Important health information

Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised 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 can be particularly at risk from infections. These people should seek advice about drinking water from their health care providers.

USEPA/Centers for Disease Control (CDC) 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 1-800-426-4791.

Nitrate in drinking water at levels above 45 mg/L (ppm) is a health risk for infants of less than six months of age. Such nitrate levels in drinking water can interfere with the capacity of the infant’s blood to carry oxygen, resulting in serious illness, symptoms include shortness of breath and blueness of the skin. Nitrate levels above 45 mg/L may also affect the ability of the blood to carry oxygen in other individuals, such as pregnant women and those with certain specific enzyme deficiencies. If you are caring for an infant, or you are pregnant, you should ask advice from your health care provider. Nitrate levels may rise quickly for short periods of time because of rainfall or agricultural activity.

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. The District is 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 http://www.epa.gov/safewater/lead.

Source water assessments

In 2002, the District completed its source water assessments of fifteen wells. These assessments identify activities that could potentially contaminate a drinking water well. The source water assessment for a sixteenth well was completed in 2011. Aromas Red Sands Aquifer supplies are considered to be the most vulnerable to on-site residential septic systems and potential leakage from sewer lines. Añitos Junior High well is also vulnerable to contamination from nearby parks and chemicals used at its drinking water treatment plant. Purisima Formation supplies are considered to be the most vulnerable to contamination from dry cleaners, historic and active automobile stations, sewer collection systems, home manufacturing, grazing, known contaminant plumes, photo processing/printing establishments, and utility stations/maintenance areas.

Copies of each assessment or the Executive Summaries are available on the District’s website at www.soquelcreekwater.org and the full reports are available at the District office at 5180 Soquel Drive, Soquel, CA.

For more information

The presence and level of constituents varies throughout the District. If you have questions, suggestions or comments regarding this report, or questions regarding the specific water quality for your neighborhood, please contact Christine Mead, the District’s Water Quality Program Coordinator, at (831) 475-8505.

There is also a wealth of information on the Internet about Drinking Water Quality and water issues in general. Two good sites include:

- California Department of Public Health, Division of Drinking Water and Environmental Management www.cdph.ca.gov/certlic/drinkingwater/Pages/default.aspx
- U.S. Environmental Protection Agency http://water.epa.gov/drink/index.cfm

Getting involved in decisions that affect your drinking water: The District encourages public participation in its decision-making process. The District is governed by a five-person, publicly elected Board of Directors. The Board meets the first and third Tuesday of each month at 7:00 pm at 5180 Soquel Drive in Soquel.
What are water quality goals?

In addition to mandatory water quality standards, USEPA and CDPH have set voluntary water quality goals for some contaminants. Water quality goals are often set at such low levels that they are not achievable in practice and are not directly measurable. Nevertheless, these goals provide useful guidance and direction for water management practices. The chart includes three types of water quality goals:

- **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 USEPA.
- **Maximum Residual Disinfectant Level Goal (MRDLG):** 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.
- **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 EPA.

What are water quality standards?

Drinking water standards established by USEPA and CDPH set limits for substances that may affect consumer health or aesthetic qualities of drinking water. The chart in this report shows the following types of water quality standards:

- **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. In addition to mandatory water quality standards, USEPA and CDPH have set voluntary water quality goals for some contaminants. Water quality goals are often set at such low levels that they are not achievable in practice and are not directly measurable. Nevertheless, these goals provide useful guidance and direction for water management practices. The chart includes three types of water quality goals:

- **Primary MCL:** The concentration of a contaminant which, if exceeded, triggers treatment or health based advisory level established by CDPH for constituents in drinking water that lack MCLs

- **Secondary MCL:** A level of a contaminant for which treatment in drinking water is required to protect the health of consumers.

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

Where your water comes from

In 2011, District customers received water from 15 wells pumping from underground aquifers in two geologic formations, the Purisima and the Aromas Red Sands. Delivered water from both sources meet all current drinking water health standards. Delivered water represents a blend from several wells in each of two regions in the District, Service Area I/II and Service Area III/IV. In general, the average amounts of contaminants shown in the analysis table are the most representative of the water quality received by customers in each of the two areas. The map below depicts the locations of the two service areas. Customers in Service Area I/II (Capitola, Soquel and parts of Aptos) receive water from the Purisima Formation. Because this water is high in iron and manganese, it is treated to reduce these elements. In Service Area III/IV (parts of Aptos, Rio Del Mar, Seascape and La Selva Beach) approximately 90% of the water is provided by the Aromas Red Sands Aquifer and the remaining 20% of the water is provided by the Purisima Formation.

How are contaminants measured?

Water is sampled and tested throughout the year. Detected constituents are measured in:

- Parts per million (ppm) or milligrams per liter (mg/L)
- Parts per billion (ppb) or micrograms per liter (ug/L)
- Parts per trillion (ppt) or nanograms per liter (ng/L)

Think about these comparisons: Parts per million = 1 drop in 14 gallons
Parts per billion = 1 drop in 14,000 gallons
Parts per trillion = 1 drop in 14,000,000,000 gallons