

STINSON BEACH COUNTY WATER DISTRICT

IMPORTANT INFORMATION FOR DISTRICT WATER CUSTOMERS:

OWNERSHIP RESPONSIBILITIES:

The responsibility for water usage and any related leaks resides with the property owner. Immediate detection of water leaks is essential for maintaining a minimal rate charge. The SBCWD recommends that those rate payers who do not reside permanently at their Stinson Beach property (i.e., rentals or seasonal use) turn their water off when they are not at home (unless there is a fire sprinkler system) and/or hire a qualified maintenance contractor to periodically examine water lines, check meter readings, inspect grounds for leaks, etc. Irrigation systems should be checked on a regular basis, as they are the major cause of undetected extensive leaks which result in extremely high water bills.

DID YOU KNOW? The Stinson Beach County Water District's total storage capacity for water is 1,269,000 gallons. If one consumer had an undetected leak equaling 30,000 gallons per day, he/she would deplete one third of the available water in Stinson Beach within two weeks. This actually happened in 2000. Please monitor your water usage and periodically check for leaks!

SHOCK LOADING ONSITE SEPTIC SYSTEMS:

As a resident of Stinson Beach, you probably know that each home in our community has its own onsite septic system to treat wastewater. Each system has a corresponding Discharge Permit which allows the homeowner to operate the onsite septic system. Valuable information is included in that Discharge Permit including the gallon per day limits that may be loaded in to the system. Exceeding these limits is detrimental to your system. Greatly exceeding these limits in a relatively short period of time is referred to as "shock loading" and is one of the most damaging procedures to your septic system. **Shock Loading is a violation of your Discharge Permit.** If you want a copy of your permit, or if you just want to know your gallon/day limit, call us at 415-868-1333.

PLANTS ARE HARMFUL TO ONSITE SEPTIC SYSTEMS:

Trees or large shrubs should not be planted on or near sand filters, leach fields or mounds. Trees that are especially suspect include Monterey Pine, Monterey Cypress, Eucalyptus, Willow, Bay Pepper, Poplar, Alder, Aspen, Mayten and Birch. Roots from the Juniper and Echium plant have caused major damage to systems. Ivy and Ice Plant retain too much water, restrict the transfer of oxygen, and clog pipes. We do not recommend these plants around septic systems.

DISTRICT MOSQUITO ABATEMENT POLICY:

In order to control mosquito breeding, the District requires that all property owners install a screening device on any plumbing vents that vent to the roof of the residence. Please be advised that the District recommends this installation be performed by a licensed contractor such as a roofer, chimney sweep, or maintenance person, with adequate liability insurance. Screening kits are available at the District office. The SBCWD wastewater system inspector will be checking your roof vents for screening as well as your septic tank riser seals to ensure that they are water tight to discourage mosquito breeding. The property owner may wish to check his or her own riser lids for adequate sealing. Call 415-868-1333 if you have any questions about this process.

DID YOU KNOW? The most effective way to prevent the spread of West Nile Virus continues to be the elimination of breeding grounds. Remember to "Dump It, Flip It and Drain It" to eliminate all standing water.

2012 WATER QUALITY/CONSUMER CONFIDENCE REPORT

DISTRIBUTED JUNE, 2013

Provided by: The Stinson Beach County Water District

Office Located at 3785 Shoreline Highway, Stinson Beach, Open 7:30-4:00 M-F

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SBCWD Website: <http://stinson-beach-cwd.dst.ca.us>

Board of Directors Meetings: Held on the third Saturday of the Month

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

Dear Stinson Beach Water Consumer:

We are proud to present you with the District's 2012 calendar year Water Quality/Consumer Confidence Report.

The Stinson Beach County Water District (SBCWD) tests the drinking water for its consumers as required by State and Federal Regulations. This report shows the results of our monitoring for the period January 1 through December 31, 2012. Enclosed you will find all pertinent information relating to the water quality of Stinson Beach. This report is provided by the SBCWD in cooperation with the California Department of Public Health Services. The District delivers a safe and reliable supply of high quality drinking water, which meets or exceeds all EPA and CDPH standards for water quality monitoring requirements. The water quality is ensured through a series of chemical and bacteriological tests performed on over 200 samples collected annually.

