Central Water 2014 Newsletter

2013 Water Quality Report Inside

Distributed Spring/Summer 2014

The Central Water District, The Drought and You

Calendar year 2013 closed as the driest year in recorded history for many areas of California and the severe drought is continuing this year. On January 17th, Gov. Brown declared a drought state of emergency and directed state officials to take all necessary actions to prepare for water shortages. At the Board meeting held on February 18, 2014, the Directors of the Central Water District passed a resolution in support of the Governor's Declaration of Drought and called for a voluntary 20% reduction of water usage by customers of the Central District. On April 25th, Governor Jerry Brown asked all Californians to redouble their efforts to conserve water and cut red tape to get water to farmers more quickly, ensure that people have safe drinking water, protect vulnerable wildlife species and prepare for an extreme fire season. Due to the geography of the area, the wells in the Central Water District have been retaining relatively stable water levels. And though we are not currently in the position of developing water budgets for households or implementing mandatory water

rationing programs we are asking customers to continue their voluntary conservation efforts. In fact, many water district customers were practicing water conservation before being asked to do so and quite a few customers have stopped by the District office to share their ideas for conserving water. The District has rules and regulations related to water conservation measures and they are as follows:

1. Plumbing leaks must be repaired within 24 hours of discovery.

2. Hoses must be equipped with shut-off nozzles.

3. Excess water running to waste from landscape or crop watering is not allowed.

4. Residents may not use running water to wash patios, driveways, sidewalks or any other paved surface. Use of a bucket is not prohibited if needed for cleaning.

5. The indiscriminate running of water without reasonable purpose is prohibited.

Water Conservation

- The Central Water District water consumption usage during 2012-13 fiscal year was 176.9 Million Gallons

- For single family homes 50% or more of the water used daily might be going to landscaping. Indoors, toilets alone account for about 32% of typical residential water use.

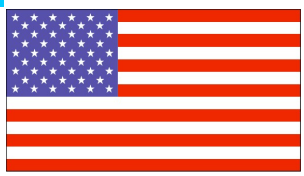
From the President of the Board of Directors

I recently attended a conference hosted by the Association of California Water Agencies (ACWA), where the drought and water management were discussed at length. Obtaining a sustainable groundwater supply is a topic of great interest to me because the Central Water District relies 100% on groundwater. The state is reviewing local management of groundwater basins to ensure a sustainable water supply. If water isn't well managed locally, the state could step in to adjudicate our water basin. Central and Soquel Creek Water Districts formed a partnership to manage our common water basin and, since our program is now a model for other districts, I think we will avoid state adjudication.

I also want to thank Central Water District customers for all of their water conservation efforts.

Carol Hamilton Monkerud
Board President

2013 Water Quality Report



All water produced and delivered by the Central Water District meets or exceeds standards for public drinking water established by the California Department of Public Health Services and the United States Environmental Protection Agency. This Water Quality Report provides information that explains Central Water District's water quality for the 2011 calendar year; the data is derived from the most recent testing completed in accordance with State and Federal regulations. This report represents only a fraction of the activity the District engages in to provide you, the consumer, a high level of confidence in the water you drink. Central Water District drinking water is tested extensively and results consistently show that regulated contaminants are either not detected or are present in amounts far below the limits permitted by state and federal drinking water standards. These tests monitor tap water for microbial organisms, minerals and organic substances that could cause disease or other adverse health effects. Testing is done for over 120 different contaminants including bacteria, metals, organic chemicals and pesticides. Only substances that are detected in the water are included in this report. **ATENCION RESIDENTES! Este informe contiene información muy importante sobre su agua potable. Tradúzcalo ó hable con alguien que lo entienda bien.**

The Board of Directors of the Central Water District meet on the third Tuesday of each month at 7 pm. Board meetings are held at the District office, 400 Cox Road, and are open to the public.

THE DISTRICT WATER IS TESTED EVERY MONTH FOR THE PRESENCE OF BACTERIA, THE PH LEVELS COLOR AND TURBIDITY.

