you water

Choose a water-efficient irrigation system such as drip irrigation for your trees, shrubs, and flowers.

♦ Save: 15 gallons/each time you water

Put a layer of mulch around trees and plants to reduce evaporation and keep the soil cool. Organic mulch also improves the soil and prevents weeds.

♦ Save: 20 to 30 gallons/each time you water/1,000 sq. ft.

Plant drought-resistant trees and plants.

♦ Save: 30 to 60 gallons/each time you water per 1,000 sq. ft.

#### **CLEANUP**

Use a broom to clean driveways, sidewalks, and patios, not your hose.

♦ Save: 8 to 18 gallons/minute

Wash cars or boats with a bucket, sponge, and a hose with self-closing nozzle.

♦ Save: 8 to 18 gallons/minute

#### **ACTIVITIES**

Teach children that the hose and sprinkler are not toys. Install a pool/spa cover to reduce evaporation and filter backwash.

♦ Save: 30 gallons/day

Test pool and spa water frequently and maintain appropriate chemical balances to avoid the need to drain it except for structural repairs. Check your pool and pool plumbing for leaks.

#### **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 1B, 2, 4A, and 5A were all constructed and permitted prior to this date, they are exempt. Although not required, the Town performed water assessment tests on Wells 1B, 2, and 4A in December 2017. A source water assessment was conducted for Well 6 of the Town of Discovery Bay water system in May 2009 and for Well 7 in August 2015.

A copy of the complete assessment may be viewed at CA 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., Senior Water Resources Control Engineer, Phone: (510) 620-3454; Fax: (510) 620-3455; E-mail: Marco.Pacheco@waterboards.ca.gov.

## **Lead Water Testing for Schools**

The State of California requires water providers to contact public schools within their jurisdiction to conduct water sampling and test for the presence of lead. The sampling draws from various staff and student water fountains. In the Byron Unified School District, Discovery Bay Elementary School and Point of Timber Elementary School receive their water from the Town of Discovery Bay. Also being tested are Excelsior Middle School and Old River Elementary School.

In compliance with State Law AB 746, samples will be taken during the first quarter of 2018 from approximately five drinking water locations used by staff and students at each school. Then, the samples will be submitted to a state-certified laboratory to test only for lead.

If any sample is higher than 15 parts per billion for lead, a re-sample will be taken at the same location(s).

Please direct any questions on lead water testing for schools to Water & Wastewater Manager Virgil Koehne at vkoehne@todb.ca.gov.

## **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.

### **Test Results**

To ensure that tap water is safe to drink, the U.S. EPA and the State Water Resource Control Board (State Board) prescribe regulations that limit the amount of certain contaminants in water provided by public water systems.

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 SUBSTAN	GULATED 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 (ppb)	2017	60	NA	14	5–26	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] (ppb)	2017	80	NA	48.06	24–82.5	No	By-product of drinking water disinfection
To water complex ways collected for lead and course analysis from complex sites throughout the community							

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 at 60° C (TON)	2015	3	NS	1	ND-4	No	Naturally occurring organic materials
Specific Conductance (µmhos/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)	2017	5	NS	0.6	0.2-1.2	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)	2017	300	NS	ND	ND-ND	No	Leaching from natural deposits; Industrial wastes
Manganese (ppb)	2017	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 <sup>2</sup> (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

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.

#### **Definitions**

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

(micromhos per centimeter): A unit expressing the amount of electrical conductivity of a solution.

**LRAA** (Locational Running Annual Average): The average of sample analytical results for samples taken at a particular monitoring location during the previous four calendar quarters. Amount Detected values for TTHMs and HAAs are reported as the highest LRAAs.

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.

<sup>&</sup>lt;sup>2</sup> 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.