Older, inefficient waterlines are continually being replaced with new ones to provide for greater flow of water, which will improve fire protection and domestic water service. The locations scheduled for pipeline replacement are portions of Seadrift Road and some of the Calles and Patios. The District has completed construction of a new water treatment plant on Laurel Avenue. New treatment technologies and new water quality regulations required upgrading the treatment plant capabilities.

The District continues to make improvements to its operations and maintenance in an effort to reduce costs, enforce policies and enhance water quality. The District allocates hundreds of thousands of dollars every year for water quality and water distribution improvements. The most important project completed this last year is the construction of the new Water Treatment Plant (all by District staff). The District also relocated numerous sections of the Seadrift waterline.

The SBCWD record of excellence, its vision and the efforts of its employees and board assure that our drinking water continues to be plentiful, safe and affordable for future generations.

Our five-year Capital Improvement Program (CIP) provides a detailed plan for ensuring the reliability and quality of our District's operations, and for meeting more stringent drinking water requirements during the next five years.

Although our new treatment plant is able to meet present demand, please take the initiative to lower your water demand on our system so we can lessen the chance of water rationing in the future. Remember that the District shares its water with the natural inhabitants of the area; therefore, learn to conserve and use water wisely throughout the year as our water resources are limited. If you would like further information regarding water quality or any other District related issues please contact the office or visit our website.

Ed Schmidt, General Manager

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DRINKING WATER SOURCE ASSESSMENT INFORMATION:

A Drinking Water Source Assessment Report was prepared in March of 2002. Copies of the report may be viewed at the District office. The report indicates very low vulnerability for possible contamination.

WATER SOURCES AND TREATMENT:

The Stinson Beach water supply is provided by two types of sources: surface water and ground water. Surface water is supplied by the Fitzhenry, Black Rock, and Stinson Gulch Creeks. Ground water is supplied by Steep Ravine, Alder Grove, Ranch, and Highlands Wells, which operate intermittently. The collected raw water is piped to the Laurel Treatment Facility. The water is then processed by our New Pall Membrane Filters which consist of two parallel units, each rated at 100 gallons per minute. Sodium chlorite (chlorine) is added after filtration for disinfection purposes.

REGULATORY AGENCIES

The world's drinking water supply is provided by rivers, lakes, ponds, springs and wells. As this water moves across the surface or through the ground, it dissolves naturally-occurring minerals and, in some cases, radioactive material or animal/human substances. The Federal Environmental Protection Agency and the State Department of Health have established limits for contaminants in both tap water and bottled water.

POSSIBLE SOURCE WATER CONTAMINANTS:

Microbial Contaminants: Includes viruses and bacteria that come from onsite septic systems, sewage systems, livestock and wildlife.

Inorganic Contaminants: Includes naturally occurring salts and metals, industrial or domestic wastewater discharges, and contaminants resulting from mining and farming.

Organic Contaminates: Includes synthetic, volatile chemicals which are by-products of industrial processes, petroleum product runoff, urban storm water runoff, and septic systems.

Radioactive Contaminants: Includes naturally occurring or man-made contaminants resulting from gas production and mining.

Pesticide and Herbicide Contaminants: Includes contaminants resulting from agricultural use, residential use and urban storm water runoff.

TERMS USED IN THIS REPORT:

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 (USEPA).

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.

Maximum Residual Disinfectant Level (MRDL): The level of a disinfectant added for water treatment that may not be exceeded at the consumer's tap.

Maximum Residual Disinfectant Level Goal (MRDLG): The level of a disinfectant added for water treatment below which there is no known or expected risk to health. MRDLGs are set by the U.S. Environmental Protection Agency.

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

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.

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

Variations and Exemptions: Department permission to exceed an MCL or not comply with a treatment technique under certain conditions.