PH RANGE FOR 2013 7.1 – 7.8 ADVERAGE WAS 7.4

Terms Used in this Report

Definitions: In the following tables, you will find detailed information about the water that comes from your tap. Your water is regularly tested for many chemicals and other substances, as well as radioactivity. Only substances that were detected in the water are listed in the tables. This information is provided to help you understand the terms used in this Consumer Confidence Report,. CWD drinking water is tested extensively, and consistently show that regulated contaminants are either not detected, or are present in amounts far below the limits permitted by state and federal drinking water standards. These tests monitor tap water for microbial organisms, minerals and organic substances that could cause disease or other adverse health effects.

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 or 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 USEPA.

Public Health Goal (PHG) The level of a contaminant in drinking water below which there is no known or expected risk no health. PHGs are set by the California Environmental Protection Agency.

Maximum Residual Disinfectant Level (MRDL) 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 containments,.

Primary Drinking Water Standard (PDWS) MCLs and MRDLs for contaminants that affect health long with their monitoring and reporting requirements, and water treatment requirements

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.

ACRONYMS

DLR - Detection Limit for purposes of Reporting
CL - Maximum Contaminate Level
CLG - Maximum Contaminate Level Goal
NA - Not Applicable
NC - Not Collected
ND - Not Detected
mg/L - Milligrams per Liter or parts per million). (Equivalent to 1 second in 11 1/2 days)
NL - Notification Level
TU - Nephelometric Turbidity Units
pCi/L - Pico Curies per Liter
ppt - Parts per Trillion (1 second in 31,700 years)
TT - Treatment Technique
ug/L - Micrograms per Liter or parts per billion (ppb) (Equivalent to 1 second in 31.7 years)

MONITORING & SAMPLING FREQUENCY

Distribution System Bacteriological 3 X Month Trihalomethanes 3 yrs. Color 3 X Month Odor 3 X Month Turbidity 3 X Month

Well Water Bacteriological Quarterly Inorganic Chemicals Once every 3 yrs. Color Monthly. Nitrates Quarterly Odor Quarterly Turbidity Quarterly VOCs Once every 3 yrs. SOCs Once every 3 yrs. Radionuclides Once every 3 yrs. to 9 yrs.

DRINKING WATER SOURCE ASSESSMENT INFORMATION: Assessment of the drinking water sources was completed in 2009 . A copy of the reports available at the District office. 400 Cox Road Aptos Ca, 95003

SAVE OUR WATER IS A STATEWIDE PROGRAM AIMED AT HELPING CALIFORNIANS REDUCE THEIR EVERYDAY WATER USE. YOU CAN FIND HELPFUL TIPS AND RESOURCES ON THE WEBSITE: saveourh2o.org

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. Drinking water, including bottled water, may reasonably be expected to contain at least small amounts of contaminants. The presence of contaminants does not necessarily indicate that water poses a health risk. More information about contaminants & potential health effects can be obtained by calling the USEPA 's Safe Drinking Water Hotline at 1-800-426-4791.

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 wild.

Inorganic contaminants, such as salts and metals, that can be naturally-occurring or result from urban storm water 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 storm water runoff, and residential uses.

Organic chemical contaminants, including synthetic and volatile organic chemicals, that are by-products of industrial processes and petroleum production, and can also come from gas stations, urban storm water runoff, agricultural application, and septic systems.

Radioactive contaminants, that can be naturally-occurring or be the result of oil and gas production and mining activities.

Nitrate The District has detected nitrates above 25 mg/L, but less than the MCL of 45 mg/L in three (3) of its 5 active wells. Nitrate in drinking water at levels above 45 mg/L is a health risk for infants of less than six (6) months of age. Such nitrate levels in drinking water can interfere with the capacity of the infant's blood to carry oxygen, resulting in a 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 agriculture activity.

