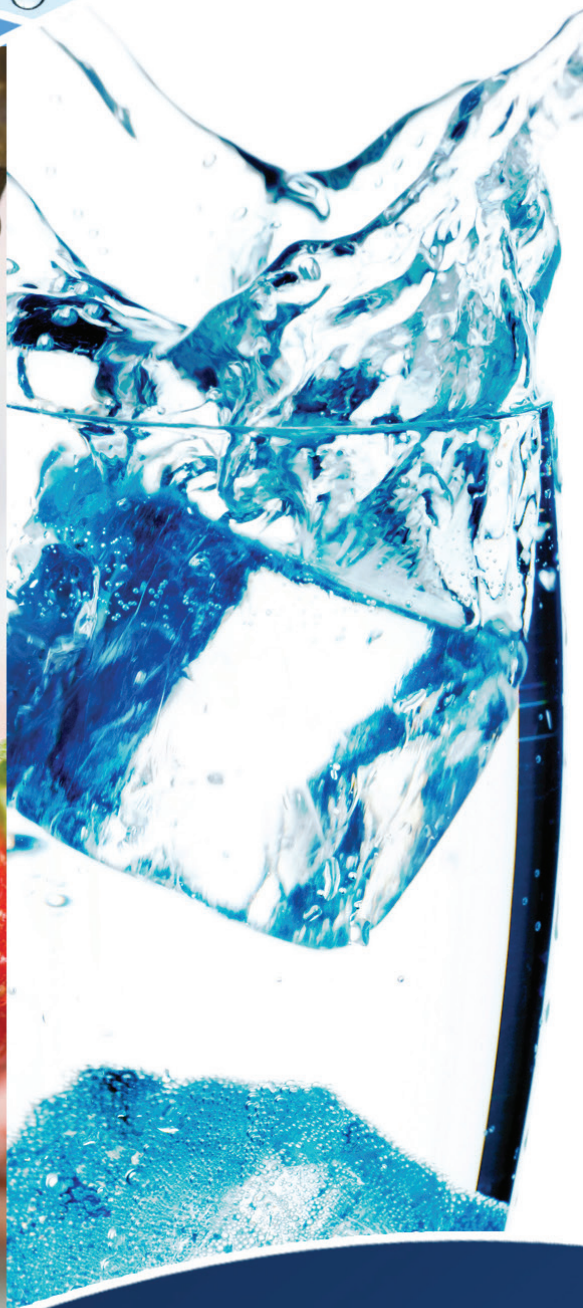


ANNUAL WATER QUALITY REPORT

WATER TESTING
PERFORMED
IN 2014



Presented By
Town of Discovery Bay CSD

Our Mission Continues

We are proud to present once again our annual water quality report covering all testing performed between January 1 and December 31, 2014. Most notably, last year marked the 40th anniversary of the Safe Drinking Water Act (SDWA). This rule was created to protect public health by regulating the nation's drinking water supply. We celebrate this milestone as we continue to manage our water system with a mission to deliver the best quality drinking water. By striving to meet the requirements of SDWA, we are ensuring a future of healthy, clean drinking water for years to come.

Please let us know if you ever have any questions or concerns about your water.



Getting Involved with the Community

If you want to learn about 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 first and third Wednesdays of each month, starting at 7:00 p.m. at the Town of Discovery Bay Community Center located at 1601 Discovery Bay Boulevard. Please also view our Web site 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 2015

- Chris Steele, *President* • Bill Pease, *Vice President*
- Kevin Graves, *Director* • Robert Leete, *Director*
- Mark Simon, *Director*

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 State Water Resources Control Board's Division of Drinking Water (DDW) prescribe regulations that limit the amount of certain contaminants in water provided by public water systems. The California Department of Public Health regulations also establish limits for contaminants in bottled water that must 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, 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 by-products of industrial processes and petroleum production and that 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.

QUESTIONS?

If you have any questions about this report or concerns about your water utility, please contact the Town of Discovery Bay CSD district office at (925) 634-1131 or Veolia Water at (925) 634-8818. You can also visit us on the Web at www.todb.ca.gov. We want our valued customers to be informed about their water utility.