MPN: most probable number

ND: not detectable at testing limit

PPM: parts per million =/or milligrams per liter (mg/L)

PPB: parts per billion =/or micrograms per liter (ug/L)

PPT: parts per trillion or nanograms per liter (ng/L)

pCi/L: picocuries per liter (a measure of radiation)

WATER QUALITY TEST RESULTS:

The following tables list all of the drinking water contaminants that were detected during the year 2012. The presence of these contaminants in the water does not necessarily indicate that the water poses a health risk. DHS allows the District to monitor some contaminants less than once per year because the concentrations of these contaminants do

not change frequently. For this reason, some of the data is more than one year old. The Stinson Beach County Water District testing results indicated that the water did not exceed any contamination levels in 2012.

WATER HARDNESS:

Many water users are concerned about the hardness of their domestic water supply. Hardness (in water) is caused by compounds of calcium, magnesium, and other minerals. The hardness of Stinson Beach water according to the Water Hardness Scale ranges from 60-120 PPM (parts per million) or “Moderately Hard”.

This information may be used to follow recommended settings when installing dishwashers and washing machines.

- Water Hardness Scale: Less than 17.1 Parts per Million: Soft*
- 17.1 – 60 Parts per Million: Slightly Hard*
- 60 – 120 Parts per Million: Moderately Hard*
- 120-180 Parts per Million: Hard*
- Over 180 Parts per Million: Very Hard*

WATER HARDNESS						
Constituent	Sample Date	Average Level Detected	Range of Detection Levels	MCL	PHG (MCLG)	Typical Source of Contaminant
Hardness	8/24/12	86.75 PPM	80-91 PPM	None	None	Generally found in ground & surface water

SODIUM:

Sodium is the sixth most abundant element on the earth and is widely distributed in soils, plants, food and water. The Environmental Protection Agency (EPA) has a draft guideline for sodium in drinking water of 20 PPM (or milligrams per liter, mg/L).

SODIUM						
Element	Sample Date	Average Level Detected	Range of Detection Levels	MCL	PHG (MCLG)	Typical Source of Contaminant
Sodium	8/24/12	18 PPM	17-19 PPM	None	None	Generally found in ground & surface water

DETECTED CONTAMINANTS WITH A PRIMARY DRINKING WATER STANDARD:

California drinking water standards, also referred to as “Maximum Contaminant Levels” (MCL) are divided into two categories, primary and secondary: Primary standards relate to public health issues; Secondary standards relate to aesthetic qualities such as taste, odor and color. In the following table, a value in the “Level Detected” column that exceeds the “MCL” value is out of compliance. **The SBCWD has no levels that exceed the MCL.**

Arsenic: Some people who drink water-containing arsenic in excess of the MCL over many years could experience skin damage, circulatory problems, or an increased risk of cancer. Samples are drawn monthly and quarterly. Compliance with the Arsenic MCL is based on the running average.

Fluoride: Some people who drink water containing fluoride in excess of the Federal MCL of 4 PPM (mg/L) over many years may get bone disease, including pain and tenderness of the bones. Children who drink water containing fluoride in excess of the state MCL of 2 PPM (mg/L) may get mottled teeth.

Nitrate: Infants below the age of six months who drink water containing nitrate in excess of the MCL may quickly become seriously ill, and, if untreated, may die.

CONTAMINANTS WITH A <u>PRIMARY</u> DRINKING WATER STANDARD

Chemical or Constituent	Sample Date(s)	Level Detected	Range of Detection Levels	MCL [MRDL]	PHG (MCLG) [MRDLG]	Typical Source of Contaminant
Arsenic	8/24/12 & various	4.44 PPB	<2.0-7.9 PPB	10 PPB	.004	Erosion of natural deposits
Fluoride	8/24/12	.1725 PPM	.17-.18 PPM	2 PPM	1 PPM PHG	Erosion of natural deposits
Nitrate (NO3)	8/24/12	5.725 PPM	5.4-6.1 PPM	45 PPM	45 PPM	Erosion of natural deposits, Leaching from septic systems

CORROSIVE TESTS; LEAD AND COPPER – PRIMARY DRINKING WATER STANDARD:

The District conducts pipeline corrosion testing by monitoring levels of copper and lead in sample households throughout Stinson Beach. In order for the testing results to be in compliance, ninety percent of the tests must remain below the Regulatory Action Level. In 2012, 100% of the tests results were below the Regulatory Action Level. The District has implemented corrosion control treatment and continues to monitor its effectiveness.

