Water Source

The Humboldt Bay Municipal Water District (HBMWD), a regional water wholesaler, supplies the drinking water delivered by the Fieldbrook Glendale Community Services District (FGCSD). HBMWD draws water from wells located in the bed of the Mad River northeast of Arcata. These wells, called Ranney Wells, draw water from the sands and gravel of the riverbed at depths of 60 to 90 feet, thereby providing a natural filtration process. In summer, this naturally filtered water is disinfected via chlorination and delivered to FGCSD.

In winter, it is further treated at a regional Turbidity Reduction Facility which reduces the occasional turbidity (cloudiness) in HBMWD's source water. While turbidity itself is not a health concern, the California Department of Public Health (CDPH) is concerned that at elevated levels, turbidity could potentially interfere with the disinfection process.

HBMWD's source water has been classified by the CDPH as groundwater. The classification is important as to the regulations that a water system must follow to ensure water quality.

Water Quality in General

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. More information about contaminants and potential health effects can be obtained by calling the United States Environmental Protection Agency (USEPA) Safe Drinking Water Hotline (1-800-426-4791) or visiting their website (http://water.epa.gov/drink/).

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. 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 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 that are byproducts of industrial processes and petroleum production, and can also come from gas stations, urban stormwater runoff, and septic systems.
- Radioactive contaminants, which can be naturally occurring or be the result of oil and gas production and mining activities.

In order to ensure that tap water is safe to drink, USEPA and CDPH prescribe regulations that limit the amount of certain contaminants in water provided by public water systems.

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 to lessen the risk of infection by Cryptosporidium and other microbial contaminants are available from the Safe Drinking Water Hotline (1-800-426-4791) and website (http://water.epa.gov/drink/index.cfm).

2011 Water Quality Report Inside

Fieldbrook Glendale CSD
PO BOX 95
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FIELDBROOK GLENDALE COMMUNITY SERVICES DISTRICT

2011 Consumer Confidence Report

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

Introduction and Background

This report represents Fieldbrook Glendale Community Services District's 2011 Consumer Confidence Report (CCR). California regulations prescribe what information must be presented by public water systems in their CCR. This report provides a snapshot of the quality of the water that we provided last year. Included are details about where your water comes from, what it contains, and how it compares to State standards.

If you have any questions about this report or the quality of your drinking water, please call Steve Marshall, Operations Supervisor, at 822-2918. You may also attend one of the regularly scheduled meetings of our Board of Directors held the fourth Tuesday of each month at 7:30 p.m. at the Fieldbrook Fire Hall, 4584 Fieldbrook Road.

Fieldbrook Glendale CSD Water Quality Results

In order to ensure that tap water is safe to drink, the California Department of Public Health (CDPH) prescribes regulations limiting the amount of certain contaminants in water provided by public water systems. FGCSD water is supplied by the Humboldt Bay Municipal Water District (HBMWD). The HBMWD treats its water and performs annual monitoring and testing, in accordance with CDPH regulations and requirements, to ensure its water is safe to drink. In 2011, the HBMWD conducted approximately 395 water quality tests for 38 contaminants. Additionally, the HBMWD conducted more than 30 water quality tests for 13 contaminants in the FGCSD water system in 2011. The results from the 2011 monitoring and testing program indicate that the water quality is very high, as has consistently been the case in past years.

The table on the right lists the drinking water contaminants that were detected during 2011 in HBMWD source water and FGCSD locations. A detected contaminant is any contaminant detected at or above its Detection Limit for Purposes of Reporting (DLR) (limit is established by CDPH). The table shows the level of detected contaminants. Contaminants that are not detected, or are detected below the DLR, are not required to be included in the table. The table also shows the maximum levels (third column) and goals (fourth column) (see insert for definitions).

The table also lists the microbiological contaminants even though there were no positive tests. Coliform bacteria are naturally present in the environment and are used as an indicator that other bacteria may be present. Coliform is part of the water quality-testing program to help signal if there is a problem with the treatment or distribution system which warrants further investigation.

The State allows monitoring for certain contaminants less than once per year because the concentrations of these contaminants are not expected to vary significantly from year to year. Therefore, results from prior years are included if such a contaminant was detected when it was last tested for.

It is important to note that the presence of contaminants does not necessarily indicate that the water poses a health risk.