Drought Enters Fourth Year

Following the lowest snowpack ever recorded and with no end in sight to the unprecedented 4-year drought, Governor Brown recently issued an Executive Order announcing mandatory 25% reductions of water use by all Californians. The new restrictions impact all residents in the Town of Discovery Bay, and we encourage everyone to do their part to conserve.

There are a number of simple and easy approaches that everyone can do to help conserve water in and around the home. Rethinking the way you use water—both indoors and outdoors—will help stretch our limited supplies and ensure water is there when we need it.

- Little leaks can add up to a lot of wasted water. A small drip can waste 70 gallons of water in a day, while a steady leak just one-sixteenth of an inch in size can send more than 1,000 gallons a day down the drain. Fix leaky faucets and toilets right away.
- Use the washing machine for full loads only to save water and energy. Install a water-efficient clothes washer.
- Run the dishwasher only when full to save water and energy. Install a water- and energy-efficient dishwasher.
- Install low-flow shower heads in the bathroom, encourage everyone to take shorter showers, and turn water off when brushing teeth or shaving.
- Check your sprinkler system frequently and adjust sprinklers so only your lawn is watered and not the house, sidewalk, or street.
- Choose a water-efficient irrigation system such as drip irrigation for your trees, shrubs, and flowers.
- 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.
- Use a broom to clean driveways, sidewalks, and patios, not your hose.
- Don't let the hose run when washing cars or boats—use a bucket, sponge, and a hose with self-closing nozzle instead.
- Install a spa or pool cover to reduce evaporation, and check it regularly for leaks.

Let's all do our part, and together, we will make a difference!

Emergency Drought Restrictions in Place in Discovery Bay

In October 2014, the Board of Directors of the Town passed Ordinance No. 25 establishing Emergency Drought Regulations requiring all Discovery Bay residents and businesses to conserve water in light of the current ongoing drought. The full Ordinance can be found on the Town's home page at www.todb.ca.gov.

The new regulations require that water used to irrigate outdoor landscapes in a manner that causes runoff onto adjacent properties, nonirrigated areas, private and public walkways, and roadways is prohibited.

Landscape Watering Schedule

The application of potable water to outdoor landscapes in a manner that causes runoff where the water flows onto adjacent property, non-irrigated areas, private and public walkways, roadways, parking lots, or structures is strictly prohibited.

Dwellings or establishments with even numbered street addresses may use outdoor water before 1 p.m. and after 7 p.m. on Tuesdays and Saturdays only.

Dwellings or establishments with odd numbered street addresses may use outdoor water before 1 p.m. and after 7 p.m. on Wednesdays and Sundays only.

Additionally, the use of an automatic shut-off nozzle attached to a hose when washing a car, boat or recreational vehicle is required. The application of water to driveways and sidewalks or used in a non-recirculating fountain or other decorative water feature is also prohibited.

If you would like additional information or need helpful ideas on how to save water, please visit us on the Web at www.todb.ca.gov or call (925) 634-1131.

Fines for Noncompliance

Failure to comply with the new regulation may result in fines of up to \$500! The Town may issue a Notice of Violation to any person, business, association, or other party who fails to comply with any condition of the new regulations. A Notice of Violation that is issued is punishable by a fine of \$25 for a first violation, \$50 for a second violation, \$100 for a third violation, and \$500 for a fourth and any subsequent violations.

Where Does Our Water in Discovery Bay Come From?

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

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 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/safewater/lead.

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 before 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.

Well 6 is considered most vulnerable to the following activities not associated with any detected contaminants: known contaminant plumes.

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 6). Since the removal of three former underground storage tanks, piping, and dispenser islands in 1998, remediation efforts have been under way 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 groundwater contamination associated with an identified dry cleaning business, it is considered a possible contaminating activity because of proximity.

The possible contaminating activities (PCAs) 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 the present, there have been more than 20 reports of sunken vessels and product sheens observed in the waterways. In addition, there was a reported incident of a raw sewage leak from a resident sewer line in 2005.

The PCAs identified in this preliminary Drinking Water Source Assessment and Protection Program have the greatest potential to affect groundwater in the shallow aquifer. The proposed well will be completed in deeper confined aquifer units. The proposed well seal consists of a 180-foot grouted conductor casing. Similar to the CSD wells, the proposed seal, along with confining clay strata will provide a barrier to potential vertical migration of shallow contamination sources. There have been no contaminants detected in the water supply to this date in Discovery Bay; however, the proposed new source, like the existing supply wells, is still considered vulnerable to the above PCAs due to proximity.