Fluoride *The District has detected levels of fluoride below the MCL (2 ppm) in all 5 of its active wells (naturally occurring).*

Lead and Copper Survey Samples Taken in 2013

Lead and Copper	No. of samples collected	90th percentile level detected	No. sites exceeding AL	AL	PHG	Typical Source of Contaminant
Lead (ppb)	10	ND	0	15	2	Internal corrosion of household water plumbing systems; discharges from industrial manufacturers; erosion of natural deposits
Copper (ppm)	10	0.63	0	1.3	0.17	Internal corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives

Sodium and Hardness

Chemical or Constituent (and reporting units)	Sample Date	Level Detected	Range of Detections	MCL	PHG (MCLG)	Typical Source of Contaminant
Sodium (ppm)	05/24/11	26	14-26	none	none	Salt present in the water and is generally naturally occurring
Hardness (ppm)	05/24/11	200	140-200	none	none	Generally magnesium and calcium, and is usually naturally occurring

OTHER CONTAMINANTS THAT WERE INCLUDED IN WATER TESTING AND WERE **NOT** DETECTED:

ARSENIC
ALUMINUM
BARIUM
COLIFORM BACTERIA
MERCURY
NICKEL
POTASSIUM
SELENIUM
SILVER
THALLIUM

Detection Of Contaminants with a Primary Drinking Water Standard

Chemical or Constituent (and reporting units)	Sample Date	Level Detected	Range of Detections	MCL [MRDL]	PHG (MCLG) [MRDLG]	Typical Source of Contaminant
Total Chromium (ppb)	5/24/11	(Highest) 14	ND-14	50	2.5	Erosion of natural deposits
Nitrate (ppm) Well 10	12/16/13	(Highest) 25	ND-25	45	45	Runoff and leaching from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits
Gross Alpha (pCi/L)	08/02/05	0.56	0.31-0.80	15	NS	Erosion of natural deposits
Total Trihalomethanes & Haa5 (ppb)	09/24/13	1.5 to 6.4 ND-3.4	1.5 to 6.4 ND-3.4	80 60	NS	By product of drinking water chlorination
Fluoride (ppm)	5/24/11	0.10 to 0.15	0.10 to 0.15	2.0	1	Erosion of natural deposits
Sulfate (ppm)	5/24/11	31 to 65	31 to 65	500	500	Runoff /leaching from natural deposits

Iron and Manganese are naturally occurring in the Purisima Formation

The District is currently in the planning phase to build an Iron / Manganese Treatment Plant

Detection of Contaminants with a Secondary Drinking Water Standard

Chemical or Constituent (and reporting units)	Sample Date	Level Detected	Range of Detections	MCL	PHG (MCLG)	Typical Source of Contaminant
Color (units	2013	ND	ND	15	NA	Oxidized iron and manganese
Iron (ppb) **Wells 3/5 Inactive 2/13**	10/9/12	**1400* Wells 3/5**	**ND-1400***	300	NA	Leaching of natural deposits
Manganese (ppb) **Wells 3/5 Inactive 2/13**	10/9/12	**430* Wells 3/5**	**ND-450***	50	NA	Leaching of natural deposits
Odor-threshold (units)	2013	ND	ND	3 units	NA	Naturally occurring organic materials
Turbidity (units)	2013	.55 average	.38-.72	5 units	NA	Soil runoff
Total Dissolved Solids (TDS) (ppm)	05/24/12	340	230-320	1000	NA	Leaching of natural deposits

Detection of Other Monitoring Results

Chemical or Constituent	Sample Date	Level Detected	Range of Detections	Notification Level	Health Effects Language
Hexavalent Chromium (Cr6) (ppb)	10/08/13	Well 4 &10 (11) Well 12 (4.3) Well 3 & 5 ND	ND-11	Public Health Goal .002 (ppb.)	Naturally occurring chromium bearing minerals
Magnesium (ppm)	5/24/11	23 to 28	22-28	NA	Leaching of natural deposits

Did you know that:

The first lighthouse built in the United States was Boston Lighthouse built on Little Brewster Island in 1716. This lighthouse was destroyed during the Revolutionary War and was rebuilt in 1783 and still stands today.

Alcatraz was the location of the first light house on the Pacific Coast. It was completed in 1854 to guide ships through San Francisco Bay. Damaged in the 1906 quake, it was rebuilt in 1909 (pictured at left).

Frequently Asked Questions

Customers often ask "What is Hexavalent Chromium ?"