Contaminant and Units	**Level Detected**	**Maximum Levels & Goals** (see insert for definitions)		**Likely Source and Potential Effects (if above MCL)**
		MCL (MRDL for Chlorine**)**	**PHG/MCLG (MRDLG** for Chlorine**)**	
Microbiological Contaminants				
Total Coliform Bacteria	Zero positive	More than one positive sample monthly	Zero positive	Coliform bacteria are naturally present in the environment and are used as an indicator that other, potentially harmful, bacteria may be present.
Fecal Coliform and E. coli.	Zero positive	A routine sample and a repeat sample are total coliform positive, and one is also Fecal Coliform or *E.coli* positive	Zero positive	Fecal Coliforms and E. coli are bacteria whose presence indicates that the water may be contaminated with human or animal wastes.
Disinfection Byproducts and Disinfectant Residuals				
TTHMs (µg/L) – (Total Trihalomethanes)	Average = 12.0	80 µg/L	n/a	By-product of drinking water chlorination
HAA5 (µg/L) (Haloacetic Acids)	Average = 3.4	60 µg/L	n/a	By-product of drinking water chlorination
Chlorine (mg/L)	Average = 0.69	4 mg/L	4 mg/L	Drinking water disinfectant added for treatment.
Inorganic Contaminants				
Copper (mg/L)*	Ten sites tested. None above the AL 90th percentile= 0.510	AL = 1.3 mg/L	0.3 mg/L	Internal corrosion of household plumbing; erosion of natural deposits; leaching from wood preservatives
Lead (µg/L)*	Ten sites tested None above the AL 90th percentile= 3	AL = 15 µg/L	0.2 mg/L	Internal corrosion of household water plumbing systems; discharges from Industrial manufacturers, erosion of natural deposits.
Aluminum (mg/L)****	0.16	1 mg/L	0.6 mg/L	Discharges from industrial manufacturers, erosion of natural deposits.
Regulated Contaminants with Secondary MCLs (as defined above, secondary MCLs address aesthetic quality of the water such as odor, taste, and appearance)				
Chloride (mg/L)***	Range = 2.8 – 2.8 Average = 2.8	500 mg/L	n/a	Runoff/leaching from natural deposits, or seawater influence
Sulfate (mg/L)***	Range = 9.5 – 9.5 Average = 9.5	500 mg/L	n/a	Runoff/leaching from natural deposits; industrial wastes
Specific Conductance (µS/cm)**	Range = 120 – 120 Average = 120	1,600 µS/cm	n/a	Substances that form ions when in water
Total Dissolved Solids (mg/L)***	Range = 93 – 93 Average = 93	1,000 mg/L	n/a	Runoff/leaching from natural deposits
Turbidity (NTU)	Range = 0.05 – 0.55 Average = 0.14	5 NTU	n/a	Turbidity has no health effects. However, high levels of turbidity can interfere with disinfection and provide a medium for microbial growth. Turbidity may indicate the presence of disease-causing organisms. These organisms include bacteria, viruses, and parasites that can cause symptoms such as nausea, cramps, diarrhea and associated headaches.

See insert for definitions. *Samples taken in 2011, **Samples taken in 2008, ***Samples taken in 2007, ****Samples taken in 2006

FGCSD 2011 Consumer Confidence Report (Continued)

Hardness and Sodium

Although sodium and hardness have no maximum contaminant levels, they are of interest to consumers:

Hardness is the sum of polyvalent cations present in the water, generally magnesium and calcium. The cations are usually naturally occurring. Hardness ranged from 57 to 80 mg CaCO3/L, with an average of 67 mg CaCO3/L (Samples taken in 2005).

Sodium refers to the salt present in the water and is generally naturally occurring. Sodium test resulted in 3.6 ppm (Sample taken in 2007).

You will find many terms and abbreviations in the table. To help you understand these terms, the following definitions are provided:

- **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 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 United States Environmental Protection Agency.
- **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 cover the aesthetic quality of the water such as odor, taste, and appearance.
- **Detection Limit for Purposes of Reporting (DLR):** The DLR is a parameter that is set by state regulation for each reportable contaminant.
- **Primary Drinking Water Standard or PDWS:** MCLs for contaminants that affect health along with their monitoring and reporting requirements, and water treatment requirements.
- **Regulatory Action level (AL):** The concentration of a contaminant which, when exceeded, triggers treatment or other requirements that a water system must follow.
- **n/a**: not applicable
- **ND**: not detectable at testing limit
- **ppb**: parts per billion or micrograms per liter **(µg/L)** (1,000 µg/L = 1 mg/L)
- **ppm**: parts per million or milligrams per liter **(mg/L**)
- **pCi/l:** picocuries per liter (a measure of radiation)
- **mgCaCO3/L:** milligrams of calcium carbonate per liter (a measure of hardness)
- **microsiemens/cm:** a measure of specific conductance **(µS/cm**)
- **NTU:** Nephelometric Turbidity Units: a measure of clarity.
- **Maximum Residual Disinfectant Level (MRDL):** The highest level of a disinfectant (i.e. Chlorine) allowed in drinking water. There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants.
- **Maximum Residual Disinfectant Level Goal (MRDLG):** The level of a drinking water disinfectant (i.e. Chlorine) 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.