Copper is an essential nutrient, but some people who drink water containing copper in excess of the action level over a relatively short amount of time may experience gastrointestinal distress. Some people who drink water containing copper in excess of the action level over many years may suffer liver and kidney damage. People with Wilson’s disease should consult their doctor.

Lead levels at your home may be higher than at other residences in the community as a result of materials used in your home’s plumbing. Infants and children are typically the most vulnerable to lead in drinking water. If you are concerned about elevated lead levels in your home’s water, you may wish to have your water tested. Testing information can be obtained at the District office. Additional information is available from the Safe Drinking Water Hotline 800-426-4791.

CORROSION TESTING; LEAD AND COPPER						
Chemical	No. of samples collected	90 th percentile level detected	No. Sites exceeding Action Level	Regulatory Action Level	PHG	Typical Source of Contaminant
Lead	10	<.005 PPM	0	.015 PPM	.002 PPM	Internal corrosion of household water plumbing systems; discharges from industrial manufacturers; erosion of natural deposits
Copper	10	.780 PPM	0	1.3 PPM	0.17 PPM	Internal corrosion of household water plumbing systems; erosion of natural deposits; leaching from wood preservatives

DETECTED CONTAMINANTS WITH A SECONDARY DRINKING WATER STANDARD:

Secondary drinking water standards relate to aesthetic qualities such as taste, odor and color. In the following tables, a value in the “Level Detected” column that exceeds the “MCL” value is out of compliance. The SBCWD has no levels that exceed the MCL.

CONTAMINANTS WITH A <u>SECONDARY</u> DRINKING WATER STANDARD						
Chemical or Constituent	Sample Date	Level Detected	Range of Detection Levels	MCL	PHG (MCLG)	Typical Source of Contaminant
Chloride	8/24/12	21 PPM	17-24 PPM	500 PPM	N/A	Runoff, leaching of natural deposits, seawater influence



Sulfate	8/24/12	19 PPM	14-24 PPM	500 PPM	N/A	Runoff, leaching of natural deposits
Total Dissolved Solids	8/24/12	167.5 PPM	160-170 PPM	1,000 PPM	N/A	Runoff, leaching natural deposits
Color	8/24/12	13.75 Units	10-15 Units	15 Units	N/A	Naturally occurring organic materials
Odor	8/24/12	<1.0 Units	<1.0-<1.0 Units	3 Units	N/A	Naturally occurring organic materials
Specific Conductance	8/24/12	240 umhos/cm	220-290 umhos/cm	1,600 umhos/cm	N/A	Substances that form ions when in water, seawater influence

SAMPLING RESULTS SHOWING FECAL INDICATOR-POSITIVE GROUND WATER SOURCE SAMPLES					
Microbiological Contaminants (complete if fecal-indicator detected)	Total No. of Detections	Sample Dates	MCL [MRDL]	PHG (MCLG) [MRDLG]	Typical Source of Contaminant
<i>E. coli</i>	0	N/A	0	(0)	Human and animal fecal waste

SAMPLING RESULTS SHOWING TREATMENT OF SURFACE WATER SOURCES	
Treatment Technique (Type of approved filtration technology used)	Membrane
Turbidity Performance Standards (that must be met through the water treatment process)	Turbidity of the filtered water must: 1 – Be less than or equal to <u>0.1</u> NTU in 95% of measurements in a month. 2 – Not exceed <u>1.0</u> NTU for more than eight consecutive hours. 3 – Not exceed <u>5.0</u> NTU at any time.
Lowest monthly percentage of samples that met Turbidity Performance Standard No. 1.	98.2%
Highest single turbidity measurement during the year	2.155
Number of violations of any surface water treatment requirements	0

2012
Stinson Beach County Water District
Annual Water Quality Report