Hexavalent chromium, also known as chromium 6, is a heavy metal that is commonly found at low levels in drinking water. It can occur naturally but can also enter drinking water sources by historic leaks from industrial plants' hazardous waste sites. Various other sources also contribute to the amount of hexavalent chromium in groundwater. The California Department of Public Health (CDPH) & the U.S. Environmental Protection Agency establish drinking water standards to ensure the drinking water provided by public water systems is safe, potable, reliable, and protective of public health. CDPH establishes maximum allowable levels for various contaminants that occur in sources of drinking water supplies, whether man-made or naturally occurring. These maximum levels are known as maximum contaminant levels or MCL's, and are also known as primary drinking water standards. **A drinking water standard specific for hexavalent chromium does not exist at the national or state level.** An MCL is being established in California and is expected to take effect in 2014. Exposure to chromium 6 from breathing dust or fumes is considered much more dangerous than exposure from drinking water. It is estimated that exposure to airborne chromium 6 is 1000 times more potent than exposure from drinking water (Office of Environmental Health Hazard Assessment, California Environmental Protection Agency).

FACTS ABOUT THE DISTRICT :

- ESTABLISHED IN 1950
- 3 FULL TIME STAFF
- 1.2 MILLION GALLONS TANK CAPACITY
- 3 ACTIVE WELLS
- 3 STANDBY WELLS
- 6 BOOSTER PUMP LOCATIONS
- 23. 2 MILE OF PIPES

District Demonstration Garden of Drought Resistant Plants

The demonstration garden located at the District office has been refreshed and some new drought resistant plants have been added to the garden. We have also developed a map of the garden that names what type of plants are growing in each area; that map is available for District customers.

The plants in the demonstration garden have displayed a resilience to drought conditions and the local deer families.

2013 Water Quality Report

400 Cox Road
P.O. Box 1869
Aptos, CA 95001-1869

Phone: 831-688-2767
Fax: 831-688-2774
E-mail: cenwtr@yahoo.com

This newsletter was written and produced by the Central Water District staff. For more information about any of the newsletter topics please contact the District office.

The Groundwater Stakeholder Advisory Committee

The Central Water District, the Soquel Creek Water District and the County of Santa Cruz are hosting a series of community meetings focusing on groundwater in the Mid-County area. The purpose of the meetings is to broaden the engagement with all groundwater basin users (private well owners & municipal water customers); to share information and explore topics such as groundwater hydrology, protection against seawater intrusion, groundwater rights, data collection & monitoring, and basin sustainability; to advise in the development of recommendations for Mid-County groundwater basin protection and management strategies. Meetings are open to the public and the first meeting was held on Tuesday May 13, 2014.

Future meetings will be held at 7 pm on the following dates:

- *Tuesday July 8, 2014*
- *Tuesday September 9, 2014*
- *Tuesday November 25, 2014*
- *Tuesday January 15, 2015*

Meeting place to be determined, info will be posted at the District office.

The Central Water District staff designed and published a website and you can visit it at:
HTTP://WWW.CENTRALWATERDISTRICT.US.COM

California Lilacs, or Ceanothus, are some of our most fragrant and colorful shrubs here in California. They are also evergreen and very drought tolerant. Drought tolerant California native plants usually only need irrigation the first summer after planting. Expect a 20-25 year life from your Ceanothus in most gardens. Some gardeners have California Lilacs in the ground that still look good after thirty years.

UPDATE: Prop. 84 Grant Funding

The Prop. 84 Grant funded planning and feasibility study regarding the redistribution of groundwater pumping between the Aromas and Purisima Aquifers has been completed. The team of HydroMetrics WRI and Kennedy/Jenks along with Central Water District staff worked on evaluating the sustainable yield of the Purisima Formation and the condition and capacity of the Cox Road wells. The District now has a conceptual design for a water treatment plant that would be appropriate for meeting the District needs regarding the treatment of iron and manganese. The team also completed an analysis of groundwater management. The final report includes information that outlines the work done and the recommended next steps for the District related to this project. The project final report is available for review at the District office and if you have any questions regarding the project please feel free to call Ralph or Christine at the office, 831-688-2767.