Acquiring 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; phone: (510) 620-3467; fax: (510) 620-3455; e-mail: Marco.Pacheco@waterboards.ca.gov.

Sampling Results

During the past year, we have taken hundreds of water samples in order to determine the presence of any radioactive, biological, inorganic, volatile organic or synthetic organic contaminants. The table below shows only those contaminants that were detected in the water. The state requires us to monitor 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.

Well 4A was the only source for which sampling was required for 2012. Radiological sampling frequency is based on the results of initial sampling. Some of our wells are on a 6-year frequency and some are on a 9-year frequency rate. The ranges reported for gross alpha and uranium in the Regulated Substances table represent sampling from all sources for the period from 2006 to 2012.

REGULATED SUBSTANCES

SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED	MCL [MRDL]	PHG (MCLG) [MRDLG]	AMOUNT DETECTED	RANGE LOW-HIGH	VIOLATION	TYPICAL SOURCE
Arsenic (ppb)	2012	10	NA	1 (Average)	ND–5	No	Erosion of natural deposits; runoff from orchards; glass and electronics production wastes
Barium (ppm)	2012	1	2	0.09 (Average)	ND–0.225	No	Discharge from oil drilling wastes and from metal refineries; erosion of natural deposits
Fluoride (ppm)	2012	2	1	0.18 (Average)	ND–0.3	No	Erosion of natural deposits; water additive that promotes strong teeth; discharge from fertilizer and aluminum factories
Gross Alpha Particle Activity (pCi/L)	2012	15	(0)	2.5 (Average)	ND–8.63	No	Erosion of natural deposits
Haloacetic Acids–Stage 2 (ppb)	2014	60	NA	5	2–12	No	By-product of drinking water disinfection
Selenium (ppb)	2012	50	30	2 (Average)	ND–9	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)	2014	80	NA	34.9	14.9–69.7	No	By-product of drinking water disinfection
Total Coliform Bacteria [Total Coliform Rule] (# positive samples)	2014	No more than 1 positive monthly sample	(0)	0	NA	No	Naturally present in the environment
Uranium (pCi/L)	2012	20	0.43	1.701 (Average)	ND–5.35	No	Erosion of natural deposits

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)	2012	1.3	0.3	0.51	0/32	No	Internal corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives
Lead (ppb)	2012	15	0.2	2.6	0/32	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)	AVERAGE AMOUNT DETECTED	RANGE LOW-HIGH	VIOLATION	TYPICAL SOURCE
Chloride (ppm)	2012	500	NA	167.8	81–480	No	Runoff/leaching from natural deposits; seawater influence
Color (Units)	2012	15	NA	5	ND–10	No	Naturally-occurring organic materials
Foaming Agents [MBAS] (ppb)	2012	500	NA	80	ND–400	No	Municipal and industrial waste discharges
Odor–Threshold (TON)	2012	3	NA	0.8	ND–2	No	Naturally-occurring organic materials
Specific Conductance (µS/cm)	2013	1,600	NA	1,339	936–2,840	No	Substances that form ions when in water; seawater influence
Sulfate (ppm)	2012	500	NA	76.6	50–98	No	Runoff/leaching from natural deposits; industrial wastes
Total Dissolved Solids (ppm)	2013	1,000	NA	754	550–1,520	No	Runoff/leaching from natural deposits
Turbidity (NTU)	2012	5	NA	0.28	ND–0.5	No	Soil runoff

UNREGULATED AND OTHER SUBSTANCES

SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED	AVERAGE AMOUNT DETECTED	RANGE LOW-HIGH	TYPICAL SOURCE
Boron ¹ (ppm)	2012	2.56	2.1–4.0	NA
Chlorate (ppb)	2014	148	120–170	NA
Hardness (ppm)	2012	216.2	147–321	Sum of polyvalent cations present in the water, generally magnesium and calcium, and are usually naturally occurring
Sodium (ppm)	2012	197	135–401	Salt present in the water and is generally naturally occurring
Strontium (ppb)	2014	743	660–820	NA

¹The 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

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.