



Annual **WATER**
QUALITY
REPORT

Reporting Year 2011



Presented By
Town of Discovery Bay
Community Services District

PWS ID#: 0710009

Our Commitment

The Town of Discovery Bay Community Services District (CSD) and Veolia Water, our contractor that operates and maintains our facilities, are proud to present our annual water quality report covering all testing performed between January 1 and December 31, 2011. Your tap water met all the Environmental Protection Agency's (EPA) and California State Drinking Water Health Standards. The Town of Discovery Bay CSD and Veolia Water vigilantly safeguard water supplies. Our constant goal is to provide you and your family the best possible water service while preserving the public's health, ensuring public safety, and being responsible stewards of our precious water resources. We are committed to ensuring the quality of your water.



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 Department of Public Health (Department) prescribe regulations that limit the amount of certain contaminants in water provided by public water systems. Department 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, 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.

QUESTIONS?

If you have any questions about this report or concerns about your water utility, please contact the Town of Discovery Bay CSD office at (925) 634-1131 or Veolia Water at (925) 634-8818. We want our valued customers to be informed about their water utility.

In the News

In 2010, the Board of Directors authorized a contract to conduct an extensive review of the District's drinking water network. This review resulted in the completion of a Water Master Plan that provides the District a long-term strategic look at the District's infrastructure needs. The master plan was developed in an effort to identify those improvements that are necessary to meet the existing and future development needs of the community for a ten (10) year period. For more information on the master plan, please visit the District's website at www.todb.ca.gov.

As your local water and sewer district, we want to remind everyone that it's important to remember to conserve water! It's a precious resource that we need to protect. Please turn your sprinklers off during inclement weather and fix any leaky water fixtures, including toilets, sinks, and sprinklers. On average, a home wastes over 10,000 gallons of water annually – enough to fill a backyard swimming pool! Be Water Wise and when you have a leak, please repair it as soon as possible. Also, avoid pouring fats, oils, and grease down your sink. These food by-products create blockages in the sanitary sewer system that result in sewer overflows! By properly disposing of your fats, oils, and grease into your refuse container, you are helping protect the environment in an easy and conscientious manner.

This past April, the Town recently held its annual Earth Day Celebration at Slifer Park. The community-wide "Get Your Green On" celebration was attended by over 200 volunteers who helped plant 117 trees, and assisted in clearing non-native plants from sensitive wetlands. After the volunteer work was over, residents browsed vendor exhibits and dined on cuisine from local restaurants.

"Parks Make Life Better" and that is no exception here in Discovery Bay! This past year, we have worked hard at improving our parks and making them more enjoyable for everyone. The tennis courts, bocce ball courts, and horseshoe pits at Cornell Park were fully renovated with new surfacing and all meet championship standards for tournament play. Bocce balls and horseshoes are available to check out at the District office. Coupled with the newly completed playground and renovated baseball field, Cornell Park is certainly the most diverse park in terms of recreational opportunities available for public use. Over at Regatta Park, the newly constructed full-sized basketball court is open for play, while the "Splash Pad" at our Ravenswood Park is open for seasonal summer play.

The Board of Directors of your CSD has been working with local agencies and the State of California on issues that are important to the Delta and its long-term sustainability. The Board took an active role last summer when the Egeria densa aquatic weed became prevalent here in Discovery Bay. As a result of the vigilant efforts taken by the CSD Board, Reclamation District 800, and Contra Costa County, the California Department of Boating and Waterways adopted an aggressive approach to fighting this invasive water weed. Results of those efforts in the bays throughout Discovery Bay were positive, and the weed's growth was significantly reduced.

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 Directors' regularly scheduled meetings. They are held on the first and third Wednesday of each month, starting at 7:00 p.m., in the Town of Discovery Bay CSD office located at 1800 Willow Lake Road behind the Delta Community Presbyterian Church.

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 2012

Chris Steele, *President*

Kevin Graves, *Vice President*

Jim Mattison, *Director*

Mark Simon, *Director*

Ray Tetreault, *Director*

Where Does Our Water in Discovery Bay Come From?

The Town of Discovery Bay CSD obtains its water from five (5) groundwater wells underlying the community. The water then flows through two (2) water treatment facilities that remove Iron and Manganese from our groundwater sources. The average depths of our wells are approximately 400 feet. During the 2011 year, the District's new well, Well #6, was placed online to add reliability to the overall water system.

Drinking Water and Wastewater Usage Charges:

A majority of the Discovery Bay residential property owners are charged an annual water and wastewater usage fee that is determined according to parcel size. For the tax roll year of 2012-2013 the Board of Directors for the Town of Discovery Bay CSD approved water and wastewater usage increases. For this fiscal year 2012-2013, the water rate increase is 31.0% and the wastewater increase is 10.0%. Please see the table below for your parcel size rates for the current year 2011-2012 and for the next tax roll year of 2012-2013 with the total average combined increase for water and wastewater of 18.0%:

Discovery Bay's Parcel Size/Sq. ft.	2011/12 Current Rates Year			2012/13 with Increase Rates per Year			\$ Increase For Year
	Water Rate	Wastewater Rate	Total	Water Rate	Wastewater Rate	Total	
under 5,000 Condo w/no irrigation	\$180.60	\$453.48	\$634.08	\$243.72	\$501.96	\$745.68	\$111.60
under 5,000 Condo w/irrigation	\$277.32	\$453.48	\$730.80	\$370.92	\$501.96	\$872.88	\$142.08
under 5,000 Homes	\$277.32	\$604.68	\$882.00	\$370.92	\$669.24	\$1,040.16	\$158.16
5,001 to 10,000	\$351.48	\$604.68	\$956.16	\$468.48	\$669.24	\$1,137.72	\$181.56
10,000 to 15,000	\$425.64	\$604.68	\$1,030.32	\$566.04	\$669.24	\$1,235.28	\$204.96
Over 15,000,	\$425.64	\$604.68	\$1,030.32	\$566.04	\$669.24	\$1,235.28	\$204.96
Plus Each Add'l 1,000	\$24.72			\$32.52			\$7.80

Residential Property owners that are charged for actual water usage were charged \$1.075 per 100 cubic feet (ccf) for the 2011-2012 year and will be charged at a rate of 1.413 per ccf for the 2012-2013 year. One ccf equates to 748 gallons.

Nonresidential Metered Sewer Rates	Use (\$/ccf) for 2011/12	Use (\$/ccf) for 2012/13
Business/Government/Clubs	\$3.499	\$3.873
Restaurants/Bars/Dining Facilities	\$10.248	\$11.343
Schools	\$3.150	\$3.486
Other Domestic Strength Users	\$3.499	\$3.873

The Town of Discovery Bay will file a report showing usage fees to be collected on the Contra Costa County Tax Rolls for the fiscal year 2012-2013 and will hold a Public Hearing on Wednesday, August 1, 2012 on this report. The public hearing will be held at the District Offices at 1800 Willow Lake Road, Discovery Bay, California at 7:00p.m.

Lead and Drinking Water

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.

Water Treatment Process

The Town of Discovery Bay CSD water treatment process includes two (2) water treatment plants (WTP), one on Newport Drive and one on Willow Lake Road, to treat raw ground water and store it in tank reservoirs for distribution. The pumped ground water is pre-chlorinated using 12.5 percent sodium hypochlorite to oxidize the iron and manganese; the water is then filtered in parallel-operated greensand filters to reduce the Iron and Manganese present in the water. The Town of Discovery Bay CSD has five (5) water production wells. Our Well #6, the newest well that is located at the Willow Lake WTP, is used for back-up during maintenance operations and can produce approximately 2,500 gallons per minute (gpm). The Willow Lake WTP is served by two (2) other ground water wells that collectively can produce 2,550 gpm. Storage capacity at the Willow Lake WTP is 1,500,000 gallons. Our Newport WTP can produce approximately 3,800 gpm with a storage capacity of 500,000 gallons.

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. Results reflect the compiled averages and ranges from all five (5) active ground water wells. 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.

REGULATED SUBSTANCES

SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED	MCL [MRDL]	PHG (MCLG) [MRDLG]	AMOUNT DETECTED	RANGE LOW-HIGH	VIOLATION	TYPICAL SOURCE
Arsenic (ppb)	2009	10	0.004	1.08	ND–2.7	No	Erosion of natural deposits; runoff from orchards; glass and electronics production wastes
Barium (ppm)	2009	1	2	0.066	ND–0.12	No	Discharges of oil drilling wastes and from metal refineries; erosion of natural deposits
Chlorine (ppm)	2011	[4.0 (as Cl ₂)]	[4 (as Cl ₂)]	0.72	0.52–0.86	No	Drinking water disinfectant added for treatment
Fluoride (ppm)	2009	2.0	1	0.254	0.19–0.33	No	Erosion of natural deposits; water additive that promotes strong teeth; discharge from fertilizer and aluminum factories
Haloacetic Acids (ppb)	2011	60	NA	18.5	8.0–21.0	No	By-product of drinking water disinfection
Selenium (ppb)	2011	50	30	3.0	ND–6.0	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)	2011	80	NA	18	ND–36	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)	2009	1.3	0.3	0.372	0/20	No	Internal corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives
Lead (ppb)	2009	15	0.2	2.5	0/20	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)	2009	500	NS	92.3	86–100	No	Runoff/leaching from natural deposits; seawater influence
Iron (ppb)	2011	300	NS	90	65–140	No	Leaching from natural deposits; industrial wastes
Manganese (ppb)	2011	50	NS	16.4	ND–110	No	Leaching from natural deposits
Specific Conductance (µS/cm)	2011	1,600	NS	943	900–980	No	Substances that form ions when in water; seawater influence
Sulfate (ppm)	2009	500	NS	84	62–96	No	Runoff/leaching from natural deposits; industrial wastes
Total Dissolved Solids (ppm)	2009	1,000	NS	568	530–590	No	Runoff/leaching from natural deposits

UNREGULATED AND OTHER SUBSTANCES

SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED	AMOUNT DETECTED	RANGE LOW-HIGH	TYPICAL SOURCE
Boron (ppm)	2009	2.6	2.1–3.8	Naturally present in the environment
Hardness (ppm)	2009	188	140–230	Generally found in ground and surface water
Sodium (ppm)	2009	132	120–160	Salt present in the water; generally naturally occurring

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.